



KONGUNADU ARTS AND SCIENCE COLLEGE



AUTONOMOUS

College of Excellence (UGC)

Re-accredited by NAAC with 'A++' Grade

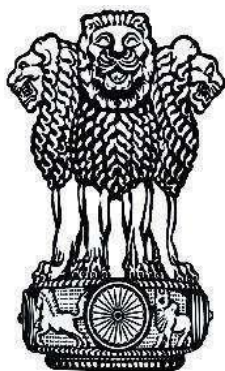
4th Cycle

DBT STAR COLLEGE SCHEME

Completion Report

23.03.2022 to 22.09.2025

Submitted to



सत्यमेव जयते

**Department of Biotechnology
Ministry of Science and Technology
Government of India, New Delhi**

By

**DEPARTMENT OF PHYSICS
DEPARTMENT OF CHEMISTRY
DEPARTMENT OF COMPUTER SCIENCE
DEPARTMENT OF MATHEMATICS**

A BRIEF PROFILE

Kongunadu Arts and Science College started with pre-university course in the year 1973-1974, has grown tremendously in academic stature and is now offering 24 UG, 14 PG, 28 Certificate, 7 Diploma and 6 PG Diploma programmes. The college has also blossomed into a full-fledged Research institute offering Ph.D. programmes in 14 disciplines.

At present around 4239 students are studying in the college. Our college has the distinction of having over 160 PhDs among the total number of 208 teaching faculty.

The college has been **Re-accredited with “A+” Grade** by the National Assessment and Accreditation Council (NAAC) in the 4th Cycle. Recognizing the quality of Teaching imparted in the college, the University Grants Commission (UGC) awarded the status of **“College with Potential for Excellence”** (CPE) in the year 2011. Satisfied with the successful implementation of the proposals under the CPE scheme, the UGC has awarded the status of **“College of Excellence”** to our college. Autonomy was granted to the college in the year 2004 and it has been extended by the UGC up to 2031-2032. In the year 2019, the College has been approved with a financial allocation of Rs.30,00,000 (Rupees Thirty Lakhs) as Mentor Institution by UGC under the scheme of **“PARAMARSH”** for mentoring NAAC Accreditation Aspirant Institutions to promote Quality Assurance in Higher Education. The Department of Science and Technology (DST), Ministry of Science and Technology, Govt. of India has sanctioned financial assistance to a tune of Rs.1.5 Crores to this college under FIST programme. The Department of Biotechnology (DBT), Govt. of India has sanctioned financial assistant under DBT Star College Scheme to a tune of Rs.82 Lakhs. The KASC IIC bagged the 3.5 Star status in the IIC Ranking 6.0. The college is a Partner Institute with the Amrita DST Technology Enabling Centre (TEC). The institution is also recognized as a Nodal center for Virtual Labs by the Amrita Vlabs for the Department of Biotechnology and School of Computer Science.

During the Academic year 2024-2025 the College has produced 4 M.Phil. degree holders and 29 Ph.D. degree holders. Currently 292 Ph.D. scholars are pursuing their degree under the recognized guides of the college. A total number of 148 International/ National Conferences/Seminars/Workshops/Hands on Training Programmes have been organized in the college by the faculty members of various departments. So far, a total of 1546 Research articles were published in Scopus indexed journals. The Institutional h-index is 73.

4 Major research projects are currently ongoing with a total funding of **Rs.70,69,000/-** and 7 projects applied with a total funding of **Rs.3,62,31,700/-**. SPARC Indo-UK collaborative project was successfully completed by Dr.K.Muthukumar, Assistant Professor of Tamil.

So far, 31 patents were granted. Research and Development cell of the college monitors the ongoing research activities by conducting periodic mentoring meetings. The cell brings out a bi-annual

journal in the name of “Kongunadu Research Journal” in which standard research articles are being published.

The following bodies functioning in the college are actively engaged in promoting research and extension activities.

- Dr. M. Aruchami Research Foundation
- ISCA- Indian Science Congress Association- Coimbatore Chapter
- Institution Innovation Council (IIC)
- KASC I-Hub
- KASC Tech hub
- Eco Club
- Bird club
- NCC
- NSS
- YRC
- RRC
- Women Empowerment Cell

The Ministry of Education has established **950+ Institution’s Innovation Councils (IICs) in HEIs** on 21st November 2018. **Our college is one among them.** Tamilnadu has maximum number of IICs -179. Out of 1641+ Proof-of-concept applied nationally in 2019, after several stages of selection and mentoring by MIC, a prototype of Electric bicycle- an innovation by our college student G. Priyadarshan, III B.Sc. Physics has been selected for National Level Boot camp and Exhibition held at New Delhi between 9th and 11th September 2019 as part of MIC. Among the colleges selected, Kongunadu Arts and Science College is the one and only Arts and Science College sharing the platform with renowned research institutions like IITs. Institution Innovation Council (IIC) received 3.5 star in IIC 6.0.

In the Smart India Hackathon 2022, a team of 8 students from KASC participated in the National Level Hackathon and won 1st place with a cash award of 1 Lakh rupees.

The ICT Academy offered various Faculty Development Programmes and a 100 Hours Skill Development Programme. ICT Academy has recognized the institution as the best institution for Learnathon Programme. In the ICT Bridge 2023, Dr. C. A. Vasuki, Secretary and Director was awarded with the “Best Edupreneur Award 2023” and received the award from Shri PTR Palanivelrajan, Minister of IT, Tamil Nadu. The college has been offered with Center of Excellence by Ui Path and Aspire. Dr. L. Kathirvelkumaran, Assistant Professor and Head, Department of CSDA, and ICT Academy Coordinator, honored with the **BEST Coordinator 2024 Award** for outstanding performance.

The Consultancy services available in the College have been publicized through the college website highlighting the areas of “core-competence” so that user industries and institutions can make use of the expertise. The faculty members of the college have generated considerable amount through the consultancy services of their expertise.

The college has inked MoUs with renowned National and International Institutions / Universities thereby enabling exchange of knowledge, sharing of expertise in niche areas and collaborates on latest research topic which will enhance joint publications.

Mrs. Sasirekha Velusamy, Research Scholar, Department of Energy, University of Exeter, UK and Dr.Senthilarasu Sundaram, Professor of Sustainable Energy Materials, Teesside University, UK and Dr.David Ian Benson, Senior Lecturer in the Department of Politics, University of Exeter, UK visited our college as visiting Professor’s under SPARC Scheme during August 2023.

The Library and Information centre in the college has a collection of 91,000 volumes of Books, 250 Periodicals, 10,00,000 e-books (N-List / INFLIBNET), more than 6500 e-journals, 32 computers, 2 Laptops and one Mini theatre. Our College subscribed Drillbit Anti-Plagiarism software for plagiarism checking. The Library is fully computerized, bar coded and functioning from 8.00 am to 8.00 pm without any break including Saturdays and vacation. Digital Library Online public access catalogue, E-Gate register are the special features, Lecture capturing System, Video Conference facilities are the latest updation in the Library. KASC NDLI club is functioning effectively with more than 10558 students as members in this club. Around 65 activities were organized and received the recognition award from NDLI, Kharagpur, Kolkata.

The College has a dedicated Placement Cell which continuously monitors the recruitment needs of Companies and networks with them for arranging campus placements. During 2024-2025, 1072 offer letters received by the students from various companies.

This College pays equal attention for harmonious growth of both the body and mind of the students. The College believes in following the dictum ‘A Sound Mind in a Sound Body’. The Department of Physical Education, ever since its inception in 1975, has been making all our efforts to train the students in Indoor and Outdoor games. The college has spacious grounds for playing outdoor games like Athletics Track, Volleyball, Kabaddi, Badminton and Basket Ball etc. The students are given intensive training every day in playing many sports and games, with the training provided by professional coaches. There is also a modern, state-of-the-art gymnasium for the benefit of both men and women students of the College, in order to keep their body and physique in a very good shape. The Department of Physical Education has been organizing a number of Sports Events for the benefit of teaching and non-teaching staff of this College. The numbers of Students have won prize in many sports meets, conducted both inside and outside Tamilnadu, in events like Chess, Badminton, and

Volley Ball, Power Lifting, Shooting, Taekwondo, Cycling, Best Physique, Cricket, Table Tennis and Athletic competitions. Notably, Mr. Samvasanth (III B.Sc. Computer Technology) secured a **Gold Medal with a New Record** in the 100 meters at the **85th All India Inter-University Athletics Championship 2026** held at Rajiv Gandhi University of Health Sciences, Karnataka and Ms. K.M.B. Subikshaa (I B.Com Banking & Insurance) won **Gold Medal** in the Under-52 kg category at the **National Taekwondo Championship 2025** held at Amritsar, Punjab.

The college has got both Boys and Girls NCC wings and our Cadets have participated in the National Independence and Republic Day parades.

The college has also got a strong NSS team with about 500 volunteers and the college has adopted few villages around Coimbatore. In four villages, 51 group houses have been constructed **under Indira Awas Yojana (IAY) scheme** for the welfare of the under privileged people. The college has also provided individual toilet facilities to the houses in the adopted village. The NSS and YRC volunteers are actively involving in various Eye checkup camp, Health camp, Tree plantation camp, Blood donation camp and many awareness programmes which includes the inculcation of the various beneficiary schemes of Central Government (**Unnat Bharat Abiyan, Swachh Bharat etc.,**) to the public.

LABORATORIES

1. Common Instrumentation Centre
2. Language Lab
3. Math Lab
4. Physics Lab (UG, PG & Research)
5. Chemistry Lab (UG, PG & Research)
6. Botany Lab (UG, PG & Research)
7. Zoology Lab (UG, PG & Research)
8. Biochemistry (UG, PG & Research)
9. Biotechnology (UG, PG & Research)
10. Computer Labs – 8 with 522 Systems
11. Costume Design & Fashion Lab
12. Psychology Lab

ACKNOWLEDGEMENT

We would like to express our profound gratitude to the **Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India**, for their generous financial support under the **DBT Star College Scheme**. The financial and academic assistance provided through this initiative has played a transformative role in shaping the educational landscape of our College at large. The infrastructure of our participating departments has seen significant upgradation through the DBT Star College Scheme, promoting a more conducive environment for scientific learning and innovation. This initiative has directly impacted around **700 undergraduate students** and **80 Faculty members**, enriching their academic journey and enabling them to explore science beyond the traditional curriculum. We submit our sincere thanks and gratitude to the DBT for giving an **extension for a period of six months** for further development of our institution through this DBT Star College Scheme.

We are deeply thankful to **Dr. Garima Gupta, Scientist 'F' and Programme Head, DBT**, for her expert guidance, continuous encouragement and unwavering support throughout the implementation of the Star College Scheme. Her vision and leadership have been truly instrumental.

We sincerely submit our profound thanks to all the **DBT Officials** under this Star College Scheme for their support and encouragement throughout this Scheme.

We also acknowledge with gratitude for the supervision provided by **Dr. R. Rajendran**, Mentor of the DBT Star College Scheme. His insightful advice and consistent support have greatly contributed to the success of our efforts.

The **DBT Star College Scheme** has provided an exceptional platform for students, facilitating their participation in various scientific events and nurturing their research interests. The financial assistance provided has raised awareness about the significance of application-oriented real-time projects, enabling students to actively contribute towards societal challenges. Furthermore, it has encouraged students to pursue higher education in various scientific disciplines. Eventually, the **financial support under DBT Star College Scheme** has empowered both students and faculty members to excel in their academic pursuits and make meaningful contributions to society.

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DEPARTMENT OF BIOTECHNOLOGY

PROFORMA FOR SUBMISSION OF CONSOLIDATED PROGRESS REPORT SUPPORTED UNDER DBT STAR COLLEGE SCHEME

1. **Name of the College** : Kongunadu Arts and Science College
2. **Name of the Coordinator, Designation** : Dr. D. Vijayalakshmi,
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3. **Assessment Duration:** a) 23/03/2022 to 22/03/2025 b) Duration in Years : 3 years
c) Extension period if any: 23/03/2025 to 22/09/2025

4. Details of Departments Supported, Courses Offered and Faculty Members

Department	Courses Offered					Regular faculty Members	
	UG	PG	Ph. D.	Certificate/ Diploma/ PG Diploma Courses	Job Oriented Courses	With Ph. D.	Without Ph.D.
Physics	B. Sc. Physics	M. Sc. Physics	Physics	Electronic Instrumentation, Astro Physics, Non – Conventional Energy	Electrical Appliances Maintenance and Servicing	9 +2*	1
Chemistry	B. Sc. Chemistry	-	-	Instrumental Methods of Chemical Analysis, Disaster Management	Textile Chemistry	7	-
Computer Science	B. Sc. Computer Science	-	-	-	-	1	3*
Mathematics	B. Sc. Mathemati cs	M. Sc. Mathema tics	Mathematics	Certificate Course in Vedic Mathematics, Diploma in Vedic Mathematics, PGDDA	-	11	-

* - Management Staff

5. Number & Date of Advisory Committee Meeting

Name of the Event	Date	Resource Person	Number of Beneficiaries	Outcome
Internal Advisory Committee Meeting	07.07.2022 & 22.01.2024	Dr. R. Rajendran Former Principal and Associate Professor of Microbiology, PSG College of Arts and Science, Coimbatore. & Dr. A.K.Vidya Associate Professor & HoD of Biochemistry, Kongu Arts and Science College, Erode	All the Four Participatory Department Staff Members.	To know more ideas on DBT Star College Scheme related to utilization of recurring and non recurring fund.
Mentor Review Meeting	08.11.2022	Dr. R. Rajendran Former Principal and Associate Professor of Microbiology, PSG College of Arts and Science, Coimbatore.	All the Four Participatory Department Staff Members	Discussed about progress and plans on upcoming and on-going Star college activities
DBT Advisory Committee Meeting Presentation – A Prequel	27.06.2023	Dr. R. Rajendran Former Principal and Associate Professor, PSG College of Arts and Science, Coimbatore.	Participatory Department Staff Members	Participatory departments had a mock presentation of their department activities for the upcoming Advisory Committee Meeting
Interface Meeting- DBT Star College Scheme	04.07.2023	Dr. Garima Gupta Scientist – ‘F’, Programme Head,DBT & Dr. Abhishek Kumar Mehta , Scientist – ‘D’, Programme Officer, DBT	Principal, & Co-ordinator of DBT Star College Scheme	Explored more ideas and examined the benefits of DBT Star College Scheme and also gained more knowledge about utilization of recurring and non-recurring fund.
Advisory Committee Meeting	05.07.2023	Dr. Garima Gupta Scientist – ‘F’, Programme Head,DBT & Dr. Abhishek Kumar Mehta Scientist – ‘D’, Programme Officer, DBT	Overall Co-ordinator, Participatory Department Co-ordinators and HoDs’.	Overall Co-ordinator and all the participatory department coordinators presented their department activities very well.

DBT Officials – Onsite Visit	06.07.2023	Dr. Garima Gupta Scientist –‘F’, Programme Head, DBT Ministry of Science & Technology, Government of India, New Delhi.	Participatory Department Staff Members and Students	DBT officials visited the Participatory Departments, Laboratories, Math Model Lab followed by students’ interaction and they appreciated the students for their active enthusiastic participation in the events of DBT Star College Scheme.
Online Interactive Meeting for Co-ordinators DBT Star College Scheme	21.11.2024	Dr. Garima Gupta Scientist -F Programme Head, DBT Ministry of Science & Technology, Government of India, New Delhi.	Participatory Departments	Interactive meeting helps us to improve the utilization of funds for the conduct of recurring activities and the importance of Advisory Committee Meeting for further progress towards the scheme.
Internal Advisory Committee Meeting & Mentor Review Meeting	14.03.2025	Dr. R. Rajendran Former Principal and Associate Professor, PSG College of Arts & Science, Coimbatore. & Dr. A. K. Vidya Associate Professor and Head, Kongu Arts and Science College,Erode.	Participatory Department Staff Members	To enhance the effectiveness of planning and delivery of various activities under the DBT Star College Scheme with a focused outcome.

Name of the Department	Mentor Meeting		
	2022-2023	2023-2024	2024-2025
Physics	07.02.2023	08.08.2023 & 01.02.2024	30.07.2024 & 21.02.2025
Chemistry	17.02.2023	08.09.2023 & 01.03.2024	08.10.2024 & 14.02.2025
Computer Science	17.02.2023	18.12.2023 & 17.02.2024	12.08.2024
Mathematics	07.03.2023	21.09.2023 & 17.02.2024	24.01.2025

6. Qualitative Improvements due to DBT Support

With the **implementation of DBT Star College Scheme** and the **generous financial assistance from DBT**, significant progress was made in Upgrading Laboratory Infrastructure, Department Library for all Participatory Departments, Teaching learning Pedagogy and Student Support Systems, Practical activities beyond the prescribed syllabus, Onsite Visits/Trainings and Interdisciplinary Projects contributed to the overall development and academic performance of the Participatory Departments and the Institution as a whole.

Department of Physics

- ❖ **Laboratory Infrastructure** was substantially upgraded with the procurement of multiple number of instruments, enabling students to perform experiments individually and engage in advanced virtual laboratory-based physics experiments. This strengthened experiential and visual learning, effectively bridging the gap between theoretical concepts and practical applications.
- ❖ **The Teaching–Learning Process** was enriched through the project-based learning, group discussions and problem-solving-oriented lecture workshops which enhanced students’ analytical skills and motivated them towards higher education and national-level examinations.
- ❖ Undergraduate students were encouraged to **present papers/posters** in National and International events. Several students obtained Skill India certification and successfully developed innovative working models, also participated in various **Science Exhibitions/Competitions** and won prizes by showcasing their academic contributions on a global platform.
- ❖ Skill development initiatives such as Hands-on-Training programmes, Seminars, Guest lectures, Workshops, Webinars, and National-level events on emerging areas broadened students’ interdisciplinary exposure and industry-relevant skills with a scientific outlook and played a vital role in improving student competency and employability.
- ❖ **Industrial / Institutional Visits** to Universities, Research Institutes, Observatories, Science parks, Industries, and National organizations such as ISRO offered real-world exposure, enabling students to understand diverse career pathways in Science and Technology.
- ❖ Orientation Programmes on **Intellectual Property Rights (IPR)**, **Energy Auditing**, and electrical safety created awareness of innovation, sustainability, and societal responsibility. Outreach and extension activities further strengthened community engagement and promoted scientific awareness among school students and teachers.

Department of Chemistry

- ❖ The Department of Chemistry has procured multiple number of instruments/equipments for conducting regular practicals which improved individual students’ practical skill in handling advanced instruments

for subject specific experiments facilitating Interdisciplinary Project, Research experiments paving the way for **additional infrastructure of the department**.

- ❖ Students acquired scientific temper by attending **more Hands on Training and Workshop** offering practical exposure to laboratory techniques, **upgradation of Technical/Practical skill**, which improvises overall learning outcomes in Chemistry.
- ❖ Students' participation in **presentation of Posters/Papers** in various National Conferences and where also engaged in demonstrating/creating various Science models.
- ❖ Invited talk, Seminars and Workshops from various experts offer in-depth knowledge on Core and recent developments in interdisciplinary areas, encourage critical thinking and inspired to take up higher studies in various science discipline in reputed institutes.
- ❖ **Enrichment of Curriculum** through the introduction of new practicals /novel concepts upgraded the day to day teaching and learning aspects of students and the faculty members.
- ❖ **Practicals beyond the syllabus** promote experiential learning, strengthen laboratory competence, Interdisciplinary projects which prepares the students to connect classroom concepts with real-world applications.
- ❖ **Various Research Lab/Field Visits** instilled a sense of scientific temper and this real time exposure has made students more creative and innovative so that they involve in accomplishing real time projects and it helps to fill industry academia gap.

Department of Computer Science:

- ❖ The **upgraded laboratory infrastructure with** additional facilities with software devices provided impetus in refining the skill sets of the students promoting more hands- on- training in emerging field of Computer Science.
- ❖ Hands- on -Training, Workshops, Seminars and Guest Lectures by eminent resource persons from reputed institutes and universities imparted a sense of scientific temper in accomplishing real time projects and developing solutions to industrial problems through academic research.
- ❖ Upgraded Curriculum enriched with practical innovative concepts to identify recent advances in the Core and Interdisciplinary domain which helps the students to connect theoretical knowledge with real-world applications.
- ❖ Students underwent more real time Interdisciplinary projects and created working models of their projects and **showcased their ventures to School and College Students in various Science Exhibitions /Competitions and Hackathons.**

- ❖ Visit to Industries /Institutions enabled the students to gain knowledge about technical, technological development in the industries, to comprehend the **Industry-Academia gap** and the awareness about the employability opportunities and requirements as future employees and employers.
- ❖ Lab manuals and Practice sessions were conducted to **align with Industrial standards** and many students have completed online certification courses aimed at strengthening their analytical and problem-solving abilities.
- ❖ Adequate capacity building Programmes for the teaching and non-teaching faculty have opened up new vistas of alternative pedagogy in the teaching learning process, which has enhanced day- to- day academic transactions with an evident upskilling and reskilling of the students in their respective fields of study.

Department of Mathematics

- ❖ The Department of Mathematics established a **Mathematics Lab** with **Mathematical Software** (MATLAB) to enrich the skill of Under Graduate students **and a Math Model Lab** with various Mathematical models, which aid the students to understand the mathematical concepts using hands on activities.
- ❖ Usage of **Smart Classrooms** and ICT-enabled pedagogical tools has further enriched students' learning experience by enabling them in participatory learning to explore beyond traditional notes and gain easy digital access to educational content and various legends Biopic have been played to rejuvenate their interest in the field of Mathematics.
- ❖ The Undergraduate Students utilized the resources procured under DBT Star College scheme to work on their **projects** and hands-on-training on **MATLAB** and **LaTeX** explore their research knowledge with multidisciplinary approach.
- ❖ **Hands on Training, Lecture Series, Lecture Workshops, Seminars and Guest Lectures** by Eminent resource persons from reputed institutes like IIT, IISE, Ramanujan Mathematical Institute, NIT and various other universities instigated the inquisitiveness of students in divergent thinking, resulted in being more interactive with a scientific approach and many of students inspired to take up higher studies in various science discipline in reputed institutes.
- ❖ Students engaged in the creation and demonstrating various Mathematical models for school students and College Students and also won prizes for their working models exhibited in various competitions at National level.
- ❖ Faculty development and Training Programmes innovative and alternative pedagogical approaches to the teaching learning process contributing to the academic elevation of the students in the respective areas.

- ❖ **Enrichment of Curriculum** through the introduction of additional practical programmes upgraded the day to day practical knowledge of the students and the faculty members.
- ❖ The **Industrial visit** to various places like Regional Science Center, Radio Astronomy Center, Visvesvaraya Technical Museum and Fluid Control Research Institute facilitated the students to gain application-oriented knowledge in Mathematics.

Details of Group/Interdisciplinary Projects selected from each department are listed below:

The **Financial Support provided by DBT Star College Scheme** has significantly encouraged students to undertake more effective and **Innovative Research initiatives** including **Group/Interdisciplinary Projects** motivating the students to work in a team. Project based learning has led to noticeable improvement in students' presentation skills, report writing skills, laboratory ethics and handling of instruments nurturing creativity with focus on real time applications in different fields of Science.

- ❖ An Interdisciplinary group project was done by the **Department of Computer Science** in collaboration **with Department of Physics and Mathematics** entitled “**Home Safety Automation Using IoT**”. The students learnt about devices like smart plugs lighting, Safety sensors for doors and security system which can be easily controlled via smartphone app to simplify our routine life.
- ❖ An Interdisciplinary group project was done by **Department of Physics** in collaboration with **Computer Science** entitled “**Line Follower Robot**”. The students understood about a robot that follows a visual black line or path on the surface which is used for industrial and domestic applications such as carrying goods and delivery services.
- ❖ An Interdisciplinary group project done by the **Department of Mathematics** entitled “**Visualisation of Earth quake data using MATLAB**” provided an idea about the magnitude of the earth quake occurred in a particular region using MATLAB tools.
- ❖ The group project done by the **Department of Physics** entitled “**LiFi Data Transmission**”, LiFi is the short form of Light Fidelity which is a wireless optical networking technology which uses LEDs for data transmission.
- ❖ The group project done by the **Department of Computer Science** entitled “**Green House Monitoring System**” for the Department of Botany used sensors to sense the surrounding and collect the information related to nature of the soil, temperature and humidity used to monitor the farmlands.
- ❖ A Group project was carried out by the Department of Computer Science entitled “**IoT Based Automatic Height Adjusting Bridge**”. In this project, students developed a Smart Bridge System to improve flood safety using Arduino Uno, Servo Motors, and Moisture. The system can detect rising water levels and respond in real-time and the system works without manual help by improving safety and reducing the chance of accidents.

- ❖ An Interdisciplinary group project done by the **Department of Mathematics** in Collaboration with **Department of Computer Science** entitled “**Statistical Analysis using Python**”. Statistical Analysis using Python is an effective way to explore, analyze and interpret data using various Statistical techniques and libraries available in the Python Programming Language.
- ❖ An Interdisciplinary Group Project was done by the Department of Physics students entitled “**Sewage Segregator using Arduino**” in which the students learnt to make a device which can separate degradable and non-degradable materials, which supports for recycling the waste and helps in environmental conservation.
- ❖ An Interdisciplinary Group Project was done by the Department of Chemistry students “**Nickel oxide nanoparticle: A Co-precipitation approach for enhanced Photocatalytic Application**” The project achieved the synthesis of nickel oxide (NiO) nanoparticles using a cost-effective and simple co-precipitation method and the photocatalytic properties of NiO make it a promising material for environmental cleanup applications, especially in degrading organic pollutants in water.
- ❖ An Interdisciplinary group project done by the **Department of Mathematics** in Collaboration with **Department of Chemistry** entitled “**A Study on Some Molecular Descriptors using Chemical Graph Theory**”. In this project, students applied various topological indices which are derived from graph theory to model the geometrical structures and to analyse the physical and biological properties of Chemical compounds.

Novel Aspects Introduced or Planning to Introduce during the Scheme Duration

Novel Aspect Introduced Under DBT Star College Scheme

With the **generous support of the DBT STAR College Scheme**, the participatory departments have actively organized and participated in variety of academic enrichment programs, such initiatives have significantly contributed to broaden the intellectual horizons of both students and faculty.

- ❖ **Lecture Series and Workshops** were conducted to instigate students towards engaging in basic science research and encouraged them to present their research works in Conferences at the Undergraduate level. As a result of these efforts, the participatory department students have presented their research findings (**a total of 24 research articles**) in the form of scientific papers, at various National and International Conferences and the students bagged prizes including **Best Paper Award**.
- ❖ More Programmes to Pitch Innovative Ideas, fostering creativity and entrepreneurial thinking among students and motivated the students to engage in various Science Day Celebrations by exhibiting and showcasing their models (**nearly 100 models/working models**) to school and college students aimed to promote Science education at large.

- ❖ The Department of Physics adopted ICT-enabled and Project-based learning, engaging students in mini-projects and group discussions to foster collaboration and also students conducted **energy audits nearby schools and also in their homes**, learning practical ways to reduce power consumption.
- ❖ Under the DBT-Star College Scheme, event on IPR, the participatory department Students gained an understanding of Intellectual Property Rights, including patents, trademarks, and design rights. They were also introduced to the step-by-step process of patent filing, learned about the types of IPR and **focused on patenting their scientific inventions**.
- ❖ The Department of Chemistry provided Micro-Scale experiment and solution-making training, improving efficiency and **preparing students for industry level practices**.
- ❖ Entrepreneurship Skills for Mobile Phone Servicing and Troubleshooting Skills, Workshop on development of real-time applications using IOT by the Department of Computer Science equipped the students to identify **entrepreneurial competencies** and skill in developing various solutions for IT related problems in the society
- ❖ The Department of Mathematics organized an **intensive one-week Summer and Winter Training** focusing on core areas of Mathematics to strengthen students' conceptual understanding and enabled more number of students to pursue higher education in Mathematics.
- ❖ Capacity Building Programmes on Aptitude, Analytical and Logical Skills, Workshop on Vedic Mathematics for speedy calculations were organized by the **Department of Mathematics** for our college and other college students to clear competitive examinations.
- ❖ The Department of Computer Science organized Awareness Programme on Digital Literacy and AI application for Non-Computer Science Students and also conducted **Film Fest -2025: Short Film Competition** for College Students.
- ❖ After the implementation of Star College Scheme, Training/ Awareness programmes were conducted for **Lab Technicians and Supporting Staff** by providing more scientific knowledge on the subject and its real time applications.
- ❖ Organized an **Awareness Programme on Familiarization of Science Education to the School Students** by all the participatory departments through Hands-on-training sessions in **Science Experiments and Competitions** on scientific events through onsite visit to all Science labs to promote interest in experimental learning at grassroot level.
- ❖ Organized **In-service Training Programme** for School teachers by all the participatory departments helped them to learn latest trends and advancement in science for next generation students.
- ❖ Awareness programme conducted by the Department of Chemistry for **farmers and farm labourers** about the safe and proper usage of fertilizers and pesticides helped **the public in agriculture sector** and

the Training Programme on Soap and Sanitizer making **provided Entrepreneurial skills** for Self Help Group and Homemakers.

Novel Aspect Planned to Introduce Under DBT Star College Scheme

- ❖ Planned to Publish research articles in reputed National/International Journals
- ❖ Planned to undergo more interdisciplinary Projects in Collaboration with Science departments.
- ❖ Planned to conduct Summer/Winter Training Programme by all participatory departments.
- ❖ Planned to organize Workshop/ Guest lecture in collaboration with other DBT funded near by Institutions.

Innovative Initiatives by Students

With the aid of DBT Star College Scheme, the students from the participatory departments transferred their innovative ideas into tangible contributions to the society.

- ❖ III B.Sc. Physics student, participated in various science events across Tamil Nadu, Kerala and Andhra Pradesh won multiple prizes and also **focusing on patenting** his scientific inventions.
- ❖ Students from Chemistry along with their faculty members **applied for design pattern for vacuum suction pump.**
- ❖ To enhance the learning experience and encourage critical thinking, the Department of Computer Science introduced a Peer-Led Team Learning (PLTL) model, where senior students mentor their juniors in complex programming concepts and real-world problem- solving exercises promoting collaboration and leadership.
- ❖ Students of Mathematics Department organized ice-breaking activities in local schools to raise mathematical awareness among school students and also students created a **short film on drug awareness**, aiming to sensitize peer consciousness about life's unpredictable challenges.
- ❖ **Energy Audit** executed by Physics students to nearby residential areas for 100 houses may help them to understand the importance of power utilization and wise consumption.
- ❖ Hands on training on Natural Soap making made the students of Chemistry to prepare organic soaps for their own use and also students adopt **Earn while Learn** through these Programmes.
- ❖ Mathematics Students Compiled a formula book **Mathematics Formulae- A Quick reference** which was provided to 10 schools with the motive of helping school students by easing the task of learning mathematics.

8. Lessons Learnt / Difficulties Faced/ Suggestions if any, in Implementation of the Programme and Utilization of DBT Grant.

Lesson Learnt Under DBT Star College Scheme

- ❖ **With the support of DBT**, the Departments have cultivated a culture of continuous learning, enabling students to acquire new skills and deepen their subject knowledge, contributing to their progression towards higher studies in basic sciences.
- ❖ Exclusive experiments done individually have greatly **expanded the Practical/Technical Skill** of the students and thereby increased their self-confidence and interest towards the basic Science Courses.
- ❖ **Frequent visits to Industries / Institutes** enabled the students to acquire high critical thinking skills, technical and application-oriented knowledge.
- ❖ **With funding from the DBT**, participating departments organized a wide range of seminars, guest lectures, workshops, and hands-on training sessions by inviting distinguished experts from renowned institutions which brought the students of all the other departments under one roof as a team, to learn the recent concepts and technologies and also to acquire new skills and deepen their subject knowledge, contributing their progression towards higher studies in basic sciences.
- ❖ Amplified students' involvement in various **Science Events/ Exhibitions**, showcasing a variety of technical and technological advancements in science among the school students and the public through demonstrations.
- ❖ Faculty members have gained more experience to organize programmes effectively towards the **upliftment of Students' aspirations in higher education**, research, self-employment and placements.
- ❖ **Group/Interdisciplinary Projects** undertaken by students in different fields of their subject, **promote research quest** and various skills and the practical methodologies related to laboratory work, teamwork, presentation skills, etc. motivated them to take up **higher studies and Research in basic sciences**.
- ❖ Students learned about basic research aspects by **presenting scientific papers** at various conferences, sparking an interest in higher education with a scientific approach.
- ❖ **The Implementation of the DBT Star College Scheme** enabled the participatory departments to actively engage in **Outreach and Extension activities** in schools such as exhibitions, competitions and awareness programs in which students gained experience to know the day to day activities of the rural public and how science plays a vital role to create safer environment for sustainable life and also these initiatives significantly enhanced the visibility and appeal of the respective courses, resulting an **increase in student admissions**.

9.Key Performance Indicators

S. No. 1 to 6 – Department wise

DEPARTMENT OF PHYSICS

Batch	1. No. of Students Admitted			2.Admission Cut off %	3. Pass %	4. Drop-out rates	5. No. of Students Opted for M.Sc. M.Tech/ PG Diploma Science	6. Average Marks
2022-2023	Category	Male	Female	70	During DBT (%)	1	9	72.62
	SC	2	1		Sem I 89.47			
	ST	-	-		Sem II 84.21			
	OBC	6	8		Sem III 94.44			
	General	1	1		Sem IV 77.78			
					Sem V 83.33			
					Sem V I 100			
	Total	9	10		Average 88.21			
2023-2024	Category	Male	Female	62.2	During DBT (%)	2	Not Applicable	65.80
	SC	2	4		Sem I 72.00			
	ST	0	1		Sem II 68.00			
	OBC	10	9		Sem III 88.00			
	General	1	-		Sem IV 83.33			
					Sem V 62.50			
	Total	13	14		Average 74.77			
2024-2025	Category	Male	Female	70	During DBT (%)	2	Not Applicable	74.30
	SC	1	4		Sem I 92.86			
	ST	1	2					
	OBC	6	2		Sem II 100			
	General	0	0		Sem III 100			
	Total	8	8		Average 97.62			
2025-2026	Category	Male	Female	62.95	During DBT (%)	2	Not Applicable	56.67
	SC	1	3		Sem I 61.90			
	ST	0	0					
	OBC	9	10					
	General	0	1					
	Total	10	14		Average 61.90			

DEPARTMENT OF CHEMISTRY

Batch	1. No. of Students Admitted			2. Admission Cut-off %	3. Pass %		4. Drop-out rates	5. No. of Students Opted for M.Sc. M.Tech/ PG Diploma Science	6. Average Marks
2022-2023	Category	Male	Female	61.25	During DBT (%)		2	15	67.38
	SC	09	05		Sem I	36.59			
	ST	01	01		Sem II	75.76			
	OBC	20	06		Sem III	50.00			
	General	01	-		Sem IV	68.75			
					Sem V	57.50			
					Sem V I	50			
	Total	31	12		Average	56.43			
2023-2024	Category	Male	Female	63.83	During DBT (%)		6	Not Applicable	66.48
	SC	3	6		Sem I	59.46			
	ST	0	0		Sem II	63.64			
	OBC	23	9		Sem III	58.33			
	General	1	1		Sem IV	71.88			
					Sem V	63.89			
	Total	27	16		Average	63.44			
2024-2025	Category	Male	Female	68.1	During DBT (%)		2	Not Applicable	62.26
	SC	0	3		Sem I	55.17			
	ST	1	1		Sem II	73.08			
	OBC	15	7						
	General	2	2		Sem III	50.00			
	Total	18	13		Average	59.42			
2025-2026	Category	Male	Female	71.67	During DBT (%)		2	Not Applicable	42.92
	SC	2	9		Sem I	69.44			
	ST	1	0						
	OBC	18	10						
	General	0	0						
	Total	21	19		Average	69.44			

DEPARTMENT OF COMPUTER SCIENCE

Batch	1. No. of Students Admitted			2. Admission Cut-off %	3. Pass %	4. Drop-out rates	5. No. of Students Opted for M.Sc. M.Tech/ PG Diploma Science	6. Average Marks
2022-2023	Category	Male	Female	71.88	During DBT (%)		18	74.33
	SC	05	02		Sem I	95.00		
	ST	-	-		Sem II	96.67		
	OBC	17	33		Sem III	96.55		
	General	01	02		Sem IV	91.38		
					Sem V	93.22		
					Sem V I	98.33		
	Total	23	37		Average	95.19		
2023-2024	Category	Male	Female	74.43	During DBT (%)		5	Not Applicable
	SC	4	10		Sem I	87.72		
	ST	0	1		Sem II	90.38		
	OBC	18	24		Sem III	87.50		
	General	2	1		Sem IV	87.27		
					Sem V	94.64		
	Total	24	36		Average	89.50		
2024-2025	Category	Male	Female	68.16	During DBT (%)		2	Not Applicable
	SC	6	2		Sem I	75.44		
	ST	0	0		Sem II	77.78		
	OBC	19	26		Sem III	87.27		
	General	6	1		Average	80.16		
	Total	31	29					
2025-2026	Category	Male	Female	75.05	During DBT (%)		0	Not Applicable
	SC	5	6		Sem I	77.59		
	ST	0	0					
	OBC	18	28		Average	77.59		
	General	2	1					
	Total	25	35					

DEPARTMENT OF MATHEMATICS

Batch	1. No. of Students Admitted			2. Admission Cut-off %	3. Pass %		4. Drop-out rates	5. No. of Students Opted for M.Sc. M.Tech/ PG Diploma Science	6. Average Marks
2022-2023	Category	Male	Female	75.7	During DBT (%)		3	19	71.19
	SC	01	01		Sem I	100			
	ST	-	-		Sem II	90			
	OBC	06	24		Sem III	80			
	General	-	01		Sem IV	90			
					Sem V	93.33			
					Sem V I	100			
	Total	07	26		Average	92.22			
2023-2024	Category	Male	Female	79.65	During DBT (%)		2	Not Applicable	72.38
	SC	2	4		Sem I	73.33			
	ST	0	0		Sem II	83.87			
	OBC	8	15		Sem III	90.32			
	General	2	2		Sem IV	93.55			
					Sem V	84.38			
	Total	12	21		Average	85.09			
	2024-2025	Category	Male		Female	76.33			
SC		0	7	Sem I	65				
ST		0	0	Sem II	80				
OBC		3	8						
General		0	3	Sem III	75.00				
Total		3	18	Average	73.33				
2025-2026		Category	Male	Female	71.63		During DBT (%)		1
	SC	1	5	Sem I		78.38			
	ST	0	1						
	OBC	10	18						
	General	3	0						
	Total	14	24	Average		78.38			

Key Performance Indicators: S. No. 7 to 15

S. No.	Indicator	Pre DBT (2021-2022)	DBT Support (2022-2023)	DBT Support (2023-2024)	DBT Support to be updated (2024-2025) & 23.3.25-22.9.25
7	No. of Hands-on Experiments Being Conducted	Physics -- Nil	Physics – 5	Physics – 5	Physics – 8
		Chemistry Nil	Chemistry – 4	Chemistry – 6	Chemistry – 5
		Computer Science -1	Computer Science –5	Computer Science – 5	Computer Science – 8
		Mathematics -1	Mathematics – 4	Mathematics – 6	Mathematics – 7
8	No. of New Experiments Introduced	Physics -- 1	Physics – 6	Physics – 13	Physics – 8
		Chemistry -Nil	Chemistry – 11	Chemistry – 2	Chemistry – 6
		Computer Science -5	Computer Science – 40	Computer Science – 13	Computer Science – 18
		Mathematics -9	Mathematics – 18	Mathematics – 7	Mathematics – 6
9	Publications (Scopus Indexed) /Patents, if any.	Physics -- 29	Physics – 19	Physics – 14	Physics – 21
		Chemistry - Publications-4 Patents-1	Chemistry—6	Chemistry – 6	Chemistry – 2
		Computer Science - Nil	Computer Science – 1	Computer Science – 2	Computer Science – Nil
		Mathematics -27	Mathematics – 35	Mathematics – 26	Mathematics – 20
10	Training received a) Faculty	Physics -- 5	Physics – 18	Physics – 10	Physics -- 17
		Chemistry -1	Chemistry – 15	Chemistry – 8	Chemistry – 10
		Computer Science - Nil	Computer Science – 6	Computer Science – 9	Computer Science – 25
		Mathematics -5	Mathematics – 30	Mathematics --17	Mathematics –20
	b)Students (Summer /Winter Projects)	Physics -- 8	Physics -- 21	Physics -- 18	Physics – 29
		Chemistry -2	Chemistry -- 9	Chemistry -- 7	Chemistry – 7
		Computer Science - 10	Computer Science –16	Computer Science –25	Computer Science –32
		Mathematics -5	Mathematics -- 15	Mathematics -- 12	Mathematics – 11
11	Exhibitions/ Seminars / Workshop /Training Courses Conducted	Physics -- 1	Physics – 9	Physics -- 11	Physics –21
		Chemistry -2	Chemistry – 4	Chemistry -- 12	Chemistry – 16
		Computer Science - 3	Computer Science – 7	Computer Science -- 13	Computer Science – 23
		Mathematics -3	Mathematics – 10	Mathematics -- 12	Mathematics – 22
12	Books/Journals subscribed from Grants	Physics -- 8	Physics -- 97 books	Physics -- 22 books	Physics --26 books
		Chemistry - 5	Chemistry -- 82 books and one journal	Chemistry -- 35 books	Chemistry -- 12 books
		Computer Science - 10	Computer Science -140	Computer Science - 55	Computer Science --29 books
		Mathematics -6	Mathematics -- 119	Mathematics -- 20 books	Mathematics -- 28 books
13	Outreach Activities (Popular lectures)	Physics -- 1	Physics – 7	Physics -- 6	Physics – 5
		Chemistry -Nil	Chemistry – 5	Chemistry -- 3	Chemistry – 2
		Computer Science -1	Computer Science – 5	Computer Science -- 2	Computer Science – 4
		Mathematics –Nil	Mathematics – 4	Mathematics -- 5	Mathematics – 3
14	Colleges Mentored to apply for DBT Star College Grants		Outlined the benefits of DBT Star College Scheme and motivated Dr. SNS Rajalakshmi College Coimbatore to apply for the scheme	Outlined the benefits of DBT Star College Scheme and motivated B.V. Raju College, Vishnupur, A.P.to apply for the scheme	Outlined the benefits of DBT Star College Scheme and motivated B.V. Raju College, Vishnupur, A.P. to apply for the scheme
15	Invited Lectures	Physics -- 6	Physics – 3	Physics -- 7	Physics – 10
		Chemistry -1	Chemistry – 7	Chemistry -- 4	Chemistry – 5
		Computer Science - Nil	Computer Science – 2	Computer Science -- 3	Computer Science – 8
		Mathematics -4	Mathematics – 6	Mathematics -- 9	Mathematics – 14

10. Details of colleges / schools mentored during the Star Scheme Tenure (Name of college / school; class / standard; No. of students benefited; whether any mentored college applied under Star College Scheme, if yes what was the outcome.

S. No.	Name of the Event/Activity	Date	School/Colleges with Number of Beneficiaries	Outcome
1	Science Exhibition in connection with Science Day Celebration “Tesla Fest for 2023 - 2025”	27.02.2023, 28-02-2024 & 25-02.2025	More than 1000 student visitors from our college and other college students	Students gained scientific knowledge about new innovations in the field of Science and Technology, which created interest towards Basic Science Education.
2	An Outreach Programme to School Students “Career Opportunities in Physics”	08.02.2023	Students -180, Faculty -2 (Government Boys Higher Secondary School, Rayakottai)	Improved critical thinking, communication skills, ability to analyse and defend Science concepts.
3	“Awareness Programme on Familiarisation of Science Education to School Students”	10.02.2023	120 students(Green Fields Matriculation, Annai Violet Matriculation School, VCSM School of grade 9 th and 10 th)	Aid the school students to attain the knowledge and importance of Science subjects through lab vist.
4	“Outreach Programme to School Students and Teachers.”	20.02.2023	Students -150, (Vidya Vikashini Matric Higher Secondary School of Class 10 th) Faculty-5	Students have been motivated to take higher education in the field of Physics by understanding the basic theory during the practical sessions.
5	“In-service training for School teachers” - Teaching learning methodologies	25.01.23 & 07.02.23	40 teachers (Green field & Annai violet matriculation school)	Teachers learnt about teaching learning methodologies and scientific aptitude .
6	Inter Collegiate Competition “MATH GALOPER 2023”	24.03.2023	44 Other College students	Some of the Students have joined M.Sc Mathematics in our institution.
7	Exhibition in Connection with “World Space Week 2023”	05-10-2023 and 06-10-2023	More than 1000 College Students from various departments and more than 80 students from nearby schools.	Science model exhibition aimed to showcase the innovative ideas of the students and kindled the interest towards Science Subject.
8	“Exploring Science education for Young Minds”	07.07.2023 05-10-2023 & 06-10-2023	175 School Students, 9 teachers,	Disseminating scientific knowledge among school students further creating thrust to take up science related studies in the College level.
9	Hands on “Chemistry Experiments for School students”	01-02-2024	16 Students Grade XII)	Students are motivated to take higher education in the field of Chemistry.
10	Hands-on-Training Programme in “Python and PHP”	27-12-2023 & 01.02.2025	128 students (Green Fields Matriculation school of Class 10 th)	Students learnt about: ❖ Advantages and applications of Python and PHP. ❖ Basic Concepts and syntax of Python and PHP through Quiz.
11	Mathematics Formula Book – ISBN	27.03.2024 to 30.03.2024	400 nearby School Students	The students of Mathematics department prepared a Formula Book which would serve as a reference source for the students to face their higher secondary examination with good confidence.

12	“Math Model Exhibition” – School Students Visit	05.10.2023	150 students	The students of grade IX – XII from various schools visited the Mathematical model to develop creative thinking towards the subject and understand the basic concept clearly.
13	One day Hands on Training on “Physics Experiments to School Students”	03.01.2025 & 30.1.2025	62 Students of XI standard and 3 teaching staff (VCSM school, CBE)	School Students gained more knowledge about the concepts and applications of Physics experiments through hands-on training.
14	Awareness Programme on “Higher Education in Science and Physics”	15.10.2024	88 Class XI & XII students of VCSM Matric Higher Secondary School, Coimbatore.	Students acquainted themselves about the unrevealed areas of Science and also understood the benefits of higher education in Science.
15	“Activity Based Learning in Mathematics”	24.12.2024	100 Students (Yuva Public School of Class 8 th -10 th)	Our UG students exhibited their teaching skills and helped the school students to learn mathematics in easy, fun-filled ways and created interest towards the subject.

11.Details of increase in the faculty generated resources viz extramural research grants from other funding agencies to strengthen the Star College Scheme efforts. NIL

12. SOPs developed, lab manuals created and uploaded on website or submitted to DBT.

Department	Lab Manual/SoP	Website Link
Physics	Standard Operating Procedure for General Experiments for I B.Sc. Physics	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Physics/labmanual/SOP%20-%20I%20BSc.pdf
	Standard Operating Procedure for General Experiments for II B.Sc Physics	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Physics/labmanual/SOP%20-%20II%20BSc.pdf
	Lab Manual General Experiments for III B. Sc Physics	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Physics/labmanual/SOP%20III%20BSc.pdf
Chemistry	Sop & Lab Manual - Physical Chemistry	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Chemistry/labmanual/Lab_manual_PHYSICAL%20CHEMISTRY.pdf
	Sop & Lab Manual - Gravimetric Analysis	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Chemistry/labmanual/Lab_manual_gravimetric_analysis.pdf
	Sop & Lab Manual- Application Oriented Practicals	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Chemistry/labmanual/Lab_manual_APPLICATION%20ORIENTED%20PRACTICALS.pdf

	Sop & Lab Manual - Organic and Volumetric Analysis	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Chemistry/labmanual/Lab_manual_VOLUMETRIC%20AND%20ORGANIC%20ANALYSIS.pdf
	Sop & Lab Manual - Inorganic Analysis and Preparation	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Chemistry/labmanual/Lab_manual_INORGANIC_QUALITATIVE_ANALYSIS_AND_PREPARATION.pdf
Computer Science	Sop & Lab Manual- Mobile Application Development	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/CS/labmanual/Mobile%20Application%20Lab%20(2022-2023).pdf
	Sop & Lab Manual- C Programming	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/CS/labmanual/C%20Programming%20(2024-2025).pdf
	Sop & Lab Manual- C++ Programming	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/CS/labmanual/Object%20Oriented%20Programming%20withC%2B%2B%20(2024-2025).pdf
	Sop & Lab Manual- PHP Programming	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/CS/labmanual/PHP%20Programming%20(2024-2025).pdf
	Sop & Lab Manual- Python and IoT	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/CS/labmanual/Python%20Programming%20and%20IoT%20(2023-2024).pdf
	Sop & Lab Manual- Java Programming	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/CS/labmanual/Java%20programming%20(2023-2024).pdf
	Lab Manual- Advanced Excel	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/CS/labmanual/Advanced%20Excel(2024-2025).pdf
Mathematics	Lab Manual- C Programming	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Mathematics/labmanual/Programming_in_C_FRONT_PAGE.pdf
	Lab Manual – LaTeX	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Mathematics/labmanual/LaTeX_22_23_compressed.pdf
	Lab Manual- MATLAB	https://kongunaducollege.ac.in/sites/kongunaducollege.ac.in/files/DBT-Star/Mathematics/labmanual/MATLAB_22_23.pdf

13.Self-Evaluation

Department	*Objective (as stated in proposal)	% achieved	Reasons for under achievement / If achieved, state in quantitative metrics
Physics	Real time experience has been carried out for the students by Industrial training/Industrial Visit	100	2
	The students are motivated to do the laboratory experiments individually to acquire more technical skill.	100	2
	Various academic events at interdepartmental such as science fiction writing, Debate, quiz, etc., has been conducted to access the knowledge of students	100	2
	Organized thematic Seminars/ Invited Talks/ Conferences/ Workshops/ FDPs/ Hands on training/ Guest Lectures etc.	100	2
	Students are motivated to design and exhibit science working models through Group Projects	100	2
Chemistry	To recycle the chemical waste at the laboratory level and to handle glassware, chemicals and instruments in safer way and Chemical safety awareness for lab assistants	100	2
	Hands on Training on solution preparation (molar, normal, ppm percentage, etc.), Phytochemical isolation of compounds, micro- scale techniques	100	2
	Participation in the Orientation programmes, workshops and National and International conferences and seminars by students and faculties and conduct of Guest lectures and invited talks	100	2
	Society centric Outreach activities to nearby school children, school faculties and to the society.	100	2
	Student centric Industrial/Lab visits, projects and internships, Competitions and Exhibition to be organized.	100	2
Computer Science	Learn the Components of IoT Architecture and determine the most appropriate IoT Devices using Arduino Board and Sensor based on problem domain.	100	2
	Explore visualization techniques to show data generated from the IoT device.	100	2
	Implement and evaluate techniques for the Installation of mobile applications and delivery via various channels.	100	2
	To strengthen the existing curriculum, more Practical courses by introducing new practicals in various Core papers to meet the current trend.	100	2
	Student centric Industrial/Lab visits, Hands –on-Training, Seminars, Conferences, Competitions and Exhibitions to be increased.	100	2

Mathematics	Initiated and coordinated impactful academic activities ranging from seminars and guest lectures conferences, Hands-on training.	100	2
	Engaged students in activity-based learning through school outreach programs, enhancing their teaching abilities and communication skills.	100	2
	To strengthen the existing curriculum, Practical courses are enriched by introducing new practicals in the respected disciplines	100	2
	Faculty members are encouraged to attend the Orientation programmes, Refresher courses, Faculty development programmes and skill development workshops	100	2
	Student centric Industrial visits, projects and internships, Competitions and exhibitions to be improved.	100	2

14. Details of the procured equipment (as per submitted asset certificate) which would be retained by the college after completion of the project for future research and academics as Annexure-I with request letter for the retention of procured equipment.

Refer Annexure I

Course Coordinator

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Head of the Institution

Principal
Kongunadu Arts & Science College
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DETAILS OF KEY PERFORMANCE INDICATORS – DEPARTMENT WISE

DEPARTMENT OF PHYSICS

9.7 No. of Hands-on Experiments being Conducted/ List of Activities Undertaken by Students

i) Hands-on Experiments being conducted

2022-2023

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Two days Workshop on “Solar PV Technology - Beginners Approach”	23.08.2022 & 24.08.2022	Mr. M. Muthukumar, Managing Trustee Honeybees skill and Social Foundation, Coimbatore.	Students -36, Faculty -4	The workshop provided an opportunity to upgrade skill development of students on renewable energy and energy efficient jobs.
2	Hands on training on "Robotics"	05.09.2022	Mr. Santha Kumar, Director, Big Bodhi Academy, Coimbatore.	Students -35, Faculty -5	Students gained knowledge on assembling and customization of a robot for various functions
3	Hands on training programme on "Servicing of Electric and Electronic Lab equipments"	24.01.2023	Mr. G. K. Shanmugasundaram, Managing Partner, GEMCO Renewable Energy Training Institute, Chennai	Students-69, Faculty-13, Non-Teaching- 3	Students gained knowledge on working, trouble shooting and servicing of various electrical and electronic lab equipments
4	Hands on training on "Working of Polarimeter"	17.02.2023	Mr. M. Maharaja, Service Engineer, The Precision Scientific Company, Coimbatore	Students -32, Faculty -3	Students experienced hands on training of working of the Polarimeter.
5	Hands on Training Programme On "Chip Level Testing and Debugging for Smart Phones and Tablets”	18.03.2023	Mr. B. Krishnakmar, Founder, New Technology, Mobile Servicing and Training Institute, Coimbatore	Students- 59, Faculty- 8	It provided practical experience to the students in servicing the hardware and removing the unwanted bugs in the smart phones and tablets.

2023-2024

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Hands on Training on “Python Programming”.	20-07-2023	Mr. Dinesh Kumar Project Manager Mr. Vikram Kumar. M. S Designing Expert Big Bodhi Academy Coimbatore.	38 Students 05 Faculty	It provided practical experience and technical skills required for the students in writing Python Program and to implement the same in the relevant field.
2	Hands on Training programme on “Construction of Power Supply”.	21-09-2023	Mr. Shanmugasundaram, Managing Director, Gemini Scientific Company, Chennai.	65 Students	Practical experience was provided to the students in constructing a power supply with multiple voltage output and in circuit design with PCB board.
3	Hands on Training on “MATLAB and its Application in Physical Sciences”.	11-10-2023	Dr. Haresh M. Pandya Associate Professor and Head of Physics Chikkanna Government Arts College, Tiruppur.	62 Students 06 Faculty	Students were trained to use ‘MATLAB’ as a simulation tool. They understood the basics of the software which enables them to apply them in their relevant field.

4	Hands on Training on “Material Characterization” at Indian Institute of Technology, Palakkad.	07-03-2024	Faculties and Skilled Trainees of IIT Palakkad.	49 Students 03 Faculty	Students will be able to handle many instruments such as Field Emission Scanning Electron Microscopy (FE-SEM), Photoluminescence, Four Probe instrument and Raman Instrument.
5	Hands on Training on “Quantum Computing”.	27-03-2024	Dr. A. R. Usha Devi Professor of Physics, Bangalore University, Bangalore.	114 Students	Students understood key innovations in quantum computing, such as Qubits, quantum teleportation and writing Python programs for quantum computation.

2024-2025

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Hands on Training Programme with “Arduino”	08.10.2024	Mr. Dinesh Kumar Director, Big Bodhi Academy, Coimbatore.	Students: 40 Faculty: 4	Training Programme provided knowledge about the function of various sensors and assembling various electronic devices.
2	Hands on Training on “Electrical Safety and Maintenance”	27.12.2024	Mr. G. K. Shanmugasundaram, Managing Partner, GEMCO Renewable Energy Training Institute, Chennai.	Students: 44 Faculty: 2 Nonteaching : 4	Students acquired knowledge on electrical safety and safe utilization of electrical Appliances.
3	One Day Hands on Training in “Python Programming”	09.01.2025	Mrs. Gayathri Jayaram, Assistant Professor of Computer Science, PSGR Krishnammal College for Women, Coimbatore.	Students: 48 Faculty: 4	Students have gained practical knowledge in the field of Python Programming which enabled them to code and handle errors in Python Programs.
4	Hands on Training in “Virtual Lab: Physics Experiments”	27.01.2025	Dr. P. Balraju, Assistant Professor of Physics, Coimbatore Institute of Technology, Coimbatore.	Students: 76 Faculty: 3	Students gained experimental insight through virtual learning, enhancing their application of theory, problem-solving skills, and data analysis.
5	Hands on Training in “LaTeX Software”	30.01.2025	Dr. V. Radhamani, Assistant Professor of Mathematics, J. K. K. Nataraja College of Arts and Science, Namakkal	Students: 93 Faculty: 6	Increased awareness of the potential applications of LaTeX Software for handling Mathematical equations, tables and technical content.
6	Hands -on Training on “Coding in Python Programming”	11.03.2025	Mrs. Gayathri Jayaram, Assistant Professor of Computer Science, PSGR Krishnammal College for Women, Coimbatore.	Students: 34 Faculty: 6	Hands-on exercises have improved the students’ skills to create and manipulate Numpy arrays which help to solve Data Science problems.

2025-2026

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Hands on Training in Chip level testing and debugging for smart phones	10.09.2025	Dr. B. Krishnakumar, Founder/ CEO, New Technology, Coimbatore	71 students and 4 faculties	Students gained advanced hardware repair skills to fix complex issues, improve repair solutions, and to enhance their career prospects.

2	Hands on Training on Construction of Batteries	22.09.2025	Dr. S.Selvasekarapandian Emeritus Professor Materials Research Center, Coimbatore.	85 students and 6 faculties	Students gained technical proficiency in battery assembly and practical experience in building complete battery packs, from selecting and arranging individual components.
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ii) List of Activities Undertaken by Students

a) Industrial Visits

2022-2023

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	III B.Sc & II B.Sc Physics Students	Radio Astronomy Centre, Ooty	29.12.2022	32 students and 2 Faculty members	Students gained knowledge of radio telescopes, the solar system, and basic astronomy, enabling projects and research in astrophysics.
2.	III B.Sc , II B.Sc & I B.Sc Physics Students	Karunya Institute of Technology and Science, Coimbatore	19.01.2023	50 students and 3 Faculty members	Students gained knowledge of thin-film preparation by physical methods, Li-ion battery construction, advanced instrumentation, and material characterization.
3	III B.Sc , II B.Sc & I B.Sc Physics Students	New amp and Ohm, TVS Nagar, Coimbatore	24.03.2023	23 students and 2 Faculty members	Students learned the basics of electric current, frequency, electronic components, and gained hands-on exposure to electric automation using variable frequency drives to reduce power consumption in agricultural and medical sectors.

2023-2024

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	I, II and III B.Sc. Physics.	Sir C.V. Raman Hall, Bharathiar University Coimbatore-29	13-07-2023	12 Students 02 Faculty	Participants gained knowledge of plasma technologies, including Tesla coils, RF and atmospheric plasma systems, plasma pyrolysis, biomedical waste disposal, and plasma treatment for textiles.
2	II and III B.Sc. Physics.	Indian Institute of Astrophysics (Kodaikanal Solar Observatory), Kodaikanal.	04-08-2023	26 Students, 02 Faculty, 01 Lab Assistant	Students gained knowledge on Solar radiation, Different layers of Sun and Visualization of photosphere of Sun
3	I, II and III B.Sc. Physics.	Kovai Medical Center and Hospital, Coimbatore.	11-08-2023	28 Students 02 Faculty	Provided insight into medical applications of physics, motivating projects in the medical field.

2024-2025

S. No.	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	I B.Sc. Physics II B.Sc. Physics III B.Sc. Physics	Regional Science Centre, Coimbatore.	30.09.2024	Students: 52 Faculty: 2 Non-teaching Staff: 1	Students gained practical insight into physics concepts, technology applications, and the working of various machines, inspiring future academic and career choices.
2	I B.Sc. Physics II B.Sc. Physics III B.Sc. Physics	Vijnan Sagar Science and Technology Park, Thrissur, Kerala. Fluid Control Research Institute, Kanjikode West, Palakkad, Kerala.	31.01.2025 & 01.02.2025	Students: 43 Faculty: 3	- Students gained knowledge in thermal and fluid dynamics, instrumentation and process control in air, water, and oil mediums, which reinforced theoretical knowledge through practical observation. - The visit strengthened Industry-Academia connections, helping students to understand the real-world applications of their studies.
3	I B.Sc. II B.Sc. III B.Sc. Physics	Salzer Electronics Limited, Coimbatore.	25.01.2025	Students: 41 Faculty: 2	Students gained insights about the industrial environment and the integration of Physics concepts in manufacturing.
4	I B.Sc. Physics II B.Sc. Physics III B.Sc. Physics	Cochin University of Science and Technology, Kerala.	18.02.2025 & 19.02.2025	Students: 9 Faculty: 3 Non-teaching Staff: 1	Students observed real-time experiments using advanced tools like SEM, Raman and photoluminescence spectroscopy, increasing awareness of higher education.
5	II B.Sc. Physics III B.Sc. Physics	ISRO Sathish Dawan Space Research Centre, Sriharikota.	28.03.2025 & 29.02.2025	Students: 5	The visit gave students firsthand exposure to India's space missions, satellite launches, rocket systems, and real-world physics applications through interactions with scientists.

2025-2026

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	UG Physics Students	An Institutional visit to DRDO Industry Academia Centre Of Excellence, Bharathiar University Coimbatore.	14.07.2025	34 students and 2 faculties	Enhanced exposure to real-time research and development practices. Inspired students to consider research careers and higher studies.

b) Summer School/Internship

2022-2023

- ❖ 3 Students of III B.Sc Physics underwent the Internship Training at **Frontline Systems**, Coimbatore
- ❖ 4 Students of III B.Sc Physics underwent the Internship Training at **Soundscap Acoustics**, Coimbatore
- ❖ Swathi JB of III B.Sc Physics underwent the Internship Training at **Roots Industries India Limited**, Coimbatore
- ❖ 2 Students of III B.Sc Physics underwent the Internship Training at **Sri Amman Mineral Water Private Limited**, Coimbatore
- ❖ 5 Students of III B.Sc Physics underwent the Internship Training at **Blue Sea Industries**, Coimbatore
- ❖ Leyga K of III B.Sc Physics underwent the Internship Training at **Shree Aranganathar Paper Converters**, Coimbatore
- ❖ 2 Students of III B.Sc Physics underwent the Internship Training at **Deccan Pumps Private Limited**, Coimbatore

- ❖ 3 Students of III B.Sc Physics underwent the Internship Training at **AJ Tech Research Labs**, Coimbatore
- ❖ 2 Students of III B.Sc Physics underwent the Internship Training at **Sri A.P.M Industries**, Coimbatore
- ❖ 2 Students of III B.Sc Physics underwent the Internship Training at **Sri Palani Aandavar Industries**, Coimbatore
- ❖ Durgadevi M of III B.Sc Physics underwent the Internship Training at **AOM Engineering Works**, Coimbatore
- ❖ Aparna C of III B.Sc Physics underwent the Internship Training at **High Precision Industries**, Coimbatore
- ❖ Dharunika A of III B.Sc Physics underwent the Internship Training at **Ravi Bala Exports**, Coimbatore
- ❖ Aravind D of III B.Sc Physics underwent the Internship Training at **Besten Pumps India (Private) Limited**, Coimbatore
- ❖ Rathina Kumar K of III B.Sc Physics underwent the Internship Training at **The Silver Crown Group of Company**, Coimbatore
- ❖ 2 Students of III B.Sc Physics underwent the Internship Training at **Uniq Technologies**, Coimbatore
- ❖ 2 Students of III B.Sc Physics underwent the Internship Training at **Janatics Pvt. Limited**, Coimbatore.

2023-2024

- ❖ R. Manoj Kumar, S. Sangavi, R. Hemavarna and V. Hemadharshini of III B.Sc. Physics undergone the Internship Training at New Technology, Coimbatore on “**Mobile Phone Troubleshooting**”.
- ❖ V. Sri Velsamy Pandian of III B.Sc. Physics undergone the Internship Training at Janatics Pneumatic, Coimbatore on “**CNC Machine Working**”.
- ❖ R. Shalini of III B.Sc. Physics undergone the Internship Training at Salzer Electronics Ltd, Coimbatore on “**Electronic Manufacturing Solution**”.
- ❖ N. Brindha of III B.Sc. Physics undergone the Internship Training at Frontline Systems, Coimbatore on “**Revolutionizing Ups Solutions for A Sustainable Future**”.
- ❖ P. Ahila and V. S. Karthick Raja of III B.Sc. Physics undergone the Internship Training at New Technology, Coimbatore on “**Advanced Techniques for Smart Phone Troubleshooting**”.
- ❖ D. Selvam of III B.Sc. Physics undergone the Internship Training at Apt Technologies, Coimbatore on “**Design & Fabrication of Flexible Drilling Machine**”.
- ❖ R. S. Subhiksha of III B.Sc. Physics undergone the Internship Training at Janatics Pneumatic, Coimbatore on “**Optimal Pneumatic Power.**”
- ❖ Suryanarayana of III B.Sc. Physics undergone the Internship Training at Teknozo Renew Energy, Coimbatore on “**Optimizing Solar Panel Efficiency for Sustainable Energy Generation**”.
- ❖ Poovarasan of III B.Sc. Physics undergone the Internship Training at Salzer Electronics Ltd, Coimbatore on “**Automated Manufacturing Process of Transformer**”.

2024-2025

- ❖ 3 Students of III B.Sc. Physics underwent Internship Training at Viyen Biotech, Vadamadurai, Coimbatore.
- ❖ 11 Students of III B.Sc. Physics underwent Internship Training at KPR Institute of Engineering and Technology, Uthupalayam, Coimbatore.
- ❖ 3 Students of III B.Sc. Physics underwent Internship Training at Feather touch tissues, Coimbatore.
- ❖ Lara G of III B.Sc. Physics underwent Internship Training at Vadamalayan Multi-Speciality Care Hospital, Madurai.

2025-2026

- ❖ 19 Students of III B.Sc Physics undergone the Internship Training at **Sunshiv electronic solution, Coimbatore** on “**Internship on product design and manufacturing**”
- ❖ Hariprasath , Sumeth S , Praneswaran R , Jenice A and Pritha R of III B.Sc Physics undergone the Internship Training at **St. Peter’s Institute of Higher Education and Research, Avadi, Chennai** on “**Internship on design and troubleshooting exploration in electronics**”

c) Conferences / Seminars / Workshops/ Competitions/ Training Attended

2022-2023

- ❖ 14 students completed a **Skill India Certificate Training programme** in the Trade of Solar PV Installer from 12.09.2022 to 10.12.2022 (60 contact hours) under CSR Program of Aspire Systems (India) Pvt. Ltd conducted by R.M. Educational Trust and Ace Skill Development Pvt. Ltd.
- ❖ 50 students of B.Sc., Physics participated in **one day Workshop** on “Nanotechnology for Sustainable Energy” organized by the Department of Applied Physics, Karunya Institute of Technology and Science, Coimbatore on 19.01.2023 during their visit to the University.
- ❖ Monisha Parisy A, Jency Gladia, Ms, Sowndhariya S, Gowthamraj V, Vigneshwar D, Raju S, Dinesh S, Karan M, Ajmal Y, Marisamy, Kaviya J and Lara G of I B.Sc., Physics participated in **One Day Basic Training Programme** on "Human Rights" sponsored by National Human Rights Commission, New Delhi held at KASC, Coimbatore on 25.11.2022.
- ❖ 12 students from B.Sc., Physics participated in the **108th Indian Science Congress Association** held at Nagpur University Nagpur, Maharashtra from 03.01.2021 to 07.01.2023.
- ❖ C. Sowhanthi of III B.Sc., Physics participated and secured 85% of marks in **National Level E-Quiz** on “World Language Day” Organized by Department of English, PPG College of Arts and Science, Coimbatore on 21.02.2023.
- ❖ 5 students from III B.Sc., Physics participated in **Two days National Conference** on “Scientific Input, Technological Advancement and Women Empowerment for Sustainable Development” organized by Indian Science Congress Association, Kolkata chapter on 02.02.2023 and 03.02.2023 held at KASC, CBE.

2023-2024

- ❖ 50 students of B.Sc. Physics have participated in “**World Space Week-2023 celebrations**” organized by Satish Dhawan Space Centre, Shar, ISRO, Sriharikota from 05.10.2023 to 07.10.2023 as demonstrators for their rocket models to the school and college student visitors.
- ❖ Ms. Hemadharshini V and Mr. Suryanarayana A of III B.Sc. Physics had attended “**DRDO Sponsored National Conference on Advanced Biocompatible Materials and Devices/ Systems for Biomedical Applications, ADMDB-2023**” organised by Sri Ramakrishna Engineering College, Coimbatore from 10.08.2023 to 11.08.2023.
- ❖ Mr. T. Kannan and Ms. P. Ahila of III B.Sc. Physics have attended a “**2 days CSIR NET/SET Workshop on Physical Sciences**” organised by PSGR Krishnammal College for Women, Coimbatore on 31.07.2023 and 01.08.2023.
- ❖ Mr. T. Kannan of III B.Sc. Physics has completed a two-day “**Workshop on Astrophysics**” conducted by Ethical Edufabrica Pvt. Ltd. In association with Pravega, **IISc Bangalore** on 04.11.2023 and 05.11.2023.
- ❖ T. Kannan of III B.Sc. Physics has attended “**Two Day India-UK Workshop on Socio-Economic Analysis of**

Textile Effluent Pollution Impacts in The Noyyal River and Exploration Remediation Through Algae and Graphene Membrane” on 13.12.2023 and 14.12.2023 organized by KASC.

- ❖ Y. Ajmal and M. Karan of II B.Sc. Physics has participated and won **I Prize** in “**Model Making Competition at Anu Awareness Programme 2023**” organized by the department of physics, PSGR Krishnammal College for Women, Coimbatore on 22.12.2023.
- ❖ S. Raju, P. Hariharan, Gowthamraj and G. Marisamy of II B.Sc. Physics has participated and won **II Prize** in “**Live Model Design Competition as part of World Space Week-2023 Celebrations**” organized by Satish Dhawan Space Centre Shar, ISRO, Sriharikota from 05.10.2023 to 07.10.2023.
- ❖ S. Monisha of II B.Sc. Physics has participated and won **III Prize** in “**Live Model Design Competition as part of World Space Week-2023 Celebrations**” organized by Satish Dhawan Space Centre Shar, ISRO, Sriharikota from 05.10.2023 to 07.10.2023.

2024-2025

- ❖ Mr. Y. Ajmal and Mr. V. Gowtham Raj of III B.Sc. Physics has attended “**UK sponsored one day national workshop on Decarbonization of Transport Sector Through Green Hydrogen – Current Status, Challenges and Future Strategies**” organized by PSG College of Technology, Coimbatore on 08.01.2025.
- ❖ Mr. Y. Ajmal and Mr. V. Gowtham Raj of III B.Sc. Physics has participated in the “**Summer Internship Program on Synthesis and Characterization of Advanced Materials**” organized by KPR Institute of Engineering and Technology, Coimbatore from 05.06.2024 to 18.06.2024.
- ❖ Mr. Y. Ajmal and Mr. V. Gowtham Raj of III B.Sc. Physics has participated in the “**CSIR NET/SET Workshop on Physical Sciences**” organized by PSGR Krishnammal College for Women, Coimbatore from 12.08.2024 to 13.08.2024.
- ❖ Mr. Y. Ajmal of III B.Sc. Physics has participated and secured **Second place** in the **SPECTRUM 2025** organized by Rathinam College of Arts & Science, Coimbatore from 19.02.2025 to 20.02.2025.
- ❖ Mr. M. Karan and Mr. V. Gowtham Raj of III B.Sc. Physics has participated and secured **Second place** in the **SPECTRUM 2025** organized by Rathinam College of Arts & Science, Coimbatore from 19.02.2025 to 20.02.2025.
- ❖ Mr. V. Gowtham Raj of III B.Sc. Physics has participated in the “**National Symposium on The Western Ghats Biodiversity Conservation and Ecosystem Management (WGBCEM-2025)**” organized by Kongunadu Arts and Science College, Coimbatore in association with Zoological Survey of India, Kolkata from 06.03.2025 to 07.03.2025.
- ❖ Mr. Y. Ajmal of III B.Sc. Physics has participated and secured **First place** in the **Innoventures competition on “Inno Vision: From Concept 2 Creation”** conducted by Institution’s Innovation Council, Nirmala College for Women, Coimbatore on 10.12.2024.
- ❖ Mr. Y. Ajmal and Mr. V. Gowtham Raj of III B.Sc. Physics secured **Third place in the event of Project Expo** Solar Grass Cutter in the National Level Symposium, INSPIRE-SJ, conducted by B.V. Raju College (A), Bhimavaram, Andhra Pradesh from 13.12.2024 to 14.12.2024.
- ❖ Mr. Y. Ajmal and MI Nawfees of III B.Sc. Physics had secured the **First Place** in the **Project Competition for College Students**, a sub-event of **TKMCE KERALA ROBOCUP 2025** was conducted by the Centre for Robotics, TKM College of Engineering, Kollam from 17.01.2025 to 18.01.2025.
- ❖ Mr. Y. Ajmal of III B.Sc. Physics has secured **Second place** in the **Science Exhibition** conducted by the Department

of Physics, Kongunadu Arts and Science College under DBT star college scheme on 25.02.2025.

- ❖ Ms. S. Sowndhariya and Ms. A. Monisha of III B.Sc. Physics has secured **First place** in the **Science Mela Exhibition Working Model in District Level Yuva Utsav (2024- 2025)** conducted by Kongunadu Arts and Science College, Coimbatore on 11.12.2024.

2025-2026

- ❖ **Adam Christ Marshall** of I BSc has **won I place** in the University Level Inter-Collegiate Poetry and Oratorical Competition in English conducted in connection with the birthday celebration of Bharat Ratna Dr. A.P.J. Abdul Kalam, under Sindhanai Kavingar Dr. Kavidasan Endowment, Organised by Department of Tamil on 19.09.2025

d) Paper Presentation

2022-2023

- ❖ Tamilselvi R of III B.Sc., Physics participated and won **II Place in Paper presentation**, Megha M and Sowhanthi C of III B.Sc., Physics (Paper presentation) and Kannan T, Srivelsamy Pandian V of II B.Sc., Physics (**Poster presentation**) participated in the Inter-Departmental Fest organized by the Department of Computer Science (A), KASC, Coimbatore on 21.03.2023.

2023-2024

- ❖ Ms. P. Ahila of III B.Sc. Physics has presented a paper entitled “**Synthesis and Characterization of Nd³⁺ doped V₂O₅ nanoparticles by Coprecipitation method**” in the Two days National Symposium on Advanced Material and Technology for Future organized by Sri Ramakrishna College of Arts and Science, Coimbatore on 08.02.2024 and 09.02.2024.
- ❖ Ms. R.S. Subhiksha of III B.Sc. Physics has presented a paper entitled “**Synthesis and Characterization of Cr doped CeO₂ Nanoparticles**” in the Two days National Symposium on Advanced Material and Technology for Future organized by Sri Ramakrishna College of Arts and Science, Coimbatore on 08.02.2024 and 09.02.2024.
- ❖ Mr. A. Poovarasam and Mr. V. S. Karthickraja of III B.Sc. Physics have presented a paper entitled “**Doped TiO₂ Thin Films for Solar Cell Applications**” in the Two days National Symposium on Advanced Material and Technology for Future organized by Sri Ramakrishna College of Arts and Science, Coimbatore on 08.02.2024 and 09.02.2024.

2024-2025

- ❖ Mr. Y. Ajmal of III B.Sc. Physics has presented a paper entitled “**Solar Water Trash bin**” in the 2nd International Conference on Socioeconomic Impacts of Pollution in Water Bodies and Remedial Measures (ICPWRM-2025) organized by Kongunadu Arts and Science College (Autonomous), Coimbatore from 06.01.2025 to 07.01.2025.
- ❖ Mr. Y. Ajmal of III B.Sc. Physics has won the **Best Poster Presentation Award** for a poster entitled “**Solar Water Trash bin**” in the International conference on Exploring the Trends and Innovations in Material Science (ICETIMS-2025) jointly organized by the Sacred Heart College (Autonomous), Tirupattur and the Prof. Albert Irudayaraj Endowment Fund on 27.02.2025.
- ❖ Mr. V. Gowtham Raj of III B.Sc. Physics has presented a paper entitled “**A study on piezoelectric Tyre**” at the **International Conference on “Exploring the Trends and innovations in Material Science (ICETIMS- 2025)”** was jointly organized by the PG & Research Department of Physics, Sacred Heart College (Autonomous), Tirupattur, Tamil Nadu, India and the Prof. Albert Irudayaraj Endowment Fund on 27.02.2025.

- ❖ Mr. A. Yuvaraj and Mr. B. Mathesh Kumar of I B.Sc. Physics has presented a Poster entitled “**The Physics of Black holes**” and secured **Second Place** in the **State Level Inter-Collegiate Symposium BHAUTHIKA '25** organized by PSG College of Arts and Science College, Coimbatore on 27.02.2025.

e) Inter-Departmental Activities

2022-2023

- ❖ Selvam D and Dhanabal of II B.Sc., Physics participated and **won III Place** and Jency Gladia and Monisha Parisy A of I B.Sc., Physics participated in **Quiz Competition** in the Inter-Departmental Fest organized by the Department of Computer Science (A), KASC, Coimbatore on 21.03.2023.
- ❖ Jency Gladia, Ms, Sowndhariya S, Monisha Parisy A, Gowthamraj V, Vigneshwar D, Raju S, Dinesh S, Karan M, Ajmal Y, Marisamy, Kaviya J and Lara G, of I B.Sc., Physics participated in the **skill enrichment programme – A Lecture on Basic Mathematics and Statistics for Non-Mathematical Students** organized by the Department of Mathematics, KASC, Coimbatore on 19.10.2022.
- ❖ C. Sowhanthi of III B.Sc., Physics participated in **One Day Training Programme** on Usage of IOT Devices organized by Department of Computer Science (A), KASC, Coimbatore on 02.11.2022.
- ❖ Monisha Parisy A, Jency Gladia S of I B.Sc., Physics participated in the **Youth Awakening Day Celebration** organized by the Department of Mathematics, KASC, Coimbatore on 17.10.2022.
- ❖ Five Undergraduate students participated in **Wall Magazine Competition** as a part of SVEEP Contest 2022 about Election, Electoral Process and the “Power of One Vote” on 10.10.2022 held at KASC, Coimbatore.
- ❖ Sowhanthi C of III B.Sc., Physics participated in the **Capacity Building Workshop** on "Quantitative Aptitude and Logical Reasoning" organized by the Department of Mathematics, KASC, Coimbatore on 07.11.2022.
- ❖ C. Sowhanthi of III B.Sc., Physics participated in **One Day Workshop** on "Development of Real Time Applications Using IOT" organized by Department of Computer Science (A), KASC, Coimbatore on 03.11.2022.

2023-2024

- ❖ 3 of our students have participated in “**Hands on Training on Basics of MATLAB**”, organized by the Department of Mathematics, KASC on 03.07.2023.
- ❖ 4 of our B.Sc. students has attended a “**Guest lecture on Career Opportunities in Abroad**” organized by the Department of Mathematics on 07.08.2023
- ❖ 13 of our B.Sc. students has attended an “**International seminar on Differential System and its Applications**” organized by the Department of Mathematics on 05.12.2023
- ❖ 5 of our students have participated in “**Capacity Building Programme an Interdisciplinary approach for non-mathematics students**”, organized by the Department of Mathematics, KASC on 11.12.2023.
- ❖ One of our B.Sc. student has participated in “**National Mathematics Day celebrations**” organized by the Department of Mathematics on 09.01.2024
- ❖ 16 of our B.Sc. students has attended a “**Workshop on Phytochemical Extraction from tea leaves**” organized by the Department of Chemistry on 19.2.2024

2024-2025

- ❖ Students of II B.Sc. Physics have attended the awareness program on “**Pitching an Idea for Staggering Genius**” organized by Department of Mathematics on 15.07.2024.

- ❖ Rathisha Shree. T of II B.Sc. Physics has attended the program on **“Digital Literacy”** organized by the Department of Computer science from 08.07.2024 to 11.07.2024.
- ❖ 3 members of III B.Sc. Physics have attended the **“Hands-on Training on power BI”** organized by Department of Mathematics on 20.09.2024.
- ❖ 2 members of II B.Sc. Physics and 3 members from I B.Sc., Physics have attended the Independence Day competition organized by the Department of Tamil (UN) from 08.08.2024 to 12.08.2024.
- ❖ 5 Students of I B.Sc. Physics Students attended Guest Lecture on **“Navigating Complexity: Interdisciplinary learning for non-Mathematics students”** on 02.08.2024 Organized by Department of Mathematics.
- ❖ 5 Students of I B.Sc. Physics Students attended **“Hands on Training in MATLAB programming for beginners”** organized by Department of Mathematics on 07.08.2024.
- ❖ 5 students of II B.Sc. Physics Students attended **“A Guest lecture on Students project ideas-Interdisciplinary approach”** organized by department of Mathematics on 23.09.2024.
- ❖ 4 students of II B.Sc. Physics attended **“A One-day Workshop on SPSS”** organized by Department of Mathematics on 16.12.2024.
- ❖ Students of II B.Sc. Physics have attended the program on **“One Day Workshop on Vedic Mathematics for Science Students”** organized by Department of Mathematics on 23.01.2025.
- ❖ 2 members of III B.Sc., Physics have attended the **“Workshop on Mobile Phone servicing and troubleshooting”** organized by the Department of Computer Science on 22.01.2025.
- ❖ 2 members of III B.Sc., Physics have attended the “District level Yuva UTSAV” organized by the Department of Zoology on 11.12.2025.
- ❖ 2 members of III B.Sc., Physics have attended the **“Hands on training on Mobile and Laptop service”** organized by Department of Computer Science on 20.02.2025.

2025-2026

- ❖ Hands on Training on the Construction of Batteries was jointly organised by the Department of Physics and Chemistry for the benefit of our students
- ❖ Workshop on Protecting Intellectual Property Rights (IPRs) and IP Management for Startups organised by the Department of Physics and Chemistry for the benefit of our students

9.8 No. of New Experiments Introduced

2022-2023

III B. Sc. Physics Core Practical 5

1. Construction and study of 4 bit parallel adder
2. Construction and study of T flip flop
3. Construction of square wave generator

III B. Sc. Physics Core Practical 3

1. Determination of specific rotation of light and concentration of the solution - Polarimeter

I B. Sc. Physics Core Practical 1

1. Determination of wavelength - Laser diffraction method
2. Determination of angle of deviation of Laser

2023-2024

Core Practical - I: Practical - I (24UPH2CL) for I B.Sc. Physics

1. Determination of viscosity of a liquid by Poiseuille's flow method.
2. Determination of surface tension & inter-facial surface tension by drop weight method.
3. Determination of frequency of tuning fork-sonometer

Core Practical - II: Practical - II (24UPH4CM) for II B.Sc. Physics

1. Determination of temperature co-efficient of resistance of a wire –Post office Box

Core Practical - III: General Experiments (24UPH6CN) for III B.Sc. Physics

1. Magnetic properties of Iron rod-I-H Curve apparatus

Core Practical - IV: Electronics (24UPH6CO) for III B.Sc. Physics

1. Verification of inverse square law of radiation

Core Practical - V: Digital Electronics & Microprocessor (24UPH6CP) for III BSc. Physics

1. Wave form generator using 555 IC

Practicals beyond the Syllabus

Core Practical – II: for II B.Sc. Physics

1. Determination of e/m - Thomsons method
2. Determination of e/m – Magnetron method

Core Practical – III: for III B.Sc. Physics

1. Determination of Youngs modulus-elliptical fringes (Cornus method)
2. Determination of Youngs modulus-hyperbolic fringes (Cornus method)

Core Practical – V: for III B.Sc. Physics

1. Music tone generator using 8085 Microprocessor
2. Square wave generator using 8085 Microprocessor

2024-2025

I B. Sc. Physics Core Practical 1

1. Determination of surface tension and interfacial surface tension by drop weight method.
2. Determination of viscosity of a liquid by Poiseuille's flow method.
3. Determination of frequency of a tuning fork - Sonometer.

II B. Sc. Physics Core Practical 2

1. Determination of temperature coefficient of resistance of a wire – Post office box.

II B. Sc. Physics Core Practical 3

1. Determination of Magnetic properties of Iron rod I-H curve apparatus.

III B. Sc. Physics Core Practical 4

1. Construction of scalar using opamp.
2. Study of characteristics of photodiode.
3. Verification of inverse square law of radiation.

9.9 Publications (Scopus indexed) /patents, if any

2022-2023

- ❖ **Dr. A. Anu Kaliani** published a paper entitled “**Photochromic and hydrophilic vanadium oxide - molybdenum oxide composite thin films**” in the journal of materials science: e materials in electronics 33(12):1-13, Jan 2023.

- ❖ V. R. Sreelakshmi, A. Anu Kalliani and M. Jithin published a paper entitled "**Photochromic and hydrophilic self-cleaning nature of MoO₃ thin films**" in Journal of Materials Science: Materials in Electronics, 33(12):1-13, 2022.
- ❖ **Dr. P. Matheswaran** published a paper entitled "Modifier's influence on spectral properties of dysprosium ions doped lead boro-telluro-phosphate glasses for white light applications" in journal Optics and Laser Technology 156(6):108585 December 2022.
- ❖ **Dr. P. Matheswaran** published a paper entitled "Effects of Heavy Ion Irradiation on the Thermoelectric Properties of In₂(Te_{1-x}Se_x)₃ Thin Films" in journal Nanomaterials 12(21), 3782 October 2022.
- ❖ **Dr. M. Seetha** published a paper entitled "Cr doped CeO₂ Nanoparticles as Supercapacitors Electrodes" in Journal AIP Advances 12(12), 125310 December 2022.
- ❖ **Dr. M. Mohamed Ibrahim** published a paper entitled "Noticeably enhanced photo sensing properties of Fe-doped Bi₂S₃ thin films developed by nebulizer spray pyrolysis technique for photo sensor applications" in journal Sensors & Actuators: A. Physical 345(2011):113759 July 2022.
- ❖ **Dr. M. Mohamed Ibrahim** published a paper entitled "Photo sensing properties of Cd-doped In₂S₃ thin films fabricated via low-cost nebulizer spray pyrolysis technique" in journal Journal of Materials Science: Materials in Electronics 33(24):1-13 August 2022.
- ❖ **Dr. B. Gokul** Published a paper entitled "Visible light photocatalytic and magnetic properties of V doped α -Fe₂O₃ (VFO) nanoparticles synthesized by polyol assisted hydrothermal method" in journal Chemosphere 307(Pt 1):135575 July 2022.
- ❖ **Dr. B. Gokul** published a paper entitled "Polyol-assisted hydrothermal synthesis of Mn-doped α -Fe₂O₃ (MFO) nanostructures: Spin disorder-induced magnetism and photocatalytic properties" in journal Environmental Research 214(Pt 4):113866 August 2022.
- ❖ **Dr. V.D.Nithya** published a paper entitled "X-ray diffraction, magnetic measurement and Mossbauer spectroscopy of MgFe₂O₄ nanoparticles" in Journal of Alloys and Compounds 912:165125 April 2022.
- ❖ **Dr. V.D.Nithya** published a paper entitled "Sonochemically Synthesized Ni₃V₂O₈ Nanoparticles for Supercapacitors" in Journal Russian Journal of Electrochemistry 59,124–130 January 2023.
- ❖ **Dr. N. SenthilKumar and Dr. P. Matheswaran** published a paper entitled "Surfactants assisted synthesis of WO₃ nanoparticles with improved photo catalytic and antibacterial activity: A strong impact of morphology" in Inorganic Chemistry Communications 142(1387-7003):109709 July 2022.
- ❖ **Dr. N. SenthilKumar** published a paper entitled "Effect of incorporation of La into WO₃ nanorods for improving photo catalytic activity under visible light irradiation" in Journal of Physics and Chemistry of Solids 170:110908 July 2022
- ❖ **Dr. N. SenthilKumar** published a paper entitled "The Structural, Morphological, and Resistive Switching Memory Studies of Zinc Tungstate Prepared by Hydrothermal Method" in NANO: Brief Reports and Reviews 17(11) November 2022.
- ❖ **Dr. N. SenthilKumar** published a paper entitled "Physicochemical properties and photocatalytic activity of MoO₃ nanostructures: Evaluation of structural, optical, vibrational, and morphological properties" in Ceramics International doi: 10.1016/j.ceramint.2022.12.281 August 2022.

- ❖ **Dr. N. SenthilKumar** published a paper entitled “Characterization of pure and Cu doped V_2O_5 nanostructures and their Cu: V_2O_5 /p-Si photodiode applications” in Digest Journal of Nanomaterials and Biostructures 18(1) 131-143 March 2023.
- ❖ **Dr. N. SenthilKumar** published a paper entitled “Ag decorated vertically aligned ZnO nanorods for Non-Enzymatic Glucose Sensor Applications” in Nanomaterials 13(4), 754 January 2023.
- ❖ **Dr. B. Chandar Shekar** published a paper entitled “Characterization of Calcium Phosphate Chitosan Nanocomposite as Plant Growth Promoter” in Journal of Experimental Biology and Agricultural Sciences [https://doi.org/10.18006/2022.10\(3\).567.574](https://doi.org/10.18006/2022.10(3).567.574) July 2022.
- ❖ **Dr. B. Chandar Shekar** published a paper entitled “Synthesis and Characterization of Magnesium Doped Ferric Sulphate Nanoparticles (Mg-Fe 2 SO 3 NPs) for Agriculture Applications” in Journal of Experimental Biology and Agricultural Sciences <https://orcid.org/0000-0002-6370-7391> August 2022.

2023-2024

- ❖ Dr. A. Anu Kaliani has published a paper entitled “**Thermochromic and photocatalytic properties of thermally evaporated vanadium oxide–molybdenum oxide mixed oxide thin films**” in the journal J Mater Sci: Mater Electron 34 (2023) 1244.
- ❖ Dr. B. Chandar Shekar has published a paper entitled “**Structural and Resistivity Analysis of ZnO Thin Films Prepared by Thermal Evaporation Method for Possible Optoelectronic Device Applications**” in the Journal of Systems Engineering and Electronics 34 (2024) 120.
- ❖ Dr. M. Seetha has published a paper entitled “**Synthesis and characterization of visible-light-driven novel CuTa 2 O 6 as a promising practical photocatalyst**” in the journal Frontiers in Chemistry (2023) DOI 10.3389/fchem.2023.1197961.
- ❖ Dr. M. Seetha has published a paper entitled “**Novel GdTaO 4 phase for efficient photocatalytic degradation of organic dye under visible light irradiation: An X-ray spectroscopic investigation**” in the journal Chemosphere 340 (2023) 139834.
- ❖ Dr. M. Mohamed Ibrahim has published a paper entitled “**Photoelectrochemical Water Splitting Over Decahedron Shaped BiVO 4 Photoanode by Tuning the Experimental Parameters**” in the Journal of Cluster Science 34 (2023) 557.
- ❖ Dr. M. Mohamed Ibrahim has published a paper entitled “**Electrochemical studies on CuBi 2 O 4 nanomaterial prepared by hydrothermal technique**” in the Journal International Journal of Current Science (IJCS PUB) 13 (2023) 345.
- ❖ Dr. P. Matheswaran has published a paper entitled “**Thermally processed phase change behavior on the stoichiometric efficacy of quaternary Se $_{77.5-X}$ Te $_{20}$ Sn $_{2.5}$ Ag $_X$ (X = 2.5, 5, 7.5) thin films**” in the Journal Materials Science in Semiconductor Processing 171 (2024) 108037.
- ❖ Dr. P. Matheswaran has published a paper entitled “**Effect of alkali/alkaline modifiers on Pr $^{3+}$ ions doped lead boro-tellurite glasses for lasing material applications**” in the Journal Optical Materials 143 (2023) 114289.
- ❖ Dr. N. Senthilkumar has published a paper entitled “**Fabrication of crack-free PbS thin films by Jet nebulizer spray pyrolysis technique for enhancing optoelectronic applications: An effect of Ce $^{3+}$ doping concentrations**” in the Journal Surfaces and Interfaces 42 (2023) 103292.
- ❖ Dr. N. Senthilkumar has published a paper entitled “**Insights into structural, vibrational, and chemical shift characteristics, solvents impact (polar and nonpolar) on electronic properties and reactive sites, ADMET**”

predictions, and ligand-protein interactions for antiviral drugs safrole and isosafrole: An in-silico approach” in the Journal Chemical Physics Impact 8 (2024) 100443.

- ❖ Dr. N. Senthilkumar has published a paper entitled **“The Emerging Role of Artificial Intelligence in STEM Higher Education: A Critical Review”** in the International Research Journal of Multidisciplinary Technovation 5(5) (2023).
- ❖ Dr. N. Senthilkumar has published a paper entitled **“Effect of La-doping on NiO photocatalyst for enhancing photocatalytic degradation performance under visible light irradiation: DFT calculations and degradation mechanism”** in the journal Inorganic Chemistry Communications 156 (2023) 111172.
- ❖ Dr. V. Mohan Kumar has published a paper entitled **“II Spacer Effect in Benzimidazole-Quinoline Donor Configuration to Explore Visible Photon Absorption for Dye-Sensitized Solar Cells”** in the journal Materials Letters 360 (2024) 135955.
- ❖ Dr. V. Mohan Kumar has published a paper entitled **“Analyzing the three-dimensional networks of piperazinium hydrogenisophthalate – Insight on the experimental, theoretical, birefringent behavior and nonlinear optical study”** in the journal, Journal of Molecular Structure 1290 (2023) 135845.

2024-2025

- ❖ Rehna Parameswaran Mohanraj Kumar, Babu Balraj, Sruti Nanditaa Sampath Kumar, Balachandran Subramanian, **Senthil Kumar Nagarajan** published a paper entitled **“Utilizing samarium doped BiVO₄ microspheres for solar-Powered photocatalysis and Microbial Defence”** in the journal of Materials Today Sustainability 27: 100944, July 2024.
- ❖ Thangabalu Subramani, **Senthil Kumar Nagarajan** published a paper entitled **“Synergic effect of rare earth doped Sm doped WO₃ nanoparticles for enhanced MB dye photocatalytic activities of waste water treatment and antibacterial activities against Staphylococcus aureus”** in the journal of Materials Today Sustainability 50: 34226-34239, 2024.
- ❖ Thangabalu Subramani, **Senthil Kumar Nagarajan** published a paper entitled **“Influence on the effect of Gd rare earth doped WO₃ nanoparticles for enhanced photocatalytic and antibacterial activities: A nanoplate like morphology”** in the journal of Materials Today Sustainability 50: 50252-50262, September 2024.
- ❖ Thangabalu Subramani, **Senthil Kumar Nagarajan** published a paper entitled **“Structural, optical and morphological properties of Eu rare earth doped WO₃ nanoparticles enhanced photocatalytic for waste water treatment and antibacterial activities”** in the journal of Materials Today Sustainability 50: 44822–44832, August 2024.
- ❖ M. Gowtham, Chandrasekar Sivakumar, Narendhar Chandrasekar, S. Balachandran, **N. Senthil Kumar** published a paper entitled **“Exploring Zinc Vanadate/Cobalt Oxide (Zn₃ (VO₄)₂/CoO) Nano Hybrid Composites as Supercapacitors for Sustainable Energy Storage Applications”** in the journal of International Research Journal of Multidisciplinary Technovation 6: 128-143, May 2024.
- ❖ A Ram Kumar, S Selvaraj, P Rajkumar, J Dhanalakshmi, Mohanraj Kumar, **Senthil Kumar Nagarajan**, P Jayaprakash, GP Sheeja Mol, Shikha Awasthi, Sarvesh Kumar Pandey published a paper entitled **“Insights into structural, vibrational, and chemical shift characteristics, solvents impact (polar and nonpolar) on electronic properties and reactive sites, ADMET predictions, and ligand-protein interactions for antiviral drugs safrole and isosafrole: An in-silico approaches”** in the journal of Journal of Chemical Physics Impact 8:100443, 2024.

- ❖ S Sathish, B Chandar Shekar, S Rathish Kumar, KC Sekhar, A Sulthan Ibrahim, K Kamakshi published a paper entitled **“Thermally evaporated InTiO transparent thin film: Optical and photoconduction behavior”** in the journal of Materials Today: Proceedings, xxx April 2024.
- ❖ Pratheep Haalan Ravi, Chandar Shekar Bellan, Vadivelan Varadarajan, R. Subramaniyan@Raja published a paper entitled **“Preparation of Panchromatic Silver Halide Emulsion to Fabricate High Efficiency Multiplexed Volume Phase Holograms for Solar Concentration Application”** in the journal of International Research Journal of Multidisciplinary Technovation 6(5): 164-176, September 2024.
- ❖ B Veena, M Seetha published a paper entitled **“Synthesis and Characterization of Cr doped CeO₂ nanoparticles for Rhodamine B dye degradation”** in the journal of Heliyon 10(16): e35758, August 2024.
- ❖ S. Keerthana, R. Venkatesh, K. Mahalakshmi, K. Saravanakumar, C. Ravi Dhas published a paper entitled **“Effect of doping level on the photoconduction and Chemi resistive ethanol gas sensing of lanthanum-doped CuO films”** in the journal of Heliyon 804: 140500 September 2024.
- ❖ Senthilkumar Palanisamy, Nandhana Varnan, Shanmugam Venkatachalam, Kumarakuru Kuppuswamy, Gayathri Devi Selvaraju, Devanesan Sanjeevi Ranjith Santhosh Kumar, Rajendran Kamalabai Selvakesavan, **Gokul Bangaru**, Devaraj Bharathi published a paper entitled **“Preparation of Cellulose Fiber Loaded with CuO Nanoparticles for Enhanced Shelf Life and Quality of Tomato Fruit”** in the journal of Materials 17(12):2823, June 2024.
- ❖ Karthikeyan Kandhasamy, Matheswaran Palanisamy, Shankar Hari, Shradha Suman, Kamatchi Jothiramalingam Sankaran, Pandiyarasan Veluswamy, **Gokul Bangaru**, Asokan Kandhasami published a paper entitled **“Thermally processed phase change behavior on the stoichiometric efficacy of quaternary Se_{77.5}-X Te₂₀ Sn_{2.5} Ag_x (X= 2.5, 5, 7.5) thin films”** in the journal of Materials Science in Semiconductor Processing, March 2024.
- ❖ G Thilakavathi, Annamalai Raja, W Hannah Blessy, **B Gokul**, M Parthasarathy, JE Sangeetha, S Cholan, Misook Kang, Adel El-marghany published a paper entitled **“Enhanced H₂ sensing performance of perforated 3D NiO nanostructures and their comparative study with green synthesized NiO nanoparticles”** in the journal of Journal of Materials Science: Materials in Electronics 35(33):2130, November 2024.
- ❖ S Sudha, A Raja, P Prameela, A Sivakami, S Cholan, Misook Kang, **B Gokul**, Samar A Aldossari published a paper entitled **“Dual function of Zn-doped NiO nanoparticles in high sensing of triethylamine gas and rhodamine B dye degradation”** in the journal of Journal of Materials Science: Materials in Electronics 35(35):1-13, December 2024.
- ❖ Sanjay S Nair, Minnu Peter, Sai Charanya B, Nithya V.D published a paper entitled **“Synthesis and characterization of BIFeO₃ Nanoparticles for supercapacitors”** in the journal of Kongunadu Research Journal 11(1):41-45, June 2024.
- ❖ Rehna Parameswaran, **Senthil Kumar Nagarajan**, Chandrasekar Sivakumar, Balachandran Subramanian, Mohanraj Kumar published a paper entitled **“Bismuth Vanadate Microspheres: Utilizing Temperature-driven Phase Transition for Improved Sunlight- Driven Photocatalysis and Antibacterial Efficacy”** in the journal of International Research Journal of Multidisciplinary Technovation 7(1): 247-263, January 2025.
- ❖ T. Usha Devi, D. Senthil Kumar, M. Gowtham, Senthil Kumar Nagarajan published a paper entitled **“Yttrium doped MoO₃ nanoplates as photocatalysts for enhanced removal of organic dyes in aqueous solutions”** in the journal of International Research Journal of Multidisciplinary Technovation 7(2) 245-260: March 2025.

- ❖ Sathish Sugumaran, Rathish Kumar Sivaraman, Bhakyalatha Meenakshisundaram, Koppole Chandra Sekhar, Koppole Kamakshi, **Chandar Shekar Bellan**, Mohd Faizal Jamlos Published a paper entitled “**16-Smart sensors for Internet of Things-based smart health monitoring**” in the journal of Blockchain and Digital Twin for Smart Healthcare xxx 303- 328: January 2025.
- ❖ Pandian Mannu, VS Manikandan, Karthikeyan Kandhasamy, **Gokul Bangaru**, Matheswaran Palanisamy, Arun Thirumurugan, Asokan Kandasami, Chi-Liang Chen, Chung-Li Dong published a paper entitled “**Thermal annealing-induced phase transition and optical property modulation of In_xSe_{80-x}Te₂₀ thin film**” in the journal of Materials Science: Materials in Electronics 36(9):1-16, March 2025.
- ❖ Vellalapalayam Devaraj Nithya published a paper entitled “**Recent Research in the Development of Integrated Solar Cell Supercapacitors**” in the journal of Journal of Electronic Materials 54:1572-1591, January 2025.
- ❖ Nagasundar, Anu Kaliani, Subin and Sakunthala Ayyasamy published a paper entitled “**Supercapacitor Performance and Characterization of La Doped V₂O₅ Nanoparticles**” in the journal of Journal of Oriental Journal of Chemistry 41(1):111-119, January 2025.

9.10 Training Received by Faculty/ List of Activities undertaken by Faculties

a) i) Training Received by Faculty

2022-2023

- ❖ Dr.S.Selvi completed Online **Two - Week Refresher Course** In “Physics” from 10.04.2022 to 24.04.2022 organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
- ❖ Dr. M. Seetha completed UGC Sponsored online **Refresher Course in Material Science (Interdisciplinary)** from 05.07.2022 to 18.07.2022 organised by UGC- HRDC, Bharathidasan University, Tiruchirappalli.
- ❖ Dr. N. Senthil Kumar completed Online **Two - Week Refresher Course** in “Physics” from 28.07.2022 to 11.08.2022 organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
- ❖ Dr.A.Ranjitha completed Online **Two - Week Refresher Course** In “Physics” from 31.10.2022 to 14.11. 2022 organized by Teaching Learning Centre, Ramanujan College, University of Delhi.
- ❖ Dr. M. Seetha, Dr. P. Matheswaran, Dr. M. Mohamed Ibrahim, Dr. N. Senthilkumar and Dr.S.Selvi participated in an **In-Service Training Programme** in Physical Sciences at Government Arts College, Coimbatore organized by TANSCH, Chennai on 05.05.2022 and 06.05.2022.
- ❖ Dr. V. Mohankumar attended an **e-workshop** entitled “LaTex for Scientific Writing” conducted by ACT Academy, Tamilnadu from 08.11.2022 to 09.11.2022.
- ❖ Dr. V. Mohankumar has attended a **One Week short term course** on “Modern E-Tools and Techniques for Research Article & Thesis Writing” from 06.10.2022 to 11.10.2022, Department of Biochemistry, Kongunadu Arts and Science College, Coimbatore.
- ❖ Dr. E.M. Koushika attended a **National level** “CSIR-SET Workshop on Physical Sciences” organized by PSGR Krishnammal College for Women, Coimbatore from 12.10.2022 to 14.10.2022.
- ❖ Dr.A.Ranjitha, Dr. N. Senthilkumar and Dr.S.Selvi attended **Two days Faculty Development Programme (FDP)** on Python with Data Science organized by the Department of Computer Science (A), KASC, Coimbatore from 13.02.23 to 14.02.23.

- ❖ Dr. M. Seetha, Dr.V.D.Nithya and Dr.E.M. Koushika participated in **Seven Days Faculty Development Programme** on Impact of Industry 4.0 on 21st Century Higher Education organized by Internal Quality Assurance Cell (IQAC) and Curriculum Development Cell (CDC), Kongunadu Arts and Science College (Autonomous), between 01.03.2023 and 08.03.2023.

2023-2024

- ❖ **Dr. M. Seetha and Dr. P. Matheswaran**, Assistant Professors of Physics have successfully completed “**Two-week refresher Course in Physics**” organized by TLC, Ramanujan College, University of Delhi from 30.08.2023 to 13.09.2023.
- ❖ **Dr. N. Senthilkumar and Dr. S. Selvi**, Assistant Professors of Physics have participated in “**UGC sponsored Refresher Course**” organized by UGC-HRDC, Bharathiar University, Coimbatore from 06.12.2023 to 19.12.2023.
- ❖ **Dr. A. Ranjitha**, Assistant Professor of Physics has successfully completed “**Two-week refresher Course in Physics**” organized by TLC, Ramanujan College, University of Delhi from 30.03.2024 to 12.04.2024.
- ❖ **Dr. B. Gokul**, Assistant Professor of Physics has successfully completed “**7 Days Online Faculty Development Programme/Workshop on DFT Modelling of Materials: Nanoparticles, Unit Cells, Thin Films (DFT-M)**” organized by Centre for Advanced Computational Research, Delhi from 4.3.2024 to 10.3.2024.
- ❖ **Dr. V. D. Nithya**, Assistant Professor of Physics has successfully completed “**Seven Days International Virtual Faculty Development Programme on Research Insights to Academic Excellence**” organized by KPR College of Arts, Science and Research, Arasur, CBE from 03.08.2023 to 09.08.2023.
- ❖ **Dr. M. Seetha, Dr. B. Gokul and Dr. V. Mohankumar**, Assistant Professors of Physics Coimbatore have attended a “**2 days CSIR NET/SET Workshop on Physical Sciences**” organized by PSGR Krishnammal College for Women, CBE on 31.07.2023 and 01.08.2023.

2024-2025

- ❖ Dr. A. Anu Kalyani, Dr. A. Ranjitha, Dr. S. Selvi and Dr. V. D. Nithya participated in a One- week FDP on “**Next generation technologies: Green hydrogen and carbon capture for a sustainable future**” from 09.12.2024 to 14.12.2024 organized by PSGR Krishnammal College for Women, Coimbatore.
- ❖ Dr. M. Mohamed Ibrahim participated in **UGC-Sponsored Refresher Course in Physical Science (Interdisciplinary)**, organized by the UGC-Malaviya Mission Teacher Training Centre (Formerly UGC-Human Resource Development Centre), Bharathidasan University in Face-to- Face Mode from 26.11.2024 to 09.12.2024.
- ❖ Dr. S. Selvi and Dr. V. D. Nithya participated in a **One-day Workshop on “Layered Structures and Devices**” on 30.08.2024 organized by Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- ❖ Dr. A. Ranjitha and Dr. S. Selvi participated in **National Level Workshop and Hands-on-Session on Technology Enhanced Physics Teaching (TEPT - 2024) in association with Indian Association of Physics Teachers** on 19.07.2024 Department of Physics, Sri Ramakrishna Engineering College, Coimbatore.
- ❖ Mr. R. Thiyagarajan, Mr. P. Rasu, Mrs. M. Malliga and Mr. T. Vivekanandhan participated in **Laboratory and Chemical safety for Lab Technicians** on 10.01.2025 organized by the Department of Chemistry, KASC.
- ❖ Mr. R. Thiyagarajan, Mr. P. Rasu, Mrs. M. Malliga and Mr. T. Vivekanandhan participated in **Hands-on training on Biosafety and fire safety** on 12.02.2025 organized by the Department of Chemistry, KASC.

ii) Conference/ Seminars / Workshops Attended

2022-2023

- ❖ Dr. E.M. Koushika presented a paper entitled “Influence of partial pressure of atmospheric oxygen on thermal plasma synthesized Fe nanopowders and its degradation of commercial dyes by ultrasound assisted Fenton process” in **National Conference on Recent Developments and Evolving Trends in Plasma Science and Technology & Pre-conference workshop on modelling and Simulation of Industrial Plasmas** at Bharathiar University from 22.09.2022 to 24.09.2022.

2023-2024

- ❖ Dr. V. Mohankumar, Assistant Professor of Physics, Kongunadu Arts and Science College (Autonomous), Coimbatore has participated in the “**Two days Workshop on Multi-Functional Nanomaterials for Water Remediation (MNWR - 2024)**” organized by SSN Research Centre, Sri Sivasubramaniya Nadar College of Engineering, Chennai” during 21 and 22, March 2024.
- ❖ Dr. V. Mohankumar, Assistant Professor of Physics, Kongunadu Arts and Science College (Autonomous), Coimbatore has presented a paper entitled “**Metal free sensitizer for solar cell application: Density Functional Theory Investigation**” in the International conference on Recent Advancement and Multidisciplinary Research in Science and Humanities (ICMRSH) organized by SNS College of Technology, Coimbatore on 23.02.2024 and bagged Best Paper Award.
- ❖ Dr. V. Mohankumar, Assistant Professor of Physics, Kongunadu Arts and Science College (Autonomous), Coimbatore has presented a paper entitled “**Benzimidazole Quinoline-Based Organic Dyes for Dye Sensitized Solar Cells: A Quantum Chemical Method Study**” in the International Conference on Recent Innovations in Modern Science and Technology (ICRIMST) organized by KPR Institute of Engineering and Technology, Coimbatore from 09.01.2024 to 11.01.2024.
- ❖ Dr. V. Mohankumar, Assistant Professor of Physics has participated in “**International Workshop on Energy Materials and Modeling for Future Technology (EMMFT - 2023)**” organized by KPR Institute of Engineering and Technology, Coimbatore on 27.11.2023.
- ❖ Dr. V. Mohankumar, Assistant Professor of Physics, Kongunadu Arts and Science College (Autonomous), Coimbatore has presented a paper entitled “**II Spacer effect in Benzimidazole Quinoline donor configuration to explore visible photon absorption for DSSC**” in the International Conference on Socioeconomic impact of pollution in water bodies and remedial measures organized by KASC, Coimbatore on 18.12.2023.
- ❖ Dr. V. D. Nithya, Assistant Professor of Physics, Kongunadu Arts and Science College (Autonomous), Coimbatore has participated in the “**Two days National Workshop on Electrochemical Devices**” organized by PSGR Krishnammal College for Women, Coimbatore during 22 and 23, August 2023.
- ❖ Dr. V. D. Nithya, Assistant Professor of Physics, Kongunadu Arts and Science College (Autonomous), Coimbatore has attended and presented a paper entitled “**Facile synthesis of NiWO₄ nanoparticles for pseudocapacitors**” in DRDO Sponsored National Conference on Advanced Biocompatible Materials and Devices/ Systems for Biomedical Applications, ADMDB-2023 organised by Sri Ramakrishna Engineering College, Coimbatore from 10.08.2023 to 11.08.2023.

2024-2025

- ❖ Dr. P. Matheswaran and Dr. B. Gokul participated in **Industry-Academia Research Conclave 2025 Silicon Synergy: Shaping Semiconductor Future in Empowering the India Semiconductor Mission** from 31.01.2025 to 01.02.2025 organized by Kumaraguru College of Technology (KCT), Coimbatore.
- ❖ Dr. A. Ranjitha and Dr. S. Selvi, Assistant Professors of the department has participated in the CSIR NET/ SET Workshop on Physical Sciences organised by the Department of Physics, PSGR Krishnammal College for Women, Coimbatore from 14.07.2025 to 15.07.2025

b) List of Projects undertaken by Students

2022-2023

- ❖ Ajay CS and Tamilselvi R of III B.Sc. Physics completed a project entitled **Study of Ce – Doped V₂O₅ Nanoparticles Synthesised by Co-Precipitation Method**
- ❖ Nareshkumar N, Swaathi J B and Nandhana J of III B.Sc. Physics completed a project entitled **Electrocardiogram and Electromyogram Monitoring System (Interdisciplinary)**
- ❖ Pranav A, Arun sagar P and Alfia P of III B.Sc. Physics completed a project entitled **Synthesis of Cu-K Nanoparticles Using Neem Leaf Extract (Interdisciplinary)**
- ❖ Leyga K, Jaswanth K and Dharani P of III B.Sc. Physics completed a project entitled **Designing of Power Controller for High Temperature Furnace**
- ❖ Sharukeerthana S and Praveen P of III B.Sc. Physics completed a project entitled **Substation Monitoring and Controlling Based on Microcontroller**
- ❖ Madhusree R, Amala Judy J and Karthika devi M of III B.Sc. Physics completed a project entitled **Obstacle Avoiding and Bluetooth Controlled Robot (Interdisciplinary)**
- ❖ Haripriya S, Aadharshini P and Ruseena S of III B.Sc. Physics completed a project entitled **Iron Oxide Nanoparticles Synthesized Using Ginger, Onion and Garlic Extracts Rapidly Degrade Methylene Blue Dye (Interdisciplinary)**
- ❖ Aparna C, Dharunika A and Aravind D of III B.Sc. Physics completed a project entitled **Physical and Optical Properties of Eu³⁺/Dy³⁺/Co – Doped Borotelluro Zinc Oxy Fluoride Glasses**
- ❖ Rathina kumar K, Sridevi M and Vijayalakshmi P of III B.Sc. Physics completed a project entitled **Synthesis and Magnetic Property of Zinc Ferrite Nanoparticles**
- ❖ Konethi S, Preethi S and Sujitha A of III B.Sc. Physics completed a project entitled **Effect of pH on the Structural and Bacterial Study of ZnO Nanoparticles by Co-Precipitation Method (Interdisciplinary)**
- ❖ Megha M, Vishnu P and Sowhanthi C of III B.Sc. Physics completed a project entitled **Generation of Microplasma and Water Treatment for Germination of Green Gram (Interdisciplinary)**
- ❖ Arun Sagar P and team completed a project entitled **Synthesis of CuK nanoparticles stimulator for agricultural applications (Interdisciplinary)**
- ❖ Megha M of III B.Sc. Physics completed a project entitled **Synthesis of FeCO Nanoparticles**
- ❖ Sharukeerthana S and Elavarasi J completed a project entitled **Synthesis and Electrochemical Studies of CeO₂ / NiO / CeO mixed oxides**

- ❖ Kannan T and Prahasitha S completed a project entitled **A study on Harvesting of electrical energy using piezoelectric transducers**
- ❖ Ajay.C. S (III B.Sc. Physics), Arun Joseph (III B.Sc. Computer Science), Sarvesh G (III B.Sc. Mathematics) and Selladurai S (III B.Sc. Computer Science) developed a project entitled **Home Safety Automation Using IoT (Interdepartmental Project with Computer Science and Mathematics).**
- ❖ Naresh Kumar N (III B.Sc. Physics), Arun Joseph (III B.Sc. Computer Science) and Selladurai S (III B.Sc. Computer Science), developed a project entitled **Smart Agriculture (Interdepartmental Project with Computer Science).**
- ❖ Tamil Selvi R (III B.Sc. Physics), Preeti W.B (II B.Sc. Computer Science) and Saranya Priya A (II B.Sc. Computer Science) developed a project entitled **Arduino Robot (Interdepartmental Project with Computer Science).**
- ❖ Durgadevi M, Hariharasudhan M, Sriram B (III B.Sc. Physics) and Kabaleeshwaran (III B.Sc. Computer Science) developed a project entitled **IOT Based ICU Patient Monitoring System (Interdepartmental Project with Computer Science).**
- ❖ Monisha Parisy, Sowndhariya S, Kaviya T, Priyadhashini S (I B.Sc. Physics) and Hariharan M (III B.Sc. Computer Science) developed a project entitled **Line Follower Robot (Interdepartmental Project with Computer Science).**
- ❖ Manoj Kumar R (II B.Sc. Physics), Anandhakumar M (II M.Sc. Physics), Thanusree S and Mithranjali M (III B.Sc. Computer Science) developed a project entitled **3D Printed Robotic Arm (Interdepartmental Project with Computer Science).**

Projects that has been developed as Working Models:

- ❖ Vigneshwar D and team developed a project entitled **Solar Automatic irrigation system**
- ❖ Gowthamraj V and team developed a project entitled **Self - car parking**
- ❖ Kannan T and team developed a project entitled **Plasma generation**
- ❖ Ahila P and team developed a project entitled **Water level indicator**
- ❖ Ajay CS and Tamilselvi of III BSc Physics developed a project entitled **Plant Monitoring system**
- ❖ Naresh Kumar N and team developed a project entitled **Third eye blind sensor**
- ❖ Pranav A and team developed a project entitled **Hydraulic Crane**
- ❖ Leyga K and team developed a project entitled **Designing of power controller circuit for high temperature furnace**
- ❖ Jaswanth V and team developed a project entitled **Portable Inverter**
- ❖ Sanjay Kumar S and team developed a project entitled **Wireless power Transmission**
- ❖ Sharukeerthana S and team developed a project entitled **Plasma ball**
- ❖ Aparna C and team developed a project entitled **Hologram and rain detector**
- ❖ Rathina Kumar K and team developed a project entitled **Distance measuring instrument**
- ❖ Konethi S and team developed a project entitled **Laser security alarm**
- ❖ Vishnu P and team developed a project entitled **Temperature sensor**
- ❖ Poovarasan A and Nickishwaran K developed a project entitled **Automatic light sensor**
- ❖ Suryanarayana A and Pavithra M developed a project entitled **Plasma generator**
- ❖ Selvam D and team developed a project entitled **Solar PV model and its application**

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- ❖ P. Ahila and D. Selvam of III B.Sc. Physics have done a project entitled **“Synthesis and Characterization of Nd³⁺ doped V₂O₅ Nanoparticles by Co Precipitation Method” (Interdisciplinary).**
- ❖ T. Kannan and R. Shalini of III B.Sc. Physics have done a project entitled **“Exploring the Structural and Electrochemical Characteristics of V₂O₅ Nanostructures for Enhanced Super capacitance Performance” (Interdisciplinary).**
- ❖ S. Sri Velusamy Pandian, S. Dhanabalan and P. Sanjay Kumar of III B.Sc. Physics have done a project entitled **“Construction of thermoelectric setup for the measurement of Seebeck coefficient for thin films”.**
- ❖ Surya Narayana and V. Hemadharshini of III B.Sc. Physics have done a project entitled **“Automatic Car Parking System”.**
- ❖ V.S. Karthick Raja and A. Poovarasana of III B.Sc. Physics have done a project entitled **“TiO₂ Doped Thin films for Solar cell application”.**
- ❖ R. Manoj Kumar and S. Sangavi of III B.Sc. Physics have done a project entitled **“Crystal growth and structural characterization of 2-amino 4-methyl pyridinium diphenyl acetate” (Interdisciplinary).**
- ❖ R. Hema Varna and R. Kumaravel of III B.Sc. Physics have done a project entitled **“Synthesis and Characterization of Manganese Ferrite” (Interdisciplinary).**
- ❖ N. Brindha and R. Subiksha of III B.Sc. Physics have done a project entitled **“Synthesis and characterization of Cr doped CeO₂ nanoparticles” (Interdisciplinary).**
- ❖ P. Sahana and E. Pavithra of II B.Sc. Physics have done a project entitled **“Preparation of electrode using CeO₂ nano particles” (Interdisciplinary).**

Interdepartmental Projects

- ❖ R A Hemavarna of III B.Sc. Physics, G Jaya Deepa, R Shoba, G Narmatha of I M.Sc. Physics and R K Hrithik of II B.Sc. Chemistry have developed a project entitled **“Ferro fluid and non-Newtonian fluid” (Interdepartmental Project with Chemistry).**
- ❖ D Vigneshwar, S Raju, V Gowthamraj of II B.Sc. Physics and P Mukeshkanna of III B.Sc. Computer Science have developed a project entitled **“Firefighting robot” (Interdepartmental Project with Computer Science).**
- ❖ R Shalini of III B.Sc. Physics, S Sowndhariya, A Monisha Prasiy of II B.Sc. Physics and K Harashaparadha of III B.Sc. Computer Science have developed a project entitled **“Smart Helmet” (Interdepartmental Project with Computer Science).**
- ❖ D Selvam of III B.Sc. Physics, S Ramya, S Deepika of I M.Sc. Physics, M Yuvaraj and R Aravind Kandeepan of III B.Sc. Computer Science have developed a project entitled **“Pet feeder using IOT” (Interdepartmental Project with Computer Science).**
- ❖ T Kannan of III B.Sc. Physics, A Sri Varsha and B Dharshana of III B.Sc. Computer Science have developed a project entitled **“Ultra sonic Radar using IOT” (Interdepartmental Project with Computer Science).**
- ❖ A Poovarasana of III B.Sc. Physics, A Bavatharani, D Madhumitha, C Benitta of I M.Sc. Physics and W B Preethi of II M.Sc. Computer Science have developed a project entitled **“Automatic height increasing bridge” (Interdepartmental Project with Computer Science).**
- ❖ S Sindhu, M Ramya of I M.Sc. Physics, S Dhanabalan of III B.Sc. Physics and M Asha Devi of III B.Sc. Computer Science have developed a project entitled **“Anti-Sleep Alarm for Drivers” (Interdepartmental Project with Computer Science).**

- ❖ P Sanjay Kumar of III B.Sc. Physics, A Pranav, N Nareshkumar of I M.Sc. Physics, E K Mukesh of III B.Sc. Physics, V Ranil and P Senthamizhalarasi of III B.Sc. Chemistry have developed a project entitled **“International Space station tracker” (Interdepartmental Project with Chemistry)**.
- ❖ S Dinesh, P Hariharan of II B.Sc. Physics, M Anandha Kumar of II M.Sc. Physics and R Tharun Raja of III B.Sc. Computer Science have developed a project entitled **“AI assisted agricultural cultivation” (Interdepartmental Project with Computer Science)**.

Projects that have been developed as a Working Model

- ❖ M Karan, G Lara and Y Ajmal of II B.Sc. Physics have developed a project entitled **“Solar water trash bin”**.
- ❖ S Geetha Lakshmi and T Kaviya of II B.Sc. Physics have developed a project entitled **“Train accident prevention system”**.
- ❖ A Jenice and R Pritha of I B.Sc. Physics have developed a project entitled **“Tesla Coil”**.
- ❖ K Hariprasath, R Praneswaran and K Magesh of I B.Sc. Physics have developed a project entitled **“MQ2 gas and smoke sensor module”**.
- ❖ N Boomika and S Gayathri of I B.Sc. Physics have developed a project entitled **“Smart Blind Stick”**.
- ❖ L Sivarajan, S Dhanesh, M Saravanan and S Siva Pranesh of I B.Sc. Physics have developed a project entitled **“Laser Alarm”**.
- ❖ T Rathisha Shree, V Vijayalakshmi and S Sankari of I B.Sc. Physics have developed a project entitled **“Light intensity measuring detector”**.
- ❖ S Sumeth, D S Anish Dev and B Srinivasan of I B.Sc. Physics have developed a project entitled **“LiFi Data Transmission”**.
- ❖ S Suriyaraj, F Praveen and S Sugesh of I B.Sc. Physics have developed a project entitled **“Crystal Radio”**.
- ❖ R S Subiksha and N Brindha of III B.Sc. Physics have developed a project entitled **“Underground Cable Fault detector using IOT”**.
- ❖ A Suryanarayana and V Hemadharshini of III B.Sc. Physics have developed a project entitled **“Automatic Car parking system using Thingspeak”**.
- ❖ B Sri Velsamy Pandian, S Dhanabalan and P Sanjaykumar of III B.Sc. Physics have developed a project entitled **“Construction of Thermo electric setup for the measurement of feedback coefficient for thin films”**.
- ❖ T Rathisha Shree, B Srinivasan of III B.Sc. Physics, S Ruseena, P Aadharshini and K Balalogesh of I M.Sc. Physics have developed a project entitled **“Infinity mirror Hypercube”**.
- ❖ S Jency Gladia of II B.Sc. Physics, B Sri Velsamy Pandian of III B.Sc. Physics, K Leyga, P Praveen and C Kiruba Sri of I M.Sc. Physics have developed a project entitled **“Innovation Solar panel with CD and Solar car with rechargeable battery”**.
- ❖ S Suvetha, Pooja Sri and R Priyadharshini of I BSc Physics have developed a project entitled **“Automatic Fire extinguisher”**.

Innovative Product Designed and Developed

- ❖ **Y. Ajmal of II BSc Physics** student designed a working Prototype entitled **“Solar Grass Cutter”** the working product runs with help of solar power and battery backup which is very useful for environment (Won **I Prize in “Model Making Competition at Anu Awareness Programme 2023”** organized by the Department of Physics, PSGR Krishnammal College for Women, Coimbatore).

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Total 29 projects have been undertaken by our students in which 23 are promoted as working models and there are 13 Interdisciplinary Projects. 7 students of our department have done their projects in association with Department of Chemistry students and 6 students of our department have done their projects in association with Department of Computer Science students.

- ❖ Harikrishnan K of I B.Sc., Physics has developed a project entitled **“Exploring the Dual Axis Solar Tracking System Using Arduino for Maximum Efficiency”**. (Interdisciplinary Project)
- ❖ Priya Dharshini R, Suvetha S, and Sharmila V of II B.Sc., Physics have developed a project entitled **“Temperature Sensor”**. (Interdisciplinary Project)
- ❖ Boomika N and Hariprasath K of II B.Sc., Physics have developed a project entitled **“Conversion of Mechanical Energy into Electrical Energy”**. (Interdisciplinary Project)
- ❖ Jenice A and Pritha R of II B.Sc., Physics have developed a project entitled **“Non- Invasive Glucometer”**. (Interdisciplinary Project)
- ❖ Anish Dev D S and Magesh K of II B.Sc., Physics have developed a project entitled **“Underground Cable Fault Detector”**. (Interdisciplinary Project)
- ❖ Pooja Sri N and Gayathri S of II B.Sc., Physics have developed a project entitled **“Water Distillation unit”**. (Interdisciplinary Project)
- ❖ Lara G and Ajmal Y of III B.Sc., Physics have developed a project entitled **“Solar Air Purifier - using Moss and Algae”**. (Interdisciplinary Project)
- ❖ M Karan and V Gowthamraj of III B.Sc., Physics have developed a project entitled **“Piezoelectric Tyres”**. (Interdisciplinary Project)
- ❖ Kaviya T of I B.Sc., Physics, Dharsana R and Tibna Blessy Jas N.J of I B.Sc., Physics have developed a project entitled **“Servo Distance Indicator”**. (Interdisciplinary Project)
- ❖ Karan M of III B.Sc., Physics and Dharshini J and Lathika V of I M.Sc., Physics have developed a project entitled **“Asset Tracking System”**. (Interdisciplinary Project)
- ❖ Ajmal Y of III B.Sc., Physics, Jishnunath K.V and Sreehari K.R of I M.Sc., Physics have developed a project entitled **“Pollution Level Monitoring and Alert System”**. (Interdisciplinary Project)
- ❖ Monisha Praisya A and Sowndhariya S of III B.Sc., Physics, Naveen. D and Karthikeyan. S of II B.Sc., Physics have developed a project entitled **“Sewage segregator- using Arduino”**. (Interdisciplinary Project)
- ❖ Sahana P of III B.Sc., Physics, Shobha. R, Syed Rifayath. S and Leyga K of II M.Sc., Physics have developed a project entitled **“Lie Detector Using Polygraph Simulator”**. (Interdisciplinary Project)
- ❖ Jency Gladia S and Dinesh S of III B.Sc., Physics have developed a project entitled **“An Efficient FM Discriminator”**. (Interdisciplinary Project)
- ❖ Karan M and Kaviya T of III B.Sc., Physics have developed a project entitled **“Ultrasonic Radar with Arduino”**. (Interdisciplinary Project)

- ❖ Raju S and Gowthamraj V of III B.Sc., Physics have developed a project entitled **“Synthesis and Characterization of CoCo₂O₄:SnO₂ Nanocomposites”**. (Interdisciplinary Project)
- ❖ Sankari S and Vijayalakshmi V of II B.Sc., Physics and Hirithik. R.K of III B.Sc., Chemistry have developed a project entitled **“Carbon Purification for Industrial Applications”**. (Interdepartmental Project)
- ❖ S Raju, P Hariharan, G Marisamy of III B.Sc., Physics and Thrishok. S of III B.Sc., Computer Science have developed a project entitled **“Smart Cart”**. (Interdepartmental Project)
- ❖ Praneswaran R of II B.Sc., Physics, Roshall Packia and A Lijo Antony of III B.Sc., Physics and Shakti Pooja R.M of III B.Sc., CS have developed a project entitled **“Smart Vehicle system”**. (Interdepartmental Project)
- ❖ Dinesh S of III B.Sc., Physics, Vino R and Murali A of I B.Sc., Physics and Pranesh N of III B.Sc., Chemistry have developed a project entitled **“Hydrogen Gas Generator Using Electrolysis”**. (Interdepartmental Project)
- ❖ Andrew A of III B.Sc., Physics, Rithika Sree P and Gopika R of I B.Sc., Physics and Priya Dharshan. K of III B.Sc., Computer Science have developed a project entitled **“IOT Based Counting System”**. (Interdepartmental Project)
- ❖ Dhaneesh S of II B.Sc., Physics, Shivani K and Navya N of I B.Sc., Physics and Rahul. A of III B.Sc., Computer Science have developed a project entitled **“E-Message System for Accident Detection in Bike Travel”**. (Interdepartmental Project)
- ❖ Raju S of III B.Sc., Physics, Sreesarin G and Ajmal A.R of I B.Sc., Physics and Dharshana. A of III B.Sc., Computer Science have developed a project entitled **“Child Tracking System”**. (Interdepartmental Project)
- ❖ Rathisha Shree T of II B.Sc., Physics, Praveen. P, Madhumitha. D and Priyadarshini A of II M.Sc., Physics and Niveditha. S of III B.Sc., Computer Science have developed a project entitled **“Traffic Flow Regulator”**. (Interdepartmental Project)
- ❖ Andrew A and Geethalakshmi S of III B.Sc., Physics and Santhosh. V of III B.Sc., Chemistry have developed a project entitled **“Preparation Of (CeGDSmYZr)O₂ High Entropy Oxides Nanoparticles”**. (Interdepartmental Project)
- ❖ Sahana P and Pavithra E of III B.Sc., Physics and Gopi Priyan. M of III B.Sc., Chemistry have developed a project entitled **“Preparation of Zn Doped V₂O₅ By Co-Precipitation Method”**. (Interdepartmental Project)
- ❖ Hariharan P and Marisamy G of III B.Sc., Physics and Tholkappian.M of III B.Sc., Chemistry have developed a project entitled **“Preparation of Nickel Doped Zinc Oxide Nanoparticles”**. (Interdepartmental Project)
- ❖ Sowndarya and Monisha Praisy A of III B.Sc., Physics and Mohan. P of III B.Sc., Chemistry have developed a project entitled **“Cytosine Zinc Nitrate Magnesium Nitrate and Potassium Nitrate Solution Prepared by Green Route Method”**. (Interdepartmental Project)
- ❖ D Vigneshwar and K Malini of III B.Sc., Physics and Elango. P of III B.Sc., Chemistry has developed a project entitled **“Preparation of Vanadium Doped TiO₂ Thin Films”**. (Interdepartmental Project)

Projects that have been developed as a Working Model

- ❖ Harikrishnan K of I B.Sc., Physics has developed a project entitled **“Exploring the Dual Axis Solar Tracking System Using Arduino for Maximum Efficiency”**.
- ❖ Priya Dharshini R, Suvetha S and Sharmila V of II B.Sc., Physics have developed a project entitled **“Temperature Sensor”**.

- ❖ Boomika N and Hariprasath K of II B.Sc., Physics have developed a project entitled “Conversion of Mechanical Energy into Electrical Energy”.
- ❖ Jenice A and Pritha R of II B.Sc., Physics have developed a project entitled “Non- Invasive Glucometer”.
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- ❖ Pooja Sri N and Gayathri S of II B.Sc., Physics have developed a project entitled Water Distillation unit”.
- ❖ Sankari S and Vijayalakshmi V of II B.Sc., Physics and Hirithik. R.K of III B.Sc., Chemistry have developed a project entitled “Carbon Purification for Industrial Applications”.
- ❖ Lara G and Ajmal Y of III B.Sc., Physics have developed a project entitled “Solar Air Purifier - using Moss and Algae”.
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- ❖ S Raju, P Hariharan and G Marisamy of III B.Sc., Physics and Thrishok. S of III B.Sc., Computer Science have developed a project entitled “Smart Cart”.
- ❖ Praneswaran R of II B.Sc., Physics, Roshall Packia and A Lijo Antony of I M.Sc., Physics and Sakthipooja R.M of III B.Sc., Computer Science have developed a project entitled “Smart Vehicle system”.
- ❖ Kaviya T of III B.Sc., Physics, Dharsana R and Tibna Blessy Jas N.J of I M.Sc., Physics have developed a project entitled “Servo Distance Indicator”.
- ❖ Dinesh S of III B.Sc., Physics, Vino R and Murali A of I M.Sc., Physics and Pranesh N of III B.Sc., Chemistry have developed a project entitled “Hydrogen Gas Generator Using Electrolysis”.
- ❖ Andrew A of III B.Sc., Physics, Rithika Sree P and Gopika R of I M.Sc., Physics and Priya Dharshan. K of III B.Sc., Computer Science have developed a project entitled “IOT Based Counting System”.
- ❖ Karan M of III B.Sc., Physics, Dharshini J and Lathika V of I M.Sc., Physics have developed a project entitled “Asset Tracking System”.
- ❖ Dhaneesh S of II B.Sc., Physics, Shivani K and Navya N of I M.Sc., Physics and Rahul. A of III B.Sc., Computer Science have developed a project entitled “E-Message System for Accident Detection in Bike Travel”.
- ❖ Raju S of III B.Sc., Physics, Sreesarin G, Ajmal A.R of I B.Sc., Physics and Dharshana. A of III B.Sc., Computer Science have developed a project entitled “Child Tracking System”.
- ❖ Ajmal Y of III B.Sc., Physics, Jishnunath K.V and Sreehari K.R of I M.Sc., Physics have developed a project entitled “Pollution Level Monitoring and Alert System”.
- ❖ Monisha Praisya A and Sowndhariya S of III B.Sc., Physics, Naveen. D and Karthikeyan. S of II M.Sc., Physics have developed a project entitled “Sewage segregator- using Arduino”.
- ❖ Sahana P, Shobha. R, Syed Rifayath. S and Leyga K of II M.Sc., Physics have developed a project entitled “Lie Detector Using Polygraph Simulator”.
- ❖ Rathisha Shree T of II B.Sc., Physics, Praveen. P, Madhumitha. D and Priyadarshini A of II M.Sc., Physics and Niveditha. S of III B.Sc., Computer Science have developed a project entitled “Traffic Flow Regulator”.
- ❖ Jency Gladia S and Dinesh S of III B.Sc., Physics have developed a project entitled “An Efficient FM Discriminator”.

❖ Karan M and Kaviya T of III B.Sc., Physics have developed a project entitled “Ultrasonic Radar with Arduino”

Innovative Product Designed and Developed

Under DBT Star College Scheme during the Academic Year 2022-23 the Department of Physics, KASC has organized a Two-day workshop on Solar PV Technology on 23.08.2022 and 24.08.2022. Many of the students utilized the workshop and arrived with new working models based on Solar technology. One of the students now pursuing his third year of B.Sc. Physics has constructed Solar Grass Cutter, Solar Air Purifier and Solar Water Trash Bin and bagged many prizes for his innovation in and around Tamil Nadu, Kerala and Andhra Pradesh. The student is planning to patent his work.

9.11 List of Exhibitions/ Seminars/ Training Courses Conducted

a) Conference/ Seminars / Workshops Organized

2022-2023

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	One day Orientation Programme on “Intellectual Property Rights (IPR)”	27.10.2022	Dr. D. Suredran, Founder and CEO, SKS Skill Fasteners, Coimbatore	Students -129, Faculty -11	Students gained knowledge of intellectual property, India’s start-up ecosystem, digital portfolios, professional networking, and turning ideas into MVPs and commercial products.
2	Orientation Programme on “Electrical Safety Management”	21.02.2023	Dr. S. Elango, Associate Professor of EEE, Coimbatore Institute of Technology, Coimbatore	Students - 246, Faculty-10	It promoted electrical safety awareness and supported sustainable prevention of electrical accidents and injuries.
3	Webinar on “Role of Material Engineering in efficient energy harvesting and waste management”	27.03.2023	Dr. Ranjith G Nair, Assistant Professor of Physics, National Institute of Technology, Assam	Students -57, Faculty-12	The students have gained knowledge on photovoltaic and photo catalysts.
4	Seminar on “Crystal Engineering: An insight into process, methods and applications”	30.03.2023	Dr. H. Arul, Assistant Professor and Head of Physics, Kumaraguru College of Technology, Coimbatore	Students- 92, Faculty-8	Students and faculties gained knowledge on Basic crystal structure, Crystal growth from various methods, Crystal Engineering and Applications of crystals

2023-2024

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Seminar on “Futuristic trends and opportunities in Basic Science”.	08-09-2023	Dr. C. Ravidhas Head, Department of Physics, Bishop Heber College, Trichy. Dr. D. Nalini Head, Department of Chemistry, PSGR Krishnammal College, Coimbatore.	195 Students	- Participants understood the various techniques of thin film technology and solar cell fabrication methods. - Awareness about various opportunities in science education was provided.

2	Lecture Workshop on “Problem Solving in Quantum Mechanics for Competitive Examinations”.	12-09-2023	Dr. S S Naina Mohammed Assistant Professor Department of Physics, Udumelpet.	120 Students & 8 Faculty	Students acquired basic skills on problem solving in Quantum Mechanics.
3	Webinar on “Awareness Programme on Higher Education and Job Opportunities in Science”.	24-01-2024	Dr. Arunkumar Dorai, Foreign Research Fellow, Tohoku University, Japan.	70 Students from B.Sc. Physics and Mathematics	Students acquired information on Scholarships available for higher Education and Job opportunities in abroad. Various funding agencies in abroad and about International Collaborative programmes.
4	Seminar on “Nanoscience: Greatness of Smallness”.	19-03-2024	Dr. S. Balakumar Professor, National Centre for Nanoscience and Nanotechnology, University of Madras, Chennai.	259 Students from B.Sc. Physics and Chemistry	Students understood the recent innovations in the field of nanomedicines which inspired some of the students to undertake projects on the same.

2024-2025

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Webinar on “Overview of Earth’s Atmosphere”	31.07.2024	Dr. Lakshmi Kumar T Associate Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi.	Physics: 41 Maths: 9 Chemistry: 5 Faculty: 5	Students acquired information on Main constituents of atmosphere, Atmospheric variables, Climatic change scenario over the globe and Measures to prevent global warming.
2	A Webinar on “Science from Indian Lunar Missions (Chandrayaan-1/2/3)”	20.09.2024	Dr. Dhanya M B., Senior Scientist Space Physics Laboratory, Vikram Sarabhai Space Centre, ISRO, Thiruvananthapuram.	Students: 79 Faculty: 5	Students acquired information on Sun-earth atmosphere, Solar wind interaction with the moon, Lunar exosphere and Achievements of Chandrayaan missions.
3	Seminar on “Drone Technology”	28.01.2025	Mr. R. Vijayanandh, Assistant Professor of Aeronautical Engineering, Kumaraguru College of Technology, Coimbatore.	Students: 41 Faculty:2	Students gained knowledge about drones, their various types, design structures, and wide-ranging applications across different fields.
4	One Day National Seminar on “Bio and Magnetic Materials”	24.02.2025	Dr. A. Joseph Nathanael, Associate Professor, Vellore Institute of Technology, Vellore.	Students:105 Faculty:10	Students enhanced their experimental skills, team work spirit, communication skills & critical thinking which encouraged their interest in

			Dr. K. S. Sivaranjani, Research Associate, National Taiwan University, Taiwan.		Science & Technology and to take up careers in different fields of science.
5	Workshop on Problem Solving Techniques in Heat & Thermodynamics	16.08.2024	Dr C. Raja Mohan Assistant Professor of Physics, School of Sciences, The Gandhigram Rural Institute, Dindigul.	UG Physics: 38 PG Physics: 35 Faculty: 04	The students acquired both knowledge and technical skills necessary to solve problems related to heat and thermodynamics.
6	Workshop on “Problem solving Techniques in Quantum Mechanics -I”	24.09.2024	Dr. J. Abuthahir, Assistant Professor of Physics, Govt. College of Technology, Coimbatore.	UG Physics: 45 PG Physics: 50 Faculty: 06	The students have learnt to analyse and solve the problems in the basic level of Quantum Mechanics.
7	Workshop on “Problem Solving Techniques in Quantum Mechanics-II”	01.10.2024	Dr. J. Abuthahir, Assistant Professor of Physics, Govt. College of Technology, Coimbatore.	UG Physics: 16 PG Physics: 50 Faculty: 02	Students enhanced their problem-solving abilities and gained a clear understanding of how to approach and solve complex problems.

2025-2026

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Awareness programme on “Career opportunities for Physics Graduates”	25.06. 2025	Dr. V. Mohan Kumar, Assistant Professor, Department of Physics, PSG College of Arts and Science, Coimbatore	37 students and 1 faculty	Students learned about career options for Physics graduates, including central government and state government jobs, entrepreneurship, and research opportunities nationally and internationally.
2	Lecture Workshop on CSIR-NET/GATE: Problems in Classical Mechanics	08.07. 2025	Dr. S. Kokila, DST-INSPIRE Fellow from the Department of Science and Technology, Govt. of India	42 students and 4 faculties	Participants gained conceptual clarity in key topics of Classical Mechanics. Students were introduced to effective strategies for approaching and solving CSIR-NET/GATE problems.
3	Workshop on Protecting Intellectual Property Rights(IPRs) and IP Management for Startups	26.08. 2025	Dr. B. MythiliGnanamangai, Associate Professor of Biotechnology KS Rangasamy College of Technology, Tiruchengode.	139 students and 10 faculties	Participants gained a clear understanding of IPR, patent search and filing procedures, and were motivated to pursue entrepreneurship and develop innovative products.

b) Exhibition / Competitions Conducted

2022-2023

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1	Solar PV Technology – Exhibition	09.11.2022	150 Students & 15 faculties of Physics Department and Faculty & student visitors from other departments	Students applied the knowledge gained during the free solar PV installation course and implemented the same to come up with projects

2	Science Exhibition in connection with science day celebration “Tesla fest 2023”	27.02.2023	More than 1000 student visitors from our college and other colleges	The questions from audience and judges kindled the mind of exhibitors to do more good models in future. Both the exhibitors and audience were mutually benefitted
3	Competition Photography	27.02.2023	43 students	The competition encouraged the student to take physics title related photographs (Lights and Shadows and Symmetry) which improvises their views and ideas towards the subject.
4	Competition Treasure Hunt	27.02.2023	7 groups of students	The competition encouraged a team spirit in students’ community towards a task

2023-2024

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1	Exhibition in Connection with World Space Week 2023	05-10-2023 and 06-10-2023	More than 1000 School students, College students and school teachers	Students have learnt about the importance of science models and its interesting applications.
2	Ignite the Scientist Within: A School Wide Science Exploration	10-01-2024	64 School Students	Competitions are an excellent platform for students to showcase their critical thinking, public speaking, and analytical skills. It created an awareness among the school students to pursue basic science courses.
3	National Science Day Celebrations- Tesla Fest 2024 Science Exhibition	28-02-2024	More than 1000 College Students from various departments and more than 80 students from nearby schools	Science model exhibition aimed to showcase the innovative ideas of the students.
4	National Science Day Celebrations- Tesla Fest 2024	29-02-2024	120 students	Events were aimed to provide a platform for participants to showcase their skills, knowledge and creativity in a fun and engaging way.

2024-2025

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1	Science Exhibition in connection with Science Day Celebration “Tesla Fest 2025”	25.02.2025	More than 1000 students	The questions from audience and judges kindled the minds of exhibitors to do more good models in future and the best exhibits were awarded.
2	Quiz Competition in connection with Science Day Celebration “Tesla Fest 2025”	26.02.2025	28 students	Students gained scientific knowledge about new innovations in the field of Science and Technology.
3	Debate Competition in connection with Science Day Celebration “Tesla Fest 2025”	26.02.2025	12 students	Improved critical thinking, communication skills, ability to analyze and defend Science concepts.
4	Brain Training Competition in connection with Science Day Celebration “Tesla Fest 2025”	26.02.2025	101 students	Improved cognitive functions like memory, concentration and enhanced mental ability.
5	Treasure Hunt Competition in connection with Science Day Celebration “Tesla Fest 2025”	26.02.2025	50 students	Improved teamwork, problem solving and logical thinking skills among the students.

6	Alternative climax Competition in connection with Science Day Celebration “Tesla Fest 2025”	26.02.2025	16 students	The competition added creativity and depth to Science fiction, offering new perspectives and unexpected twists that made story writing more dynamic and thought-provoking.
7	Drawing Competition on “Touching lives while touching the moon: India’s Space Saga”	03.09.2024	73 Students from various Departments of KASC, Coimbatore.	Students gained deeper insight into India’s achievements in space exploration, expressing their understanding and appreciation creatively through art.

c) Training Courses Conducted

2022-2023

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	One Day Faculty Development Programme on “Hands on Python”	15.11.2022	Mr. Dinesh Kumar, Entrepreneur, Big Bodhi Academy, Coimbatore	24 faculties from KASC and 5 faculties from other colleges	Faculties learned the importance of Python in science and technology and were encouraged to deepen their skills, ultimately benefiting students through curriculum integration.

2023-2024

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Faculty Development Programme on “Interdisciplinary approaches of Machine Learning”	21-10-2023	Dr. P. Shanmugavadivu Professor, Department of Computer Science, Gandhigram Rural Institute, Dindigul. Mrs. G. Kanimozhi Software Engineer, Gen digital, Chennai.	58 Faculty	The faculty members gained knowledge on machine learning and deep learning for interdisciplinary approaches.
2	Faculty Training Programme on “Correlation of classical dynamics with quantum mechanics”	27-03-2024	Prof. MVN Murthy(Retired) Professor, Institute of Mathematical Sciences, Chennai.	19 Faculties and 38 Students 03 Research Scholars	The faculty understood the mathematical framework for describing dynamical systems, differential equations governing the time evolution of a dynamical system, time evolution described by the flow of the system in phase space.
3	Hands on Training on “Trouble shooting in Power supplies”	21-09-2023	Mr. Shanmugasundaram, Managing Director, Gemini Scientific Company, Chennai.	3 Lab Assistants	Practical experience was provided to troubleshoot the power supplies available in the laboratory.

2024-2025

S. No.	Name of the event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Faculty Development Programme On “Characterization of Materials”	25.07.2024	Dr. N. Muthukumarasamy, Retired Professor, Department of Physics, Coimbatore Institute of Technology, Coimbatore.	Faculty:21	The knowledge and skills acquired through the FDP enabled the faculty to know more about cutting-edge research in the Material Science Industry.
2	Hands on training programme on “Servicing of Electric and Electronic Lab Equipment”	28.12.2024	Mr. G. K. Shanmugasundaram, Managing Partner, GEMCO Renewable Energy Training Institute, Chennai.	Lab Assistants: 4 Faculty: 2	Lab assistants have learnt to troubleshoot the basic Physics lab instruments.
3	Faculty Development Program on “Advanced Materials”	21.01.2025	Dr. Lakshmi Kumar TV, Associate Professor, Jawaharlal Nehru University, New Delhi.	50 Faculty	Gained knowledge about various characterization techniques employed for Aerosol studies.
		22.01.2025	Dr. Uwe Gaitzsch, Fraunhofer Institute for Manufacturing Technology and Advanced Materials, Germany.		Gained knowledge about the use of MoSiB materials for high temperature applications.
		24.01.2025	Dr. Pankaj B Agarwal, Senior Principal Scientist, CSIR-Central Electronics Engineering Research Institute, Pilani, Rajasthan		Gained knowledge about the properties of pyroelectric materials and its application as infrared detectors.

2025-2026

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Online-Faculty Development Programme on “Environment-friendly Solid-State Lighting”	03.07.2025	Dr. Arun Kumar, Associate Professor of Physics, National Institute of Technology, Telangana	17 faculties from various colleges participated	Faculties gained knowledge about different types eco-friendly lighting sources. Introduced to various challenges and difficulties in modern ecofriendly lighting devices. Gained knowledge about process producing different light sources

9.12 Details of Books & Journals Subscribed from DBT Grant

2022-2023

S. No.	Bill no	Date	Company name	Author	Title	Qty	Amount (Rs.)
1	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Ramen kar	Optics (classical & quantum)	1	543.75
2	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Gupta	Modern optics	1	521.25

3	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Madhusudhan jana	Laboratory manual of physics vol – 2	1	371.25
4	Cbetbh2223-sinv04015	23.03.2023	Khanna	Rao	Csir - ugc physical science	1	799.2
5	Cbetbh2223-sinv04015	23.03.2023	Khanna	Khanna	Basic physics	1	135.2
6	Cbetbh2223-sinv04015	23.03.2023	Kataria & sons	Singh	Applied physics – i	1	300
7	Cbetbh2223-sinv04015	23.03.2023	Kataria & sons	Singh	Applied physics – ii	1	316
8	Cbetbh2223-sinv04015	23.03.2023	Commonwealth	Sharma	Experiments in solid state physics	1	1121.25
9	Cbetbh2223-sinv04015	23.03.2023	Commonwealth	Seema singh	Electricity and magnetism	1	3000
10	Cbetbh2223-sinv04015	23.03.2023	Dover	Dennerly	Mathematics for physicists	1	337.5
11	Cbetbh2223-sinv04015	23.03.2023	Dph pub	Vikas kashyap	Basic of quantum mechanics	1	1125
12	Cbetbh2223-sinv04015	23.03.2023	Arihant publications	Melemnganba chenglei	Nta csir ugc net/set physicsl sciences (jrf & lectureship) (d493)	1	712.5
13	Cbetbh2223-sinv04015	23.03.2023	S. Chand	Murugesan	Allied physics paper i & ii	2	336
14	Cbetbh2223-sinv04015	23.03.2023	Mhe	Beiser	Schaums easy outline of applied physics	1	337.5
15	Cbetbh2223-sinv04015	23.03.2023	S. Chand	Arora	Refresher course in physics vol - iii	1	399.2
16	Cbetbh2223-sinv04015	23.03.2023	S. Chand	Arora	Refresher course in physics vol ii	1	396
17	Cbetbh2223-sinv04015	23.03.2023	S. Chand	Dass	Mathematical physics	1	479.2
18	Cbetbh2223-sinv04015	23.03.2023	Bharathi bhawan	Verma	Concepts of physics 1	1	313.6
19	Cbetbh2223-sinv04015	23.03.2023	Bharathi bhawan	Verma	Concepts of physics 2	1	291.2
20	Cbetbh2223-sinv04015	23.03.2023	S. Chand	Dass	Mathematical physics (lpspe)	1	540
21	Cbetbh2223-sinv04015	23.03.2023	S. Chand-vikas	Gupta	Mathematical physics 4ed	1	536
22	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Gupta	Waves and optics	1	393.75
23	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Biswas	Quantum mechanics	1	333.75
24	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Gupta	Fundamentals of mathematical physics	1	528.75
25	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Gupta	College physics vol 1	1	318.75
26	Cbetbh2223-sinv04015	23.03.2023	Books & allied	Gupta	College physics vol. ii	1	318.75
27	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Avadhanulu	An introduction to lasers: theory and applications	1	196
28	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Ghosh	A tb of oscillations waves & acoustics	1	212
29	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Mathur	Mechanics	1	500
30	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Murugesan	Optics & spectroscopy	1	280

31	Cbetbh2223-sinv04122	28.03.2023	S. Chand-vikas	Subramanyam	Waves and oscillations	1	380
32	Cbetbh2223-sinv04122	28.03.2023	S. Chand-vikas	Subrahmanya m	A textbook of sound	1	340
33	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Tewari	Electricity & magnetism with electronics	1	528
34	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Subramanyam	Atomic and nuclear physics	1	292
35	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Murugesan	Allied physics paper i & ii	1	168
36	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Murugesan	Thermal physics	1	156
37	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Murugesan	Properties of matter and acoustics	1	176
38	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Lal subramanyam	Heat thermodynamics and statistical physics	1	560
39	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Subrahmaniya m renu jain	A textbook of optics	1	540
40	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Ghoshal	Nuclear physics	1	388
41	Cbetbh2223-sinv04122	28.03.2023	S. Chand	Murugesan	Modern physics	1	399.2
42	Cbetbh2223-sinv04122	28.03.2023	Commonwealth	Dash	Advanced solid-state physics	1	971.25
43	Cbetbh2223-sinv04122	28.03.2023	Narosa	Jain	Physics of atoms molecules solids and nucle	1	457.5
44	Cbetbh2223-sinv04122	28.03.2023	Narosa	Puri	Classical electrodynamics	1	581.25
45	Cbetbh2223-sinv04122	28.03.2023	Narosa	Lahiri	Quantum field theory: a first book	1	322.5
46	Cbetbh2223-sinv04122	28.03.2023	Narosa	Saxena	Mathematical physics	1	532.5
47	Cbetbh2223-sinv04122	28.03.2023	Narosa	Ghosh	Basic plasma physics	2	457.5
48	Cbetbh2223-sinv04122	28.03.2023	Laxmi publications	Ghatak	Laser fundamentals and application	1	439.2
49	Cbetbh2223-sinv04122	28.03.2023	Narosa	Goldstein	Classical mechanics 2ed	1	397.5
50	Cbetbh2223-sinv04122	28.03.2023	Wiley	Sze	Semiconductor physics and devices, 3ed	1	606.75
51	Cbetbh2223-sinv04122	28.03.2023	Commonwealth	Raj kumar	Nuclear physics	1	1496.25
52	Cbetbh2223-sinv04122	28.03.2023	Na tech	Pillai	Solid state physics	1	449.25
53	Cbetbh2223-sinv04122	28.03.2023	Book world enterprises	Huang	Introduction to statistical physics, 2ed	1	371.25
54	Cbetbh2223-sinv04122	28.03.2023	Mhe	Mase	Schaums outline of continuum mechanics	1	507.75
55	Cbetbh2223-sinv04122	28.03.2023	Mhe	Peleg	Quantum mechanics (schaums outline series)	1	581.25
56	Cbetbh2223-sinv04122	28.03.2023	Wiley	Jackson	Classical electrodynamics	1	741.75
57	Cbetbh2223-sinv04122	28.03.2023	Wiley	Kittel	Introduction to solid state physics	1	644.25
58	Cbetbh2223-sinv04122	28.03.2023	Wiley	Walker halliday	Principles of physics 10th ed isv	1	786.75

59	Cbetbh2223-sinv04122	28.03.2023	Wiley	Krane	Modern physics 4ed an indian adaptation	1	659.25
60	Cbetbh2223-sinv03701	04.03.2023	Kedar nath	Pandya	Elements of nuclear physics (ai)	2	800
61	Cbetbh2223-sinv03701	04.03.2023	Upkar	Upkar	Ugc csir net jrf set physical science (500)	3	2256
62	10788	28.03.2023	K s paperbacks	Sareen	Dictionary of mechanics	5	1800
63	10788	28.03.2023	rajat publications	Khanna	Electricity and magnetism	5	5180
64	10788	28.03.2023	Raj publication	Khattar	Light and optics	5	5580
65	10788	28.03.2023	Arihant publications	M k rangoia	Nano material	5	6000
66	10788	28.03.2023	Arihant publications	Irodov	Problem in general physics	5	980
67	10788	28.03.2023	Cyber tech publications	A r sardva	Problems in electricity and magnetism	5	6000
68	10788	28.03.2023	Sarup book publishers	Ishita	Quantum mechanics	1	480
Total						97	60,000

2023-2024

S. No.	Bill No.	Date	Company Name	Publisher	Author	Title	Qty	Amount (Rs.)
1	623	22-02-2024	Pai & Sons	Ane Books Pvt. Ltd.	V. Balakrishnan	Mathematical Physics with Applications Problems And Solutions	1	2995
2	623	22-02-2024	Pai & Sons	Mjp Publishers	S. Mohan, V. Arjunan, M. Selvarani, M. Kanchana Mala,	Laser Physics	1	695
3	623	22-02-2024	Pai & Sons	Maxwell Press	J.J. Thomson	Electricity And Matter	1	525
4	623	22-02-2024	Pai & Sons	Maxwell Press	Sir William Bragg	The World Of Sound	1	595
5	623	22-02-2024	Pai & Sons	Maxwell Press	Robert Andrews Millikan	Mechanics Molecular Physics And Heat	1	595
6	623	22-02-2024	Pai & Sons	Levant Books	Manoj Kumar Pal	General Theory Of Relativity	1	795
7	623	22-02-2024	Pai & Sons	Mjp Publishers	Pushpa Viswanathan	Electron Microscopy	1	2400
8	623	22-02-2024	Pai & Sons	Crc Press Inc.	Valeria Ferrari Leonardo Gualtieri Paolo Pani	General Relativity And Its Applications-Black Holes, Compact Stars And Gravitational Waves	1	2995
9	623	22-02-2024	Pai & Sons	Scientific International (Pvt) Ltd.,	Howard Fawkes	Mechanics For Engineering	1	495
10	623	22-02-2024	Pai & Sons	Scientific International Pvt. Ltd	A.V. Salker	Catalysis: Principles & Basic Concepts	1	495

11	623	22-02-2024	Pai & Sons	Taylor & Francis	Eoin O Reilly	Quantum Theory Of Solids	1	1295
12	623	22-02-2024	Pai & Sons	Crc Press Inc.	Kathleen Sellers, Christopher Mackay, Lynn L. Berge Son, Stephen R. Clough, Marilyn Hoyt, Julie Chen, Kim Henry, Jane Hamblen	Nanotechnology And The Environment	1	1995
13	623	22-02-2024	Pai & Sons	Levant Books	R. Shankar	Fundamentals Of Physics I: Mechanics, Relativity And Thermodynamics	1	1195
14	623	22-02-2024	Pai & Sons	Levant Books	R. Shankar	Fundamentals Of Physics II: Electromagnetism, Optics, And Quantum Mechanics	1	1295
15	623	22-02-2024	Pai & Sons	Oxford Book Company	Manish Kapoor	Nanotechnology Diagnostics and Therapeutics	1	1950
16	623	22-02-2024	Pai & Sons	Institute Of Physics Publishing	Diego A.R. Dalvit, Jaime Frastai, Lan D Lawrie	Problems On Statistical Mechanics	1	1595
17	623	22-02-2024	Pai & Sons	Crc Press Inc.	Kurt Gottfried	Quantum Mechanics Fundamentals (Volume I)	1	2995
18	623	22-02-2024	Pai & Sons	Crc Press Inc.	Murray Sargent 111, Marlan O. Scully, Willis E. Lamb, Jr	Laser Physics	1	2995
19	623	22-02-2024	Pai & Sons	Crc Press Inc.	D. G. C. Jones	Atomic Physics	1	995
20	623	22-02-2024	Pai & Sons	Pearl Books	M. K. Singh	Nuclear Physics	1	600
21	623	22-02-2024	Pai & Sons	Pearl Books	S. K. Mittal	Principles Of Mechanics	1	650
22	623	22-02-2024	Pai & Sons	Oxford University Press	Ta-Pei Cheng Ling-Fong Li	Gauge Theory Of Elementary Particle Physics	1	995
TOTAL							22	31140

2024-2025

S. No.	Bill No.	Date	Company Name	Publisher	Author	Title	Qty	Amount (Rs.)
1	1573B	25.02.2025	Shanti Books	S. Chand and Co., Noida	B.L Theraja	Basic Electronics Solid State	2	1691.50
2	1573B	25.02.2025	Shanti Books	S. Chand and Co., Noida	Brij Lal, N. Subrahmany am, P.S. Hemne,	Heat Thermodynamics and Statistical Physics	2	1275.00
3	1573B	25.02.2025	Shanti Books	Pearson India education services Pvt. Ltd	Robert L Boylestad, Louis Nashelsky,	Electronic Device And Circuit Theory 11th Edition	2	1742.50

4	1573B	25.02.2025	Shanti Books	Elsevier, India	R.K. Pathria, Paul D. Beale	Statistical Mechanics 4th Edition	1	722.50
5	1573B	25.02.2025	Shanti Books	S. Chand and Co., Noida	Murugesan R, Kiruthiga Sivaprasath,	Modern Physics	3	1593.75
6	1573B	25.02.2025	Shanti Books	S. Chand and Co., Noida	V.K. Mehta, Rohit Mehta,	Principal Of Electronic Ed12	3	2103.75
7	1573B	25.02.2025	Shanti Books	Wiley India Pvt. Ltd	Nouredine Zettili	Quantum Mechanics	4	4743.00
8	1573B	25.02.2025	Shanti Books	Starch Press Inc, San Francisco	Eric Matthes	Python Crash Course	1	1359.15
9	1573B	25.02.2025	Shanti Books	Pearson India education services Pvt. Ltd	Herbert Goldstein, Charles Poole, John Safko	Classical Mechanics	2	1700.00
10	1573B	25.02.2025	Shanti Books	Wiley India Pvt. Ltd	Mary L. Boas	Mathematical Methods In The Physical Sciences	2	1902.30
11	1573B	25.02.2025	Shanti Books	National Academic Press, Chennai	Yeeshtdevisi ngh Hosanee	Learn Python Programming	4	1156.00
TOTAL							26	19989.00

9.13 Outreach / Extension Activities

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Yoga programme for Stress Management for Non-teaching Staffs	24.11. 2022	Ms. M.Mohnasri & Mr. S. Jayaram, Yoga Volunteer, Anandha Yogam, Sulur, Coimbatore	Students -20, Faculty -4, Non Teachning- 27	Participants learned tips for a healthy lifestyle, proper eating and sleeping habits, stress-reducing mudras and breathing exercises, and advanced asanas for overall well-being.
2	Energy Audit Programme to Green Field Matriculation Higher Secondary School, Coimbatore	28.12. 2022	Six students from III BSc Physics audited the school campus	6 students of III BSc Physics and Green Field Matriculation Higher Secondary School	The importance of energy saving and how to do the audit has been learnt by our students
3	An Outreach Programme to Government Boys Higher Secondary School, Rayakottai in the name of "Career opportunities in Physics"	08.02. 2023	Dr. V. Mohankumar, Assistant Professor, Department of Physics, KASC, Coimbatore	Students -180, Faculty -2	Many students would have been motivated to take higher education in the field of Physics

4	“Awareness Programme on Familiarisation of Science Education to School Students”	10.02. 2023	Dr. S. Paulsamy, Dean R and D, KASC, Coimbatore.	120 students	Aid the school students to attain the knowledge in science subject through lab visit to Physics laboratory, Chemistry laboratory, Computer laboratory, Math Model Lab
5	Outreach Programme to School Students and Teachers (Vidya Vikashini School, Coimbatore)	20.02. 2023	Faculty Members of Physics Department	Students -150, Faculty-5	May students have been motivated to take higher education in the field of Physics by understanding the basic theory during the practical sessions
6	Training of Physical Parameters to School teachers	04.03. 2023	Faculty Members of Physics Department	9 school teachers	Teachers gained knowledge on the measurement of Physical parameters which will be transferred to the student community
7	Tuitions for Tribal students at Seva Kendra, Coimbatore.	Weekly twice	Dr. B. Gokul and Dr. V. Mohankumar Assistant Professor of Physics	Tribal students	Tribal students were trained to excel in their examinations and higher education

2023-2024

S. No	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Hands on Physics Experiments to School Students.	04-09-2023	Faculties of Department of Physics.	30 Students 01 Faculty	Through hands-on training, students gained practical lab experience, including measuring refractive index and light wavelength, studying Zener and junction diodes, and verifying truth tables of basic logic gates using ICs.
2	Outreach Programme to School Students of Grade XI and XII-Govt. Girls Hr. Sec. School, Thondamuthur.	05-09-2023	Dr. M. Seetha Dr. P. Matheswaran Assistant Professors of Physics, Kongunadu Arts and Science College, Coimbatore.	100 School students.	Students have learnt about the importance of science education and its future scope. They have also learnt about the job opportunities related to the science disciplines.
3	Hands on training on “Basic Physics Experiments for School Students”.	26-12-2023	Faculties of Department of Physics.	55 School Students.	Higher secondary students at Green Field’s Matriculation School, Coimbatore gained hands-on experience with instruments like spectrometers, diodes, pendulums, and sonometers, sparking interest in the subject.
4	Awareness Programme and Competition for School students in science education at corporation higher secondary school, Maniakaranpalayam.	10-01-2024	Dr. N.Senthil kumar & Dr. V. Mohankumar Assistant Professors of Physics, Kongunadu Arts and Science College, Coimbatore.	64 School Students.	Science competitions for school students ignite their approach and preference on the science education.

5	Energy Audit to Residential Areas	04-03-2024 to 08-03-2024	I B.Sc. Physics Students	100 Houses	Our students learned energy-saving techniques and conducted home energy audits, advising neighbors to use LED bulbs and raising awareness about the importance of conserving power.
6	Tuitions for “Tribal students at Seva Kendra”, Vadavalli, Coimbatore.	Weekly twice	Dr. V. Mohankumar Assistant Professor of Physics, Kongunadu Arts and Science College, Coimbatore.	20 School students	Tribal students at Seva Kendra, Vadavalli, Coimbatore were benefited out of the Physics tuitions to know more about higher education in science.

2024-2025

S. No	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	National Space Week 2024 Touching lives while touching the moon: India’s Space Saga	30.08.2024	Department of Physics, Kongunadu Arts and Science College.	Class- IX Standard(16) Faculty (5)	Students gained knowledge about the importance of Space Science and its applications.
2	Awareness Programme on “Higher Education in Science and Physics”	15.10.2024	Dr. M. Seetha, Assistant Professor of Physics, KASC	88 Class XI and XII students of VCSM Matric Higher Sec. School, CBE	Students acquainted themselves about the unrevealed areas of Science and also understood the benefits of higher education in Science along with the suitable job opportunities.
3	Energy Audit	28.12.2024	Students from I, II and III B.Sc. Physics audited their houses.	55 houses	Our students have learned the importance of energy conservation and the methods for conducting an energy audit.
4	One day Hands on Training on “Physics Experiments to School Students”	03.01.2025	Dr. M. Seetha Dr. P. Matheswaran Assistant Professors of Physics, KASC.	Students: 26, Faculty: 1	School Students gained more knowledge about the concepts and applications of Physics experiments through hands-on training.
5	Demonstration of Class 11th Practical to VCSM Matric School	30.01.2025	Faculty Members of the Physics Department.	62 Students	Students learnt and understood the mechanism and working principles of the Physics experiments.

9.15 Invited Lectures

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Enrichment Programme DBT Star College Scheme	08.11.2022	Dr. R. Rajendran, Associate Professor of Microbiology, PSG College of Arts and Science, Coimbatore	All participatory department students	Students able to know about salient features and benefits of the DBT Star College Scheme
2	Invited talk on “Nanomaterials for energy applications and I-STEM”	04.02.2023	Dr. P. Shakkthivel, Professor of Nanoscience and Technology, Alagappa University, Karaikudi	Students -185 Faculty-9	Students gained knowledge about - Preparation of nanomaterials - Characterisation of Nanomaterials through I-STEM

	(Interdisciplinary with Chemistry)		and Dr. K. Saminathan, Assistant Professor of Chemistry, KASC.		• Various components of Li-ion batteries • Higher studies in Foreign countries
3	A Guest lecture on "A legacy of Research and Discovery of Nobel Laureates"	16.03.2023	Dr. Sa. K. Narayanadass, Former Head of Physics, Bharathiar University, Coimbatore	All Participatory Students -155 Faculty - 6	Students gained knowledge about the research and discovery of Nobel Laureates

2023-2024

S. No	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	An invited talk on "Societal Implications of Nanotechnology and its Perspectives".	08-08-2023	Dr. N. Ponpandian Professor and Head of Nanoscience and Technology, Bharathiar University, Coimbatore.	120 Students 09 Faculty	Students were able to learn the basics of nanotechnology and also got ideas on the applications of nanotechnology which in turn motivated the students to undergo projects in this domain.
2	An Invited talk on "Fundamentals and Applications of Lasers".	14-12-2023	Dr. M. Sivakumar Vice Chairperson, Professor of Sciences, School of Engineering, Amritha Vishwa Vidyapeetham, Coimbatore.	91 Students	Students gained knowledge on the different types of lasers in practice and their wide range of applications.
3	An Invited talk on "The Glow Discharge: An exciting plasma and its applications".	20-12-2023	Dr. G. Shanmugavelayutham Associate Professor of Physics, Bharathiar University, Coimbatore.	71 Students	The students were exposed to the knowledge on the production and applications of cold plasma.
4	Invited talk on "Awareness Programme on Higher Education in Physics"	05-02-2024	Mr. Vignesh Research Fellow, Jeju University Republic of Korea.	110 Students	Students acquired knowledge on various opportunities in higher education at different institutions in different countries.
5	Guest Lecture on "Bio-Safety and Ethics for Young Minds"	15-09-2023	Dr. Kumaresan Kupamuthu Associate Professor of Biotechnology, Kumaraguru College of Technology, Coimbatore	146 Students 05 Faculty	Students gained information about awareness on hand hygiene, prevention for transmission of infectious agents and preventive measures to avoid chemical and radioactive exposure in laboratories.
6	A guest lecture on "Understanding Intellectual Property Rights"	20-09-2023	Dr. Sharmila Chandran Associate Professor and Research Associate in Physics, PSGR Krishnammal College, Coimbatore	110 Students 02 Faculty	The participants were able to understand about the importance of patent and intellectual property rights.

7	A guest lecture on “Laser Tightening and Sun light trapping Schemes in Nano-optics”	21-12-2023	Dr.P.M.Anbarasan Professor, Department of Physics, Periyar University, Salem	93 Students	Students gained knowledge on Basics of Optics, Nano-optics, Laser tightening and Sun light trapping.
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2024-2025

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Artificial Intelligence for Physics Applications	30.07.2024	Dr. M. Lavanya, Associate Professor, Department of Physics, PSGR Krishnammal College for Women, Coimbatore.	Students: 46 Faculty: 3	The students have acquired knowledge on current technology and understood how to utilize AI tools for the applications of Physics.
2	Beyond Imagination: “A Journey Through the Universe’s Wonders”	30.08.2024	Dr. D. Khanna, Assistant Professor Department of Physics, Karunya Institute of Technology and Sciences, Coimbatore.	Students: 70 Faculty :03	Students explored key space milestones, including the Vikram lander’s Moon landing, and learned about Aditya-L1 and other missions, strengthening their understanding of India’s progress in space science.
3	Glow discharge Plasma Materials Processing: In the perspective of Advanced and Nanomaterials	27.09.2024	Dr. C. P. Yoganand, Assistant Professor, Department of Physics, Coimbatore Institute of Technology Coimbatore.	Students: 46 Faculty: 6	Enhanced understanding of glow discharge plasma material processing among Students. Created subject interest and motivated them in doing higher education in the field of Material Science.
4	Importance of Science Innovations in Higher Education	09.10.2024	Dr.Ranjithkumar Rajamani, International Research Fellow, INTI International University, Malaysia.	Students: 54 Faculty: 8	Students understood to approach important practical problems faced by the society and how to solve them through Research and Innovation.
5	Nanomaterials Innovations: “Technology Transfer to Industry”	16.10.2024	Mrs. J. Revathi Scientist D, Centre for Nanomaterials, International Advanced Research Centre for Powder Metallurgy and New Materials, Hyderabad.	131 students from Department of Physics and Chemistry Faculty: 3	Students gained insights on how technology transfer in nanomaterials can create employment opportunities, boost revenue generation, and drive economic development by bridging research and industry.
6	Crafting the Future: “Innovation and IPR for Aspiring Minds”	12.12.2024	Dr. N. Priyadharsini, Associate Professor, Department of Physics, PSGR Krishnammal College for Women, Coimbatore.	UG Physics: 38 PG Physics: 51 UG CS:15 UG Chemistry: 5 UG Maths: 6 Faculty: 3	Students gained knowledge on protecting their Intellectual Property Rights such as patents, trademarks and Design Rights. They have also been exposed to how to file patents and its stage-by-stage process.

7	Bi- Transition Metal Oxide Nanostructures for Supercapacitor Applications	21.01.2025	Dr. B. Saravanakumar, Associate Professor of Physics, Dr. Mahalingam College of Engineering and Technology, Pollachi.	Students: 80 Faculty: 3	The talk covered the latest breakthroughs in battery, fuel cell systems and supercapacitors, highlighting the innovations that improve energy density, efficiency and longevity.
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2025-2026

S. No	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Invited talk on “Understanding corrosion of room temperature magnetocaloric materials and its control”	11.07.2025	Dr. Madhu Chennabasappa Associate Professor and HoD Department of Physics, School of Sciences, Sri Jayachamrajendra College of Engineering, JSS Science and Technology University	63 students and 2 faculties	The students gained knowledge about magnetic refrigeration. Students gained knowledge about the Auger spectroscopy and Electron probe micro analyzer
2	Guest Lecture on “Physics Beyond the Textbook:Real-World Applications and Research	11.07.2025	Dr. K. Aravinth, Assistant Professor, Department of Physics, SSN College of Engineering, Chennai	44 students and 5 faculties	Students learned how physics principles apply to real-world technologies, sparking curiosity in research areas like crystal growth, quantum computing, and nanotechnology.
3	An Invited Lecture on “Advanced Materials for Defence: Driving Strategic R&D in Nation Building”	17.09.2025	Dr. K. Kadirvelu, Scientist ‘G’ and Associate Director at DEBEL-DRDO, Ministry of Defence, Government of India.	68 students and 6 faculties	Students and faculty gained in-depth knowledge about advanced materials used in defence applications. Awareness was created in the current challenges and future opportunities in defence R&D.

DEPARTMENT OF CHEMISTRY

9.7 No. of Hands-on Experiments being Conducted/ List of Activities Undertaken by Students

i) Hands-on Experiments being conducted

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Hands-on Training on “Solution Preparation Phase – I”	30.07.2022	Dr.S.N.Karthick, Assistant Professor, Department of Chemistry, Bharathiar University, Coimbatore	44 Students	Various method of expression of Concentrations in solution preparation to Prepare solution by three methods (N,M&%wt)
2	Hands on training on “Solution preparation skill and lab awareness programme”	29.08.2022	Dr.A.Murugesh, Assistant Professor of Chemistry, SRMV College of Arts and Science, Coimbatore	61 Students	Students learnt various solution preparation methods and came to know about laboratory safety
3	Hands on Training on “Solution Making”	28.10.2022	Dr.A.Murugesh, Assistant Professor of Chemistry, SRMV College of Arts and Science, Coimbatore	II year Biochemistry, botany and physics students -58	Expression of Concentrations in solution preparation, To Prepare solution by different methods (N,M, m, ppm &%wt)
4	Hands on Training on “Phytochemical Extraction Techniques”	12.01.2023	Dr. T. Suresh, Assistant Professor of Chemistry, Bharathiar University	71 Students and four faculties	Students learned to isolate the Phytochemical compound from plant extraction and various chromatographic techniques.

2023-2024

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
5.	Hands on Training on “IR Spectroscopy”	18-12-2023	Dr. S. Senthilkumar Senior Scientist, CSIR – CECRI, Karaikudi. Dr. P. Sakthivel Professor, Department of Nanoscience and Technology Bharathiar University, Coimbatore.	Students - 81 Faculty – 4	Students and faculty were able to understand the handling of IR Instruments and their working principle.
6.	Hands on Training Programme on “Micro Scale	04-01-2024	Dr. A. Jeya Rajendran Associate Professor (Retd.)	Students - 69 Faculty –07	The participants upgraded their practical skills on detecting the cations, anions and learnt how

	Experiments in Inorganic Analysis”		Department of Chemistry Loyola College Chennai.		to eliminate the interfering radicals and to prepare and add the reagents.
7.	Hands on Training Programme on “Micro Scale Experiments in Organic Analysis”	05-01-2024	Dr. S. Murugan Professor and Head (Retd.) Department of Chemistry S. T. Hindu College, Nagerkovil.	Students - 34 Faculty -07	The participants gained practical skills on detecting the various organic functional groups with less reagents.
8.	Hands on Training on “Finding Food Adulteration”	12-01-2024	Dr. G. Subashini Assistant Professor Department of Chemistry PSGR Krishnammal College for women Coimbatore.	Chemistry students – 44 Physics students – 18 Faculty - 07 Total - 69	Students were taught to identify preservatives, colorants, dyes from different packed food items and to find food adulteration from turmeric, salt, edible oils and spices using chemical techniques.
9.	Hands on Training “Soap Making”	30-01-2024	Dr. K.Poonkodi Assistant Professor & Head, PG Chemistry, Nallamuthu Gounder Mahalingam College, Pollachi.	45 Students	Students learnt about the saponification values of different oils and soap making process which enabled them to make organic soaps individually.
10.	Hands on Training on “Solvent Free microwave assisted irradiation reaction in organic synthesis”	27-02-2024	Dr.D. Karthikumar Assistant professor, Department of Chemistry PSG College of arts and science, Coimbatore.	Chemistry students – 60 Bio Chemistry-13 Botany - 13 Faculty- 7 Total - 93	Students were trained to perform solvent free microwave assisted irradiation reactions to synthesis organic compounds such as Aspirin and quinolone. This type of hands-on training motivated the students to take up projects in organic synthesis.

2024-2025

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Hands on Training on “Water Pollution Monitoring”	30.12.2024	Dr. S. Dhanakumar, Head, Department of Environmental Science, PSG College of Arts and Science, Coimbatore.	Che: 50 Biochem:18 Physics: 03 Faculty: 4	Students learned to detect various water pollutants using Chemical techniques and gained experience in analysing water samples for Physical, Chemical and Biological parameters.
2	Hands on Training on “Chromatographic Techniques and their Applications”	31.01.2025	Dr. T. Suresh Assistant Professor of Chemistry, Bharathiar University, Coimbatore.	Students: 77	Students learnt about the basics and types of Chromatography and its applications in various Industries.

3	Hands on Training on “Water Quality Analysis”	19.02.2025	Dr.P.Thilagavathy, Assistant Professor of Chemistry, School of Physical Sciences, Amrita Vishwa Vidyapeetham, Coimbatore.	Students: 65 Faculty: 5	Students came to know about the importance of water quality and causes of pollution.
4	Two days Hands on training on “Analytical Techniques and Sustainable Chemical Recycling”	10.03.2025 & 11.03.2025	• Dr. P. Sakthivel, Associate Professor, Department of Nanoscience and Technology, Bharathiar University, Coimbatore. • Dr. S. Yogapriya, Dr. V. Kirthika, Research Associates Department of Chemistry, Vinayaka Mission, Salem. • Mr. Sanjeev, Analytical Chemist, Tamil Nadu Agricultural University, Coimbatore.	Students: 23	• Students enriched their practical skills by using analytical tools like Chromatography, Spectroscopy to assess the quality and effectiveness of recycled materials. • Students were trained to analyze the composition and purity of products obtained from Chemical recycling processes.
5	Hands on training on “Lab to table; Practical Approaches in food Chemistry”	19/07/25	Dr. Veeranan Arun Giridhari V Associate Professor, Centre for Post Harvest Technology Tamilnadu Agricultural University Coimbatore	32 students and 7 faculty members	Provided insights into how food chemistry can be used to develop new and improved food products, catering to consumer demands and addressing nutritional needs.

ii) List of Activities Undertaken by Students

a) Industrial Visits

2022-2023

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	III & II B.Sc., Chemistry	Balaji Plastics, Coimbatore	03.11.2022	71 students and four faculty	Students, faculties and lab assistants understand various technologies of moulding of plastics and Chemistry behind the process
2	III & II B.Sc., Chemistry	Research Lab Visit –DRDO – BLS, Nanoscience and technology lab, Bharathiar University, Coimbatore	08.11.2022	71 students and four faculty	Students, faculties and lab assistants gained knowledge about the principle behind the instruments like NMR, UV, IR, Fluorescence spectroscopy, working methodology and handling procedure

3	III & II B.Sc., Chemistry	Aavin Coimbatore District Co-operative Milk Producers Union Ltd., Coimbatore.	10.02.2023	71 students and four faculty	Students learnt and understood high tech testing equipment's used for confirming the quality standards and parameters of milk products.
4	III & II B.Sc., Chemistry	Tamilnadu Agricultural University, Coimbatore.	09.03.2023	71 students and four faculty	Students, faculties and lab assistants came to know about the principle behind the instruments like SEM, TEM, XRD working methodology and handling procedure

2023-2024

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	III B.Sc. Chemistry	Priyadarshini Chemicals, KR Puram, Coimbatore.	30- 10-2023	Students - 26 Lab Assistant-1 Faculty -2 Total-29	Students, faculty and lab assistants understood about the basic qualification and knowledge required to enter into the industry, working environment and various procedures to handle the chemicals.
2	III and II B.Sc., Chemistry	Research lab visit to Avinashilingam University, Coimbatore.	08-12-2023	Students - 66 Faculty -2 Total-68	Students learnt about the working principle of Field Emission Scanning Electron Microscope (FESEM), X-ray Diffractometer (XRD), Nano Spray Dryer, Atomic Absorption Spectrophotometer (AAS), 3D Optical Profilometer, Fourier Texture Analyzer, Plasma Chamber, Spectrophotometer with Color Lab.
3	III B.Sc., Chemistry	Research lab visit, Karunya University, Coimbatore.	07-03-2024	Students- 22, Faculty-04, Total - 26	The students and faculty gained knowledge and training on various instruments, operating procedure and its application in various domains.
4	III B.Sc., Chemistry	Research lab visit, UPASI	14-03-2024	Students-26, Faculty-03, Total - 29	The students gathered information about the various stages and steps in tea processing and the importance of fermentation.

2024-2025

S.No.	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	II and III B.Sc. Chemistry	- Keezhadi Heritage Museum, Keezhadi. - Research Lab visit to "CECRI on Open day" and Alagappa University, Karaikudi.	25.09.2024 & 26.09.2024	Students: 41 Faculty: 3	Students gained knowledge in Li-ion Batteries, Electrochemical power station, working Principle of Instruments like SEM, TEM etc. The students were exposed to the Scientific and Technological achievements of various departments of CECRI.

2	III B.Sc. Chemistry	• Karnataka Soaps and Detergent Limited, Mysuru, Karnataka. • Research lab of Chromatogen Analytical Solution, Mysuru, Karnataka. • Seven Bean Coffee Works Limited, Mugalavalli, Karnataka. • SLN Coffee Private Limited, Koppa, Chikkmagalur, Karnataka.	11.12.2024 to 13.12.2024	Students: 27 Faculty: 3	• Students gained knowledge about the extraction process of oil from sandalwood. • Students came to know about the principle behind the instruments, working methodology and handling procedure and gained a deeper understanding of the coffee market and the factors that influence coffee quality and demand.
3	I & III B.Sc. Chemistry	Regional Science Centre, Coimbatore	01.08.2024	Students: 30 Faculty: 4	Engaged the students with hands-on experiences in various scientific concepts and technologies.
4	III B.Sc., Chemistry II B.Sc., Chemistry	ISRO, Satish Dawan Space Center, Sriharikota.	28.03.2024	Students: 5 Faculty: 1	• Students understood how Chemistry is applied in space missions-e.g., rocket fuel Chemistry, Materials Science and environmental monitoring via satellites.

b) Summer School/Internship

2022-2023

- ❖ V.JanaiKeerthana, R.Babyshalini, S.Akshaya Rani, K.Saranesh, M Baladurgesh and Sakthipriya M of II B.Sc Chemistry underwent an internship in **Aavin Milk Company**, Coimbatore
- ❖ Durga Devi.C, Ashika S, Prathoshini S,M ahesh Kumar.M, Karthik.M, A.Nithya Kalyani,B. Madhubala, Aarthika.S, Kavya. S underwent an internship training in **Sri Ganga Soap Works**, Coimbatore
- ❖ Selva Prasanna S, Muthukamal .M,ThirumaniRaja.P underwent internship training in **Aruna Soaps**, Coimbatore to learn about the manufacturing and processing of soaps
- ❖ Kavitha.P,Nitha A.N,Ramya. G,Jobina J of II B.Sc Chemistry underwent an internship in **Parisons Estate And Industry Pvt Ltd**, Wayanad to learn about tea leaves processing and making of tea varieties.
- ❖ K.Mathankumar,Nikitha Priya M,S.Nikhileswaran, Abitharshini .S,Deepak.S,PRAKASH M,Shiyamsundar T,Priyadharsan. R,Sangeetha Justina.R,Janani .I, of II B.Sc Chemistry underwent an internship in **Bisco Electro Coatings** Coimbatore.
- ❖ Sri Pragathi M of II B.Sc Chemistry underwent an internship in **Sri Sai Casting**, Coimbatore where she learnt about process of making gold jewellery.

2023-2024

- ❖ J. Chandni of II B.Sc. Chemistry underwent an internship in “**Determination of heavy metals in fertilizers and pesticides by analytical methods**”at Upasi Tea Research Foundation, Coonoor.

- ❖ Mohanarajan of II B.Sc. Chemistry underwent an internship in “**Plastic manufacture and testing technology**” at CIPET-IPT Chennai Plastic testing centre.
- ❖ J. Vishnu madesh, Vignesh. S, RanilV of II B.Sc. Chemistry underwent an internship in “**Metal testing (Iron, Nickel, Zinc, Cobalt, Aluminium and Copper) technology**” at AgroMet Lab, Coimbatore.
- ❖ Vignesh. S, Ranil V, Sameera. M, S. Syedjaffersadiq of II B.Sc. Chemistry underwent an internship in “**Metal testing (Iron, Nickel, Zinc, Cobalt, Aluminium and Copper) technology**” at Bisco electro coatings, Coimbatore.
- ❖ Sriramya A, Lishanthini. S of II B.Sc. Chemistry underwent an internship in “**Domestic water motor lifting, manufacturing and processing**” at Swagath industrial corporation, Coimbatore.
- ❖ Abinaya S of II B.Sc. Chemistry underwent an internship in “**Aavin milk and its milk products**” at Aavin Dairy, Ooty.
- ❖ Vimal Kumar S, Guruprasath S of II B.Sc. Chemistry underwent an internship in “**Laundry Soap Manufacturing techniques**” at Sri Ganga Soap Works, Coimbatore.
- ❖ Dravid Raja of II B.Sc. Chemistry underwent an internship in “**Electro coating and powder coating on Aluminium and Iron metals**” at Pharma fabric on, Madurai.
- ❖ Ashwini S of II B.Sc. Chemistry underwent an internship in “**Manufacturing of nutraceutical supplements**” at Nvron life science limited, Coimbatore.
- ❖ Balaji S, Barath K M of II B.Sc. Chemistry underwent an internship in “**Gold assay and hallmarking**” at KTC Hallmarking, Coimbatore.
- ❖ Rithika M I of II B.Sc. Chemistry underwent an internship in “**Water quality management**” at Seven hills Aqua Industry Ltd, Salem.
- ❖ Narmadha V. M, Divya K of II B.Sc. Chemistry underwent an internship in “**Hard chrome plating**” at Allied Chrome Tech, Coimbatore.
- ❖ VanyaaLingi R, of II B.Sc. Chemistry underwent an internship in “**Quality control techniques used in vaccine manufacturing**” at Human biologicals institute, Ooty.

2024-2025

- ❖ Gopi priyan M, Mohan P, Tholkappiyan M of IIB.Sc. Chemistry underwent an internship at Farmfert Advance Tech Pvt.Ltd., Krishnagiri, Tamil Nadu on “**Manufacturing of humic acid liquid fertilizer**”.
- ❖ Dhinakaran.T of II B.Sc. Chemistry underwent an internship at, Rajapalayam, Tamil Nadu on “**Mercerization process**”.
- ❖ Santhosh. V of II B.Sc.Chemistry underwent an internship at Rmv Analytical Lab Pvt Ltd., Cuddalore, Tamil Nadu on “**Analysis of pharma products**”.
- ❖ Pragadeesh M of II B.Sc. Chemistry underwent an internship at Ramco Cements Limited, Tamil Nadu on “**Cement manufacturing process**”.
- ❖ Nishandhini G, Pravin Kumar S of II B.Sc. Chemistry underwent an internship at Aavin Dairy, Ooty, Tamil Nadu on **Aavin milk and its milk products**.
- ❖ Suryaprakash. M,P. Seshanth, Niranjana.S, Vimalakannan. M ,Arunkumar.N, Agneeswaran S of II B.Sc. Chemistry underwent an internship at Sri Ganga Soap Works, Coimbatore, Tamil Naduon “**Manufacturing of soaps**”.
- ❖ T. Karthick Raja, Elango P, S, lakshmi Priya, Mathan Kumar. K, N. Pranesh, Suryakumar, Geetha M of IIB.Sc Chemistry underwent an internship at Shree Jothsana Electroplating, Coimbatore, Tamil Nadu on “**Manufacturing of Electroplating Products**”.

- ❖ Harish, Hirithik R.K, Anuranjani S, Nithya. C, Ezhil C, Geetha M of II B.Sc. Chemistry underwent an internship at BISCO Electro Coating, Coimbatore, Tamil Nadu on **“Coating Technique on Aluminum and Iron Metal”**.
- ❖ Boopathi Raja C, Ayyappan K, Srikanth B, Praveen S, Ruban Raj M of IIB.Sc. Chemistry underwent an internship at Mercury Surface Coats Coimbatore, Tamil Nadu on **“Surface Powder Coating”**.
- ❖ Shibila. M, Rinshajasmine of IIB.Sc. Chemistry underwent an internship at HT.C Tea and Enterprises Private Limited, Ooty, Tamil Nadu on **“Processing of Tea”**.
- ❖ Ananthika Vijayalakshmi P of II B.Sc. Chemistry underwent an internship at PEPS Industries Private Limited, Coimbatore, Tamil Nadu on **“Manufacturing of Polyurethaneams”**.

2025-2026

- ❖ Lavanya. M of II B.Sc Chemistry underwent an internship at aavin Dairy, Ooty, Tamilnadu on Analysis of Milk Products and By Products.
- ❖ Thangarasan. R of II B.Sc Chemistry underwent an internship at GB aqua environmental solutional PVT. LTD, Tamilnadu on effluent treatment plant.
- ❖ Mithun Jabadurai. M of II B.Sc Chemistry underwent an internship at , Tamilnadu on “Analysis of pharma products”
- ❖ Shanjeeva.A of II B.Sc Chemistry underwent an internship at Seshasayee Paper and Boards Limited, Namakkal, Tamilnadu on Advancements in Pulp and Paper manufacturing technologies.
- ❖ Mukesh.G of II B.Sc Chemistry underwent an internship at K.T.C Leathers, Vellore, Tamilnadu on Manufacturing of Frished Leathers.
- ❖ Siranjeevi.L, Vignesh.M, Velmurugan.V of II B.Sc Chemistry underwent an internship at Hatsun agro product PVT. LTD, Palacode, Tamilnadu on Hatsun agro product and milk product.
- ❖ Nasrin Fathima.H of II B.Sc Chemistry underwent an internship at Vijay electroplating works, Coimbatore, Tamilnadu on plating works for metal (Rust Prevent).
- ❖ Durga.P, Ramya Bharathi.S, Dheenasha.K, Sindhu.V of II B.Sc Chemistry underwent an internship at Kaleeshwari Paint company, Coimbatore, Tamilnadu on Manufacturing of Zinc Chromate Paint.
- ❖ Gopi.M of II B.Sc Chemistry underwent an internship at Daffodils PVT. LTD, Coimbatore, Tamilnadu on Preparation of Alcohol.
- ❖ Dineshkumar.M of II B.Sc Chemistry underwent an internship at Daffodils PVT. LTD, Combatore, Tamilnadu on Manufacturing of Bathing Soap.
- ❖ Vigneshwaran.E, Anbumani.M of II B.Sc Chemistry underwent an internship at Robbell Materials Research centre (OPC) PVT.LTD, Salem, Tamilnadu on Green Synthesis of Nano Particle and preparation of sol gel method.
- ❖ Aswathi.K, Surya Praha.M, Kandeepan.K, Mohammad Safwan.S of II B.Sc Chemistry underwent an internship at Prof. CNR Raoresearch centre Avinashilingam Institute of Home Science and Higher Education for Women, Coimbatore, Tamilnadu on Synthesis of Zinc oxide nanoparticles.
- ❖ Sethuram.S, Premkumar.S, Devisree.R, Sujitha.K, Madhan.P, Haalitha Parveen.K, Santhosh Guhan.S, Guru Prasad.R of II B.Sc Chemistry underwent an internship at Sri Ganga Soap works, Coimbatore, Tamilnadu on Manufacturing of soap products.
- ❖ Logesh Pandi.V, Lensika.G, Haranesh.A, Abiram.D, Srikanth.S, Parthiban.A, Akshaya.N of II B.Sc Chemistry underwent an internship at Sri Ganga Soap works, Coimbatore, Tamilnadu on Manufacturing of soap products.

c) Conferences /Seminars / Workshops/Competitions/Training Attended

2022-2023

- ❖ 18 students of III B.Sc Chemistry students attended **One Day National Seminar on Advancements in Materials Chemistry for Energy Applications** in Department of Chemistry, Sri Ramakrishna Engineering College, Coimbatore- 641022, Tamil Nadu, India on 28.10.2022.
- ❖ 26 of III B.Sc Chemistry students attended Indian science congress association ISCA Coimbatore chapter sponsored two days national level conference on scientific input, technological advancements and women empowerment for sustainable development on February 2 and 3 at Kongunadu arts and science college
- ❖ A One Day National Level Webinar on “Science and Technology for Sustainable Development with Women Empowerment” was organized by Department of Chemistry (UG) & Indian Science Congress Association, Coimbatore Chapter was attended by all the students of chemistry (113 Nos.) on 03.01.2023
- ❖ Mr. R. Priyadharshan of II IB.Sc Chemistry attended The 108th session of Indian Science Congress (ISC), between January 3-7, 2023 at Nagpur University for which registration fees and travel grant give from DBT fund
- ❖ Six students of III B.Sc Chemistry participated (Selvaprasanna, Muthukamal, Maheshkumar, Nikhleshwaran, Shyamsundar,Baladurgesh) in Intercollegiate math carnival conducted in PSGR Krishnammal college for women on (07.02.2023) bagged overall second runner up.
- ❖ Students **won first and second prize** in Poster making competition organized by Department of Chemistry on 31.03.2023.

2023-2024

- ❖ Ezhil, Harish. L, Nithya. C - II B.Sc.Chemistry and Mohamadsafwan, Madhavnaresh – I BSc., Chemistry, Participated in **Chemfusion** and won **Third prize in “Chemposter”**, organized by Department of Chemistry, Sri Ramakrishna Mission Vidhyalaya College of Arts and Science, Coimbatore.
- ❖ Balaji. S, Barath. K.M of III B.Sc.Chemistry participated in **“Recent Innovations in Modern Science and Technology”**, at KPR Institute of Engineering and Technology, Coimbatore.

2024-2025

- ❖ Dhinakaran.T, Gopipriyan of II B.Sc. Chemistry won **Second Place** in the event **Chem Quiz** conducted by Department of Chemistry, PSGR Krishnammal College for women on 10.09.2024 (Chem Utsav).
- ❖ Gopipriyan, Ezhil of III B.Sc. Chemistry participated in Chem fusion - 24 **“One day Intercollegiate Chemistry Students Meet”** organized by Department of Chemistry, Sri Ramakrishna Mission Vidyalaya College of Arts and science. Coimbatore and won first prize in Chem fusion.
- ❖ Dhinakaran.T, of III B.Sc. Chemistry won **First Place** in **Crazy capture on Chem Bond: An Intercollegiate Students Meet** conducted by PG and Research Department of Chemistry, Kongunadu Arts and Science College on 13.03.2025.
- ❖ Ezhil. C, Venkat. K of III B.Sc. Chemistry won **Second place** in **Chem quiz on Chem Bond: An Intercollegiate Students Meet** conducted by PG and Research Department of Chemistry, Kongunadu Arts and Science College on 13.03.2025.

- ❖ Aswathi. K, Suryaprapha M and Lavanya, K of II B.Sc., Chemistry students participated **TNWISE 2025 Hackathon for women in Science and Engineering and won cash prize of Rs.10,000/-** organized by Tamil Nadu Industrial Development Corporation Limited.
- ❖ Anbumani and Abhiram of II B.Sc. chemistry secured Second Place **In Application of Chemistry in forensic Science-Test exhibit** in the National Level Symposium, INSPIRE- SJ, conducted by B.V. Raju College (A), Bhimavaram, Andhra Pradesh from 13.12.2024 to 14.12.2024.
- ❖ Srikanth of II B.Sc. chemistry Participated **in Escape room** in the National Level Symposium, INSPIRE-SJ, conducted by B.V. Raju College (A), Bhimavaram, Andhra Pradesh from 13.12.2024 to 14.12.2024.
- ❖ Guru of II B.Sc. chemistry secured **First Place In Escape room** in the National Level Symposium, INSPIRE-SJ, conducted by B.V. Raju College (A), Bhimavaram, Andhra Pradesh from 13.12.2024 to 14.12.2024.

d) Paper Presentation by Students

2023-2024

- ❖ Vimalkumar. S, Syed jaffersadiq, Lishanthini. S, Vignesh. S - III B.Sc., Chemistry participated in the National Conference on Futuristic materials in Science and Technology (NCFMST -2023) and presented a Paper entitled **“Preparation, Characterization and Biological activities of transition metal hydrazine carboxylates”** organized by Department of Chemistry, Bannari Amman Institute of Technology, Sathyamangalam.
- ❖ Abinaya. S, Mathumitha. M, Guruprasath. S, Sriramy.A, Sameera. M, Vannyalangi. R, Dravid raja. K, of III B.Sc., Chemistry students participated in an International Conference on socioeconomic impacts of pollution in the water bodies and remedial measures (ICPWRM – 2023) and **Presented 8 abstracts**, jointly organised by Kongunadu Arts and Science College, Coimbatore and University of Exeter, UK and Teesside Univerity, UK.
- ❖ Subiksha. K, Rithika. M, Balaji. S Barath. K.M of III B.Sc., Chemistry participated inNational Convention Electrochemists on 04/01/2024, 05/01/2024 at SRM University, Chennai and presented a paper entitled **“Beyond lithium: Sodium – ion coin cells with tailored Cathods and Graphene anode for next generation energy storage”**.

2024-2025

- ❖ M. Tholkappiyan, P. Mohan, of III B.Sc. Chemistry& Dr. R. Manimekalai and Dr. K Saminathan Assistant Professor of Chemistry Participated in 9th Asian PGPR, India Chapter National Conference on “The beneficial microbes on integrated approach for sustainable agriculture. Opportunities and challenges” from 29/08/2024 to 30/08/2024and presented a paper entitled **“Precision agriculture: Optimizing nutrient management with NPK spot analysis”**.
- ❖ Hirthik of III B.Sc. Chemistry & Dr. R. Manimekalai Assistant Professor of Chemistry Presented a paper entitled **“Efficient synthesis and characterization of transition metal oxide, nanoparticles for advanced industrial applications”** Conducted by Chevalier T. Thomas Elizabeth College for Women on 06.11.2024, International E Conference on Advancing Frontiers, Empowering the Next Generation of Chemists -2024.
- ❖ P. Mohan and Hirthik R.K. of III B.Sc. Chemistry Dr. R. Manimekalai Assistant Professor of Chemistry Submitted an article for New Journal of Chemistry entitled **“Nickel oxide nanoparticle: A Co- precipitation approach for enhanced photo catalytic application” (for publication)**.

e) Inter-Departmental Activities

2022-2023

- ❖ 23 students of II B.Sc chemistry attended webinar on Role of Material Engineering in Efficient energy harvesting and waste management organized by Department of Physics, KASC on 27.03.2023
- ❖ Five students of III B.Sc Chemistry participated in a guest lecture on A legacy of research and discovery of Nobel laureates organized by Department of Physics, KASC on 16.03.2023
- ❖ Five students of III B.Sc Chemistry attended a seminar on Crystal Engineering : An insight into process methods and applications organized by Department of Physics, KASC on 30.03.2023
- ❖ 25 students of II B.Sc chemistry attended orientation programme on electrical safety management organized by Department of Physics, KASC on 21.02.2023
- ❖ All the students of Chemistry participated in Science Exhibition programme organized by Department of Physics, KASC on 27.02.2023
- ❖ Five students of III B.Sc Chemistry attended capacity building workshop on quantitative aptitude and logical reasoning on 7.11.2022 organized by Department of Mathematics, KASC

2023-2024

- ❖ Srikanth. B, Arunkumar. N, Dineshkumar. M, Subieswar. D, Rabah Raj – II B.Sc., Chemistry participated in a **“Guest lecture on Carrier opportunities in Abroad”** organized by Department of Mathematics, under DBT – STAR College, Kongunadu Arts and Science College, Coimbatore on 07.08.2023.
- ❖ 33 Students of II B.Sc., Chemistry participated **“Societal Implications of Nanotechnology and its perspectives”** organized by the Department of Physics, Kongunadu Arts and Science College, Coimbatore on 08.08.2023.
- ❖ 42 students from III & II B.Sc., Chemistry attended a **“Guest lecture on Industrial and Biosafety Ethics for young minds”**, organized by the Department of Physics, Kongunadu Arts and Science College, Coimbatore on 15.09.2023.
- ❖ 40 students of II B.Sc., Chemistry students participated in a **“Workshop on Information Security”**, Jointly Organized by Department of Botany and Chemistry in collaboration with Information Security awareness (ISEA) project phase – II, Ministry of Electronics and Information technology (MEITY) Government of India.
- ❖ 5 of our students have participated in **“Capacity Building Programme an Interdisciplinary approach for non-mathematics students”**, organized by the Department of Mathematics, KASC on 11.12.2023.
- ❖ 4 of our students participated in a Guest Lecture on **“Students Project Ideas- Interdisciplinary Approach”** organized by the Department of Mathematics, KASC on 21.09.2023

2024-2025

- ❖ 5 Students of III B.Sc. Chemistry participated in a Webinar on **“Overview of Earth’s atmosphere”**, conducted by Department of physics, Kongunadu Arts and Science College, Coimbatore on 31.07.2024.
- ❖ 10 Students of I B.Sc. Chemistry participated an event **Navigating complexity: Interdisciplinary learning for Non-Mathematics students** conducted by Department of Mathematics, Kongunadu Arts and Science College, Coimbatore on 02.08.2024.
- ❖ 5 Students of III B.Sc. Chemistry participated a **Hands-on training in MATLAB programme for beginners** conducted by Department of Mathematics, Kongunadu Arts and Science College, Coimbatore 07.08.2024.
- ❖ 5 Students of III B.Sc. Chemistry participated a **Hands-on training on power BI** conducted by Department of

Mathematics, Kongunadu Arts and Science College, Coimbatore on 20.09.2024.

- ❖ Ezhil C of III B.Sc. Chemistry participated in a event, **Students project ideas- Interdisciplinary approach** conducted by Department of Mathematics, Kongunadu Arts and Science College, Coimbatore on 23.09.2024.
- ❖ 5 Students of I B.Sc. Chemistry participated **Workshop on SPSS (Statistical Package for Social Sciences)** conducted by Department of Mathematics, Kongunadu Arts and Science College, Coimbatore on 16.12.2024.
- ❖ 5 Students of III B.Sc. Chemistry participated a guest lecture on “**Grafting the future: Innovation and IPR for aspiring minds**” conducted by Department of Physics, Kongunadu Arts and Science College, Coimbatore on 14.12.2024.
- ❖ 5 Students of III B.Sc. Chemistry participated **The Western Ghats Fest** jointly organized by Eco club, PG and Research Department of zoology and wildlife biology, Kongunadu Arts and Science College, Coimbatore 07.03.2025.

9.8 No. of New Experiments Introduced

2022-2023

Core Chemistry Practical – I Inorganic Semi-Micro qualitative analysis

1. Microscale experimental technique demonstrated
2. Simplified borate, oxalate, chloride, nitrate and sulphate was demonstrated and the same was introduced
3. Spot tests for cation analysis was demonstrated and the same was introduced

Core Chemistry Practical – II Inorganic Volumetric and Organic Qualitative Analysis

1. Double titration method was demonstrated in volumetric analysis
2. Special element test for nitrogen and sulphur was simplified
3. Melting point and FT-IR spectrum of organic compounds (**demonstration only**)

Core Chemistry Practical – III- Inorganic Quantitative Analysis

1. Metal analysis in cosmetic products using AAS. (**Demonstration only**)

Core Chemistry Practical – IV Physical Chemistry Experiments

1. Group practicals, with the purchase new equipments given individually

Core Chemistry Practical – V Application oriented practicals

Practicals done beyond the syllabus

1. Preparation of sanitizer and soap oil
2. Adulterants present in milk
3. Isolation of citric acid

2023-2024

Microscale experimental techniques enhanced for I and II B.Sc., Chemistry students.

Isolation of phytochemicals from tea leaves (polyphenols, flavanols, flavone diols, flavonoids) was demonstrated for III B.Sc., Chemistry students

2024-2025

Practical beyond syllabus

- ❖ Photocatalytic Reactions Using Visible Light.
- ❖ UV-Vis Analysis of Sunscreen Absorption.

- ❖ Electrochemical Cells and Battery Design.
- ❖ Colorimetric Determination of Iron in Food.
- ❖ pH and Buffer Capacity of Beverages.
- ❖ Extraction of Caffeine from Tea or Coffee

9.9 Publications (Scopus Indexed) / Patents, if any.

2022-2023

- ❖ E. Jayanthi, Ruthenium(III) and (II) complexes containing pyridine moiety: Synthesis, crystal structure and in vitro biological evaluation, Journal of Molecular Structure, 1270, 15 2022, 133929, 2022.
- ❖ E. Jayanthi, Nickel Ferrite-based Composites and its Photocatalytic Application – A review, Journal of hazardous materials advances,8, 2022, 100156, 2772-4166, 2022.
- ❖ E. Jayanthi, Chemical profile and in-vitro biological activities of eupatorium adenophorum spreng, Rasayan Journal of Chemistry, 15(4), 2366-2372, 09741496, 2022.
- ❖ Dr.K.Saminathan, Influence of sugarcane bagasse and animal dung on the fatty acid profile and its reproductive indices of earthworm Eudriluseugeniae, Biomass Conversion and Biorefinery, 1-12, 2190-6823, 2023.
- ❖ Dr.K.Saminathan, Detoxification of Petroleum Hydrocarbon Contaminated Soil Through Vermicomposting and Its Impact on Gut Profile of Earthworm Eudriluseugeniae, Water, Air, & Soil Pollution, 234 (3), 199, 0049-6979, 2023.
- ❖ Chandra Prakash. K, Length-weight relationship of flying fishes (Exocoetidae) from Bay of Bengal, Eastern Indian Ocean, Thalassas: An International Journal of Marine Sciences, Accepted Manuscript, 2023.

2023-2024

- ❖ Dr. E. Jayanthi, Assistant Professor of Chemistry published an article entitled **“Quantum Chemical studies on structural, spectral and frontier molecular orbital analysis of Indometacin in aqueous phase”** in the journal, Asian Journal of Chemistry vol.,35 No.10(2023) 2489- 2509.
- ❖ Dr. E. Jayanthi, Assistant Professor of Chemistry published an article entitled **“Green synthesis of metal doped Zinc oxide nanoparticles using *bauhinia racemosa* Lam. extracted and evolution of their photocatalysis and biomedical applications”**, Applied bio materials, vol.,7 No.4(2024) 2519- 2532.
- ❖ Dr. K. Saminathan, Assistant Professor of Chemistry published an article entitled **“Revolutionizing Hydrogen Fuel Production: Exceptional Hydrogen Evolution Reaction Performance of Metal Oxides Coated Kish Graphite Electrodes with Mathematical Modelling”**, Research Square, 16 June 2023 [https:// doi.org/ 10.21203/rs.3.rs-3054032/v1](https://doi.org/10.21203/rs.3.rs-3054032/v1) PPR: PPR677142.
- ❖ Dr K. Saminathan, Assistant Professor of Chemistry published an article entitled **“Toxic Effect of Lawsonia inermis Leaf Litter on Growth and Reproduction of Earthworm Eudriluseugeniae”**, Journal of Soil Science and Plant Nutrition (IF 3.9) Pub Date: 2023-07-14, DOI:10.1007/s42729-023-01369-2.
- ❖ Dr. K. Chandra Prakash Assistant Professor of Chemistry published an article entitled **“Length-weight relationship of flying fishes (Exocoetidae) from Bay of Bengal, Eastern Indian Ocean”**, Thalassas 2023, 39, 509–512.
- ❖ Dr. K. Chandra Prakash Assistant Professor of Chemistry published an article entitled **“First Record of Redfin Emperor Monotaxisheterodon (Lethrinidae) from Indian Waters with Molecular Confirmation”**, J. Ichthyol. 2024, 64, 202–208

2024-2025

- ❖ **E. Jayanthi**, *Tecoma stans* intermediated green synthesis of copper oxide nanoparticles, their characterization, paracetamol degradation and biological activities, *Inorganic Chemistry Communications*, 170 (2024) 113503.
- ❖ **E. Jayanthi**, Seasonal variation in chemical compositions and biological activities of essential oils extracted from *Ageratum conyzoides* L. - grown in Western Ghats region-South, India *Plant Science Today*, Vol 11(3), 2024, 535-542.

9.10 Training Received by Faculty/ List of Activities Undertaken by Faculties

a) (i) Training Received by Faculty

2022-2023

- ❖ Dr. K. Chandraprakash attended a “**Two days Faculty Development Programme on Python with Data Science**”, Organized by the Department of Computer Science, Kongunadu Arts and Science College, Coimbatore, from 13.02.23 to 14.02.23.
- ❖ 6 faculties participated in an **In-Service Training Programme in Chemical Sciences** at Government Arts College, Coimbatore organized by TANSCH, Chennai on 05.05.2022 and 06.05.2022.
- ❖ Dr. K. Saminathan attended workshop on **PFMS-EAT, CNA, SNA, ZBSA-Dos and Don'ts on PFMS** organized by Kongunadu Arts and Science College, Coimbatore on 30.08.2022 and 31.08.2022.
- ❖ 7 Faculty members attended **Seven days faculty development programme on Impact of Industry 4.0** on 21st century Higher education organized by IQAC and Curriculum development cell, Kongunadu Arts and Science College, Coimbatore between 1.03.2023 and 8.03.2023

2023-2024

- ❖ Dr. E. Jayanthi, Assistant Professor of Chemistry completed a “**Faculty Development Programme**” conducted by Teaching Learning Centre, Ramanujan College, University of Delhi from 16.11.23 – 22.11.23.
- ❖ Dr. V. Sangeetha, Dr. R. Manimekalai, Sr. K. Saminathan, Assistant Professors of Chemistry completed “**Online Two-week Refresher Course**” from 15th to 29th December conducted by Teaching Learning Centre, Ramanujan College, University of Delhi in collaboration with Kongunadu Arts and Science College and Kandaswami Kandar's College, Velur, Tamilnadu
- ❖ Dr. K. Chandraprakash, Assistant Professor of Chemistry completed “**TNSCST Young Scientist Fellowship at CIMAP**”, Bangalore from 25th October to 26th December 2023.
- ❖ Dr. K. Krishnaveni, Assistant Professor of Chemistry attended a “**Six-day faculty development programme on Charging ahead: Exploring next generation Battery technology**” on 14th October 2023 conducted by SRM Institute of Science and Technology, Ramapuram, Chennai.
- ❖ Dr. K. Krishnaveni, Assistant Professor of Chemistry attended a “**Five day International level online Faculty Development programme on Artificial Intelligence in Chemistry: Current trends and futuristic perspectives (AICCTPF- 2023)**”, from 4th – 9th September 2023 conducted by PG and Research Department of Chemistry, Holy Cross College, School of Physical Science, Tiruchirapalli.
- ❖ Dr. K. Krishnaveni, Assistant Professor of Chemistry attended a “**Seven-day International virtual faculty development programme on Emerging trends in Chemical sciences**” from 19th to 25th November 2023 at Seethalakshmi Ramaswami College, Tiruchirapalli.

2024-2025

- ❖ Dr.M.S.Sivaramkumar, Dr.R.Manimekalai, Dr.K.Saminathan, Dr.K.Krishnaveni, Dr.K. Chandraprakash, Assistant Professors, Department of Chemistry participated in the **Faculty Development Programme on Characterization of Materials** on 25.07.2024 conducted by the Department of Physics, Kounnadu Arts and Science College, Coimbatore.
- ❖ Dr E Jayanthi, Dr K Krishnaveni, Dr K Chandraprakash, Dr. R. Manimekalai, Assistant Professors, Department of Chemistry participated in a Two-day **Faculty Training Programme on LaTeX“ Quality documentation easy with PC”**on14.02.2025conducted by Department of Mathematics, Kongunadu Arts and Science College, Coimbatore.
- ❖ Dr. K. Chandraprakash, Assistant Professor, Department of Chemistry participated in a **One-day workshop on AI tools for research writing and publishing** on 21.02.2025. conducted by the Department of Biochemistry in association with professor Dr.M Aruchami Foundation, Kongunadu Arts and Science College, Coimbatore.

2022-2023

ii) Conference/ Seminars / Workshops Attended

- ❖ All the faculty members attended 2nd National Seminar On Innovation And Entrepreneurship In Chemical sciences For Inclusive Curriculum, Organizedby: Department of Chemistry, Kongunadu Arts and Science College (Autonomous), College of Excellence (UGC), Coimbatore – 641 029 Sponsored by : Paramarsh Scheme – UGC &IndianScienceCongress Association -CoimbatoreChapter
- ❖ A One Day National Level Webinar on “**Science and Technology for Sustainable Development with Women Empowerment**” was organized by Department of Chemistry (UG) & Indian Science Congress Association, Coimbatore Chapter was attended by all the faculties of chemistry on 03.01.2023
- ❖ Dr. K. Saminathan , Assistant professor , Department of Chemistry, Kongunadu Arts and Science College, Coimbatore attended The **108th session of Indian Science Congress (ISC)**,between January 3-7, 2023 at Nagpur University
- ❖ Dr. E. Jayanthi attended the International Conference on Influence of Chemistry in the Transition towards Green Economy, on 02.03.2023 at Post Graduate & Research Department of Chemistry, PSGR Krishnammal College for women, Coimbatore.
- ❖ A One Day National Level Webinar on “Science and Technology for Sustainable Development with Women Empowerment” was organized by Department of Chemistry (UG) & Indian Science Congress Association, Coimbatore Chapter was attended by all the faculty members on 03.01.2023
- ❖ Dr. K. Saminathan, Dr. E. Jayanthi, Dr. K. Krishnaveni and Dr. K. Chandraprakash attended Indian science congress association ISCA Coimbatore chapter sponsored two days national level conference on scientific input, technological advancements and women empowerment for sustainable development on 2.02.23 and 3.02.23 at Kongunadu arts and science college.

2023-2024

- ❖ Dr. M. S. Sivaramkumar, Dr. R. Manimekalai, Dr. E. Jayanthi, Dr. K. Chandraprakash, Assistant Professors of Chemistry participated in an **“International Conference on Recent Innovations in Chemical Sciences”**, on 29.09.23 at Sona College of Technology, Salem.
- ❖ Dr. K. Chandraprakash, Assistant Professor of Chemistry, attended an **“Online International conference on Recent Advances in Chemistry – 2023”** at Mother Theresa Women University, Kodaikanal on 13.07.2023 - 14.07.2023 and presented a paper entitled **“Hetero aromatic Quinoline: facile synthesis of Nitro substituted Indolo Quinoline under microwave assisted condition”**.

2024-2025

- ❖ Dr. K. Saminathan, Assistant Professor, Department of Chemistry participated in **9th Asian PGPR. India chapter National Conference on the beneficial microbes on integrated approach for sustainable agricultural opportunities and challenges** on 29.07.2024. and 30.07.2024 conducted by Department of Botany, Bharathiar University, Coimbatore.
- ❖ Dr. R. Manimekalai, Assistant Professor, Department of Chemistry participated **International E-Conference on advancing frontiers : empowering the next generation of chemists-2024** on 06.11.24 conducted by Chevalier T Thomas Elizabeth College for women, Perambur, Chennai.
- ❖ Dr. K. Saminathan Assistant Professor, Department of Chemistry participated in the **International Conference on frontiers in material science and technology, energy and environmentally sustainable development** on 05.12.24 & 06.12.24 conducted by Department of Chemistry, SRM TRB Engineering College, Tiruchirappalli.

b) List of Projects Undertaken by Students

2022-2023

- ❖ Six students of III B.Sc., Chemistry completed a project on **Synthesis and characterization of pyrazolino carbazoles**
- ❖ Six students of III B.Sc., Chemistry completed a project on **Photocatalytic activity of cellulose nano Particles on Crystal Violet dye(Interdisciplinary)**
- ❖ Six students of III B.Sc., Chemistry completed a project on **Synthesis, Characterisation of transition metal hydrazine carboxylate**
- ❖ Six students of III B.Sc., Chemistry completed a project on **Development of solid electrolyte**
- ❖ Five students of III B.Sc., Chemistry completed a project on **Green Synthesis of Cobalt ferrite nano particles using samaneasaman and its characterization(Interdisciplinary)**
- ❖ Five students of III B.Sc., Chemistry completed a project on **Corrosion inhibition of aluminium metal in HCl medium using a synthetic inhibitor**
- ❖ Five students of III B.Sc., Chemistry completed a project on **Synthesis of heteroaromatic substituted quinoline**
- ❖ Five students of III B.Sc., Chemistry completed a Mini Project on **Sodium Ion Battery(Interdisciplinary)**
- ❖ Five students of III B.Sc., Chemistry completed a review on **Hydrogen Fuel**

2023-2024

- ❖ J.Chandni, Mohanarajan.P, J. Vishnu madesh, Priyanka M of III B.Sc. Chemistry completed a project on **“Synthesis Characterization of Pyrozolino carbazole”**.
- ❖ Sriramya A, AbinayaS ,Guruprasath S, Mathumitha M of III B.Sc., Chemistry completed a project on **“Photocatalytic activity of guar gum nanoparticles on methylene blue dye”**. (Interdisciplinary)
- ❖ Syed Jaffer Sadiq. S, Lishanthini .S, Vignesh.S, Vimal Kumar S of III B.Sc. Chemistry completed a project on **“Synthesis, characterization of transition metal oxide nano particles”**.
- ❖ Subiksha K, Balaji S, Barath KM, RithikaM of III B.Sc. Chemistry completed a project on **“Beyond lithium: Sodium – ion coin cells with tailored cathodes and Graphene anode for next generation energy storage”**. (Interdisciplinary)
- ❖ Ranil V, Senthamizharasi. P, Narmadha V. M, Divya K of III B.Sc. Chemistry completed a project on **“Green synthesis, characterization and biological activity of copper oxide Nanoparticles using Curcuma Amada”**. (Interdisciplinary)
- ❖ VanyaaLingi R, Dravid Raja K, Sameera. M of III B.Sc. Chemistry completed a project on **“Effect of temperature and immersion time on the corrosion inhibition of mild steel in sodium hydroxide medium”**.
- ❖ MohanaPriya. M, Ashwini. S.Patrickpaul . J of III B.Sc. Chemistry completed a project on **“Synthesis of Indazole substituted Quinoline Scaffolds”**.

Innovative Product Designed and Developed

- ❖ **Natural Soaps** are prepared by students of Chemistry using clay, finely grinded alkaline soil, charcoal, butter and plant based essential oil and it leads to conservation of ecosystem.
- ❖ **Sodium-Ion Coin Cells** with Tailored Cathode and Graphene Anode model for energy storage was prepared by Subiksha .K., Rithika. M.I., Balaji .S., Barath . K.M., Students of Chemisty, which is an economically attractive and efficient alternative to traditional Li-ion batteries.

2024-2025

- ❖ Six students of III B.Sc., Chemistry completed a project on **“Synthesis and characterization studies of 2-Hydroxy ethyl ammonium 4-nitroBenzoate crystal”**.
- ❖ Six students of II IB.Sc., Chemistry completed a project on **“Synthesis of hetroaryl chalcones”**.
- ❖ Six students of III B.Sc., Chemistry completed project on **“Nickel oxide nanoparticle : A Co- precipitation approach for enhanced photocatalytic application”**.
- ❖ Six students of III B.Sc., Chemistry completed a project on **“Preparation and evaluation of sodium vanadium phosphate Nasicon type Cathode material for sodium ion batteries”**.
- ❖ Six students of III B.Sc., Chemistry completed a project on **“Green synthesis of ZnO nanoparticles using Calliandra haematocephala extract”**.
- ❖ Six students of III B.Sc., Chemistry completed a project on **“Effect of temperature on the corrosion inhibition of mild steel in sodium chloride medium”**.
- ❖ Five students of III B.Sc., Chemistry completed a project on **“Synthesis of heteroaryl substituted quinolone”**.

Innovative Product Designed and Developed

- ❖ Tholkappian. M, Mohan. P, Gopipriyan. M, Dinakaran. T, Ezhil. C Hirthik R. K of III B.Sc., Chemistry, HaalithaParveen. K, Anbumani. M, Kandeepan. K, Guruprasath. R, Abiram D of II B.Sc. Chemistry along with faculty members of Chemistry has applied Design Pattern for “**Vacuum Suction**”.

9.11 List of Exhibitions/ Seminars/ Training Courses Conducted

a) Conference/ Seminars / Workshops Organized

2022-2023

S. No.	Name of the Event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Workshop on “Microscale Experiments Techniques in Chemistry”	18.02.23	Dr. S. Murugan, Former Head, Department of Chemistry, S. T. Hindu College, Nagercoil	I and II B.Sc Chemistry students (61 Students)	Students are exposed to reduce the amounts of chemical hazards. Less waste (including toxic or harmful by-products) is generated. Demonstration experiments can become student lab experiments without causing an increase in the amount of chemicals used.

2023-2024

S. No	Name of the Event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Seminar on “Recent Trends in Advanced Materials and their Applications”	04-09-2023	Dr. SakthiPandi K Professor & Research Coordinator, SRM Trichy Campus, Tiruchirappalli. Dr. Hemalatha K Assistant Professor of Chemistry, CIT Coimbatore.	47 Students	Students understood about the applications of various advanced materials like super capacitors, nanocomposites, ceramics, polymers and metals.
2	Seminar on “Futuristic Trends and Opportunities in Basic Sciences”	08-09-2023	Dr C. Ravidass Head, Department of Physics, Bishop Heber College, Trichy. Dr. D. Nalini Head, Department of Chemistry, PSGR Krishnammal College for Women, Coimbatore.	195 Students	The students gained understanding of different methods for preparing thin films, techniques for fabricating solar cells and explored opportunities within various industries, research and development laboratories, as well as higher education prospects in reputable institutions.

3	Seminar on “Current Topics of Interest in Chemical Science Research”	21.09.2023	Dr. Shanmugaraju Sankarasekaran Associate Professor in Chemistry, Indian Institute of Technology Palakkad, Kerala, Dr. R. Prabhakaran Associate Professor of Chemistry Bharathiar University, Coimbatore	64 Students, 7 Faculty	Various types of Sensor, their uses and applications in numerable areas are covered. The participants understood the concepts of Coupling reactions.
4	Seminar on “Current trends in Pharmaceutical Industry and Futuristic opportunities”	04-03-2024	Lakshmanan Subramaniam Scientific Manager- R & D, Biocon Pharma Ltd, Bangalore. Mahendran Krishnan Senior Manager, Somerset Therapeutics Ltd, Karnataka.	Students-56 Faculty-07 Total - 63	Students gained insight into recent drug advancements, diverse medication forms, and practical skills encompassing drug formulation, manufacturing, FDA regulations, design and quality control.
5	Workshop on “In Silico Molecular Design”	11-01-2024	Dr. V. Rajapandian Assistant Professor of Chemistry, SRMV College of Arts and Science, Coimbatore	42 Students	Students became familiar to use Gaussian software for drawing 3D chemical structures and performing calculations on bond angles, bond lengths, energy, and other related parameters in their project work.
6	Workshop on “Phytochemical Extraction from Tea Leaves”	19-02-2024	M. Thennarasu Group Manager Wipro Enterprises limited Kochi, Kerala.	Chemistry students-37 Physics-16, Biochemistry – 06, Botany – 06, Faculty –7, Total - 72	Students gained practical knowledge in isolating phytochemicals such as polyphenols and flavonoids, from tea leaves through chemical techniques and also improved their skills in identifying tea leaf varieties and to operate the rota vapor instrument for extraction.

2024-2025

S. No	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Seminar on "Scope and Opportunities in Chemical Industries"	19.09.2024	T. Narendran, Vice President, Aquasub Engineering, Coimbatore. - Mr. Arjun Moorthy, Founder and Director, Rob Bell Materials Research Centre, Salem.	Students: 88 Faculty: 4	- Students came to know about various opportunities and challenges in Chemical Industries, R & D Laboratories. - They also learnt about current trends and applications of advanced materials like Silicon carbide, graphene in the field of Electronics. 6 students got placement offers from Aquasub Engineering, Coimbatore.
2.	Seminar on "Recent Trends in Chemical Sciences"	20.01.2025	Dr. S. Marappan Velusamy, Professor of Chemistry, North Eastern Hill University, Shillong, India. Dr. K. Sundaravel, Assistant Professor of Chemistry, Bharathiar University, Coimbatore.	Students: 65 Faculty: 4	- Students learnt about the design, efficiency, and stability challenges of small molecule organic solar cells (OSCs). - Gained key insights into the future potential of the innovative technologies for sustainable energy in the field of Chemistry.
3	Workshop on "ICT Tools for Teaching and Research in Chemistry"	21.01.2025	Dr. V. Rajapandian, Assistant Professor of Chemistry, SRMV College of Arts and Science, Coimbatore.	Students: 44 Faculty: 5	Students learnt about the usage of ICT tools & software which helps in conceptual learning of Chemistry by visualizing various chemical structures in 3D-way.
4.	An International Webinar on "Recent Research Scenario in the Field of Chemistry"	17.02.2025	Dr. Nandhakumar Ponnusamy, Postdoctoral Researcher of Nano engineering, University of California, United States of America. Dr. Agilan Perumal, Postdoctoral Researcher, Nanomaterial and System Lab, Department of Mechatronics Engineering, Jeju National University, Republic of Korea	Students: 75 Faculty: 3	Students gained insights into cutting-edge research trends in Chemistry, including advancements in Material Science, Pharmaceuticals, and reaction Engineering, fostering interdisciplinary collaboration and inspiring future research directions.
5	International Seminar on "Advances in Chemical Sciences"	23.07.25	Prof. A.M. Kannan, Graduate Program Chair, Fulton Schools of Engineering, Arizona State University, USA	75 Students and 9 Faculty members	Participants gained international exposure on the latest research trends in clean energy systems and space materials.

			Dr. S. A. Ilangovan Former Deputy Director & Outstanding Scientist, Vikram Sarabhai Space Centre, Thiruvananthapuram		Students understood the practical applications of chemistry in global challenges such as energy and space exploration.
6	Workshop on “Protecting Intellectual property Rights (IPR) and IP Management for start ups”	26.08.2025	Dr.B.Mythili Gnanamangai Associate Professor of Biotechnology, K.S.R College of Technology, Thiruchengode.	44 students + 5 Faculties	Participants acquired a clear understanding of IPR concepts and their role in safeguarding innovations. Students and faculty learned about the patent search and filing process, including fee structures and schemes.
7	A National level seminar on “Current trends in spectroscopic techniques”	03.09.25	Dr. N. Sampathkumar Associate Professor of Chemistry Government Arts College Coimbatore. Dr. V. Dhanapal Assistant Professor of Chemistry SRMV College of Arts and Science, Coimbatore.	57 students	Students Acquired basic knowledge of spectral methods.

2022-2023

b) Exhibition / Competitions Organized

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1	National science day-Intra Departmental Model making Competition	27.02.2023	56 students which comprised of 13 teams of chemistry	Students learnt various simple methods of making scientific working models
2	Inter departmental poster making competition under the topic Save earth, Sustainable development and chemistry in day today life	31.03.2023	27 students	Students learnt ideas about sustainable development goals and chemistry in day today life and effect of pollutants

2023-2024

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1	Model Making Competition	28-02-2024	23 students	To motivate internal achievement which is very important for self-learning and optimizing students group activity and self-responsibility.
2	Quiz Competition	28-02-2024	32 students	Students gained insight into various current affairs across different subjects, recognizing the significance of collaborative activities in acquiring new knowledge.
3	Interdepartmental Science Exhibition	02-03-2024	120 students	Anticipated outcomes involve disseminating scientific knowledge, developing project management skills, holistic and impactful science experience.

2024-2025

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1.	Exhibition on “Exploring Youngminds for Foster Creativity”.	14.12.2024	106 School students Faculty: 3	The exhibition served as a platform for school students to present their innovative ideas, promoting scientific thinking, enhancing problem-solving abilities, and building confidence through practical learning and interaction with peers.
2.	Interdepartmental Exhibition for Science Students	27.01.2025	70 students from Botany, Bio- Chem, Physics and Mathematics	• Students from different departments participated and shared creative projects and ideas related to chemistry. • The event encouraged teamwork, learning, and a better understanding of how Chemistry connects with other fields.
3	Inter Departmental Science Quiz Competition	25.07.25	22 students	Students learned lot of current affairs indifferent field of subjects and how to face competitive exams and make themselves to face future challenges.
4	Inter Departmental Knowledge-inquiry Event	16.09. 25	23 students	Students gained cognitive experience on how to face competitive exams and adopt themselves to face future challenges

c) Training courses conducted

2022-2023

S. No.	Name of the event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Faculty Development Programme	14.03. 2023	Dr. MochamadNurcholis, Assistant Professor of Food Science and Biotechnology, Brawijaya University, Indonesia.	49 faculties and research scholars from chemistry, Maths, botany, zoology departments	The participants understand new methods in Teaching and Learning process.
			Dr. Wahyunanto Agung Nugroho, Assistant Professor of Biosystem Engineering, Brawijaya University, Indonesia.		
			Dr. S. Ponnuswamy, Associate Professor & Head, PG And Research Department Of Chemistry, Government Arts College (Autonomous), Coimbatore – 18		

2023-2024

S. No.	Name of the event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Faculty Development Programme “Empowering Science Educators: AI &ML “	06-03-2024	Dr. P.Subashini Professor of Computer Science, Centre for Machine Learning and Intelligence, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. Dr.Valliappan Raman Professor &HoD of Artificial Intelligence and Data Science, Coimbatore Institute of Technology, Coimbatore.	35 faculty	A groundwork was laid for proficient, ethically-minded educators, integrated curriculum development, influential research contributions, and a collaborative community dedicated to advancing AI/ML education trademark.
2	Faculty Training Programme on “Teaching Pedagogy and Skills”	25-03-2024	Dr. S.K. Krishna, Assistant Professor Department of Chemistry, Chikkaiah Naicker College, Erode.	30 Faculty	Development of interpersonal skills, positivism, fair minded, humour sense, consistent, punctuality which helps for a better classroom environment.
3	Hands on Training on “Handling of new Instruments for lab Technicians”	13-12-2023	Mr. G.K. Shanmugasundram Managing Partner Gemini Scientific Company Chennai.	16 Lab Assistants	Lab Assistants from various scientific disciplines understood about the handling of new instruments like digital potentiometer, colorimeter, rotavapour, Electrodes, hot air oven, etc.

2024-2025

S. No.	Name of the event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Faculty training Programme on “Scientific Conduct”	21.09.24	Prof. S. Karutha Pandian Honorary visiting Professor, Department of Biotechnology, Science campus, Alagappa University, Karaikudi.	Faculty :43	Improved Knowledge on Avoiding Misconduct: Faculty members are now better equipped to identify and prevent common research misconduct, such as plagiarism and data manipulation.
2	Faculty Development Programme on “Reverse Mentoring”	08.10.24	Prof. Dr. A. Sangamithra Professor, Department of Economics Bharathiar University, Coimbatore.	Faculty:25	It broke down the traditional mindset that only teachers have the experience and knowledge fit for mentorship. From students also teachers can learn to a new way of thinking, new technologies, and current needs.

3	An Awareness Program on “Laboratory and Chemical Safety” for Lab Technicians	10.01.2025	Dr.B. Vidhya, Assistant Professor, Department of Applied Physics, Karunya Institute of Technology and Sciences, Coimbatore.	13 Lab Technicians Faculty:4	Lab technicians came to know about various Chemical and lab safety measures and how to handle chemical hazards.
4	Hands on Training on “Biosafety& Firesafety Awareness”	12.02.2025	V. RangaRaju, Safety Officer, PSGInstitutions, Coimbatore.	Lab Technicians: 15 Faculty: 4	The participants learned the importance of biosafety and firesafety and responsibilities in preventing accidents.
5	Faculty Interaction on “Applications of Particle Size Analysis: A Zeta Potential Perspective in Biological and Chemical Systems”	05.08.2025	Dr. Namrata Jain Senior Application Scientist HORIBA India – Analytical Instruments, Chennai	30 participants	- Participants gained practical and theoretical insights into the concepts of Dynamic Light Scattering (DLS) and Zeta Potential Analysis. - The session enhanced participants' understanding of characterization techniques used in nanotechnology, biotechnology, and colloidal systems.

9.11 Details of Books & Journals Subscribed from DBT Grant

2022-2023

S. No.	Bill No	Date	Company Name	Author	Title	Qty	Amount
1	10786	28/3/2023	Shanti Books	Arun Bahl, B.S. Bahl and G. D. Tuli	Essentials of Physical Chemistry	5	3066
2	10786	28/3/2023	Shanti Books	Gurdeep Raj	Advanced Physical Chemistry	2	2151
3	10786	28/3/2023	Shanti Books	IshaqZaafarani, Syed Aftab Iqbal	Textbook of Electrochemistry	5	3980
4	10786	28/3/2023	Shanti Books	R. D. Madan	Modern Inorganic Chemistry	3	1575
5	10786	28/3/2023	Shanti Books	Satya Prakash G. D Tuli S. K Basu R. D Madan	Advanced Inorganic Chemistry Vol-1	3	2142
6	10786	28/3/2023	Shanti Books	Satya Prakash G. D Tuli S. K Basu R. D Madan	Advanced Inorganic Chemistry Vol-2	3	1386
7	10786	28/3/2023	Shanti Books	J.D. Lee	Concise Inorganic Chemistry	3	2898
8	10786	28/3/2023	Shanti Books	Wahid U Malik, GD Tuli, RD Madan	Selected Topics in Inorganic Chemistry	3	2142
9	10786	28/3/2023	Shanti Books	P.L. Soni	Textbook of Inorganic Chemistry	2	1440
10	10786	28/3/2023	Shanti Books	Gurdeep raj,	Advanced Inorganic Chemistry-Vol I	2	1971
11	10786	28/3/	Shanti	Gurdeep raj,	Advanced Inorganic	2	1611

		2023	Books		Chemistry-Vol II		
12	10786	28/3/2023	Shanti Books	Arun Bahl, B.S. Bahl	Advanced Organic Chemistry	3	3969
13	10786	28/3/2023	Shanti Books	G R Chatwal	Reaction Mechanism and Reagents in Organic Chemistry	2	1554
14	10786	28/3/2023	Shanti Books	P.L. Soni	Textbook of Organic Chemistry	2	1431
15	10786	28/3/2023	Shanti Books	G.R. Chatwal	Organic Chemistry of Natural Products Volume - I	1	638.4
16	10786	28/3/2023	Shanti Books	G.R. Chatwal	Organic Chemistry of Natural Products Volume - II	1	651
17	10786	28/3/2023	Shanti Books	O.P. Agarwal	Organic Chemistry Natural Products - Vol. I	1	486
18	10786	28/3/2023	Shanti Books	O.P. Agarwal	Organic Chemistry Natural Products Vol II	1	468
19	10786	28/3/2023	Shanti Books	P S Kalsi	Organic Reactions And Their Mechanisms	3	1257.48
20	10786	28/3/2023	Shanti Books	Venkateswaran. V, Veeraswamy. R, Kulandaivelu .A.R	Basic Principles of Practical Chemistry	3	675
21	10786	28/3/2023	Shanti Books	B.K Sharma	Environmental Chemistry	1	1125
22	10786	28/3/2023	Shanti Books	Anil Kumar De and Arnab Kumar De	Environmental Chemistry	3	1005.48
23	10786	28/3/2023	Shanti Books	Subramanian P.S. Gopalan R and Rangarajan K	Elements of Analytical Chemistry	3	675
24	10786	28/3/2023	Shanti Books	Y. R. Sharma	Elementary Organic Spectroscopy: Principles and Chemical Applications	4	2012.64
25	10786	28/3/2023	Shanti Books	Dash U.N.	Nuclear Chemistry	3	540
26	10786	28/3/2023	Shanti Books	P.S. Kalsi	Spectroscopy of Organic Compounds	3	1499.4
27	10786	28/3/2023	Shanti Books	B.K. Sharma	Industrial Chemistry Vol 1	1	715.5
28	10786	28/3/2023	Shanti Books	B.K. Sharma	Industrial Chemistry Vol II	1	715.5
29	10786	28/3/2023	Shanti Books	B.K. Sharma	Polymer Chemistry	1	355.5
30	10786	28/3/2023	Shanti Books	M S Bhatnagar	A Textbook of Polymer Chemistry	3	1663.2
31	10786	28/3/2023	Shanti Books	S Shanmugam	Nanotechnology	3	2507.4
32	10786	28/3/2023	Shanti Books	Ghosh Jayshree	A Textbook Of Pharmaceutical Chemistry	3	819
33	10786	28/3/2023	Shanti Books	Ghosh Jayshree	Fundamental Concepts Of Applied Chemistry	3	907.2
					NET	82	50032.70
					R. Off		32.7
					NET TOTAL		50000.00
34	18285 129	15.02 .2023	American chemical society		Journal of chemical education –Web based	1	10500
					Total		60500

2023-2024

S. No	Bill No.	Date	Company Name	Publisher	Author	Title	Qty	Amount
1	12306	16.03.2024	Shanti Books	Sultan Chand & Sons	Venkateswaran V, Veeraswamy R., Kulandaivelu AR	Basic Principles of Practical Chemistry	2	531
2	12306	16.03.2024	Shanti Books	Willey India (p) ltd	J. D. lee	Concise Inorganic Chemistry	3	2932.50
3	12306	16.03.2024	Shanti Books	New age International Pvt. Ltd	B. Srilakshmi	Food Science	3	1402.50
4	12306	16.03.2024	Shanti Books	Pearson India education services Pvt ltd	James E Hubeey, Ellen A Keiter, Richard l Keiter, Okhil K Medhi,	Inorganic Chemistry Principles Of Structure And Reactivity	3	2728.50
5	12306	16.03.2024	Shanti Books	Himalaya Publishing House P ltd	Gurdeep R Chatwal,shamk.anand	Instrumental methods of chemical Analysis	3	1887
6	12306	16.03.2024	Shanti Books	Pearson India education services Pvt ltd	Robert Thomson Morrison, Robert Neilson Boyd, SaibalKantiBhattacharj ee	Organic Chemistry	2	1921
7	12306	16.03.2024	Shanti Books	Pearson India education services Pvt ltd	I. L. Finar	Organic Chemistry- Volume-2 Stereochemistry And The Chemistry Natural Products	3	3085.50
8	12306	16.03.2024	Shanti Books	Pearson India education services Pvt ltd	I.L. Finar	Organic Chemistry Volume 1	3	3136.50
9	12306	16.03.2024	Shanti Books	Bloomsbury Publishing India Pvt Ltd	William kemp	Organic Spectroscopy	1	594.15
10	12306	16.03.2024	Shanti Books	New age International Pvt. Ltd.	P. S. Kalsi	Spectroscopy of organic compounds	1	505.75
11	12306	16.03.2024	Shanti Books	Pearson India education services Pvt ltd	G.Svehla,B.Sivasankar	Vogels Qualitative Inorganic Analysis	3	1950.75
12	12306	16.03.2024	Shanti Books	Pearson India education services Pvt ltd	Brian S.Furnis	Vogel's Textbook of Practical Organic Chemistry	3	4207.50

13	12379	26.03.2024	Shanti Books	Krishna Prakashan	B.K. Sharma	Industrial Chemistry Vol 1	2	4250
14	12379	26.03.2024	Shanti Books	Krishna Prakashan	B.K. Sharma	Industrial Chemistry Vol 2	2	4250
15	12379	26.03.2024	Shanti Books	I K International Publishing House Pvt. Ltd	Sulekh Chandra	Concise Inorganic Chemistry	1	293.25
TOTAL							35	33676

2024-2025

S. No	Bill No.	Date	Company Name	Author	Title	Qty	Amount
1	1767	14.03.25	Shanti Books	ArunBahl,B.S.Bahl	Advanced Organic Chemistry	3	4832.25
2	1767	14.03.25	Shanti Books	O.P.Agarwal	Organic Chemistryof Natural Products Volume-I	2	4564.50
3	1767	14.03.25	Shanti Books	O.P.Agarwal	Organic Chemistryof Natural Products Volume-II	2	4564.50
4	1767	14.03.25	Shanti Books	SamuelDevlin	Problemsin Organic Spectroscopy	5	4228.75
					Total	12	18,190

9.13 Outreach / Extension Activities

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	In-service training for school teachers - teaching learning methodologies raising scientific aptitude	25.01.23	Dr. V. Sangeetha, Dr. M. S. Sivaramkumar, Dr. R. Manimekalai, Assistant Professor, Department of Chemistry, KASC	20 teachers from Green field matriculation school	Teachers learnt about teaching learning methodologies and scientific aptitude
2.	An outreach programme for the "Farmers regarding the safe and proper usage of pesticides and fertilisers"	04.02.23	Dr. E. Jayanthi Assistant Professor, Department of Chemistry, KASC	27 farmers	Understand about the side effects and diseases and chronic illness caused by pesticides and alteration in soil property and eradication of useful microbes
3.	In-service training for school teachers – exploring science and technology for nation building	07.02.23	Dr. V. Sangeetha, Dr. M. S. Sivaramkumar, Dr. R. Manimekalai, Assistant Professor, Department of Chemistry, KASC	20 teachers from Annai Violet matriculation school	Teachers learnt about teaching learning methodologies and scientific aptitude
4.	Awareness programme on "Familiarization of Science Education of School students"	10.02.23	Dr.S.Paulsamy Dean R & D, KASC	113	Created students the opportunity to gain a better knowledge of how and why things function.

5.	Training Programme on “Soap and Sanitizer Making for Self Help Group people and home makers”	25.03.23	Mrs. A. Bhuvanewari, Soap Maker, Love Little Soaps - Skin Care Service, Saravanampatti	15 persons	Entrepreneurial skills developed for homemakers
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2023-2024

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Exploring science education for young minds (for school students)	07-07-2023	Faculty members of Chemistry.	37 students	Disseminating scientific knowledge among school students further creating thrust to take up science related studies in the college level.
2.	Exploring science education for young minds (School students Programme)	05-10-2023 & 06-10-2023	Dr.K.Krishnaveni Assistant Professor of Chemistry, Kongunadu Arts and Science College, Coimbatore-29	175 School Students, 9 Teachers, Total - 185	The students and teachers gained knowledge in arranging the molecular module design, Preparation method of Soap and Sanitizer.
3.	Hands on “Chemistry experiments for school students (Grade XII)”	01-02-2024	Dr K. Krishnaveni Dr K. Chandra Prakash Assistant Professor Department of Chemistry Kongunadu Arts and Science College Coimbatore.	16 Students 1 Teacher Total 17	The participants got training on volumetric analysis and systematic qualitative analysis of organic compounds and functional group analysis which helps them to perform better in their practical examinations.

2024-2025

S.No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	A Hands-on Chemistry Experiments for School Students	25.01.2025	Mr. R. Gokul, Assistant Director, Nature Science Foundation, Coimbatore. Dr.K. Saminathan and Dr. K.Chandra Prakash, Assistant Professor, Department of Chemistry, Kongunadu Arts and Science College, Coimbatore.	19 Students (accompanied by teacher)	The simple chemistry experiments made learning more enjoyable, increasing students' interest and involvement.
2.	“Innovation and Entrepreneurship Outreach Programme” for School Students	27.01.2025	Dr.K.Kalpanadevi, Associate Professor & Head, Department of Chemistry, Kongunadu Arts and Science College, Coimbatore.	Students: 71	Students gained insights into innovative thinking and the process of new product development, fostering entrepreneurial mindset and creativity.

9.15 Invited Lectures

2022-2023

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	An invited talk on “Principles of Electrochemistry”.	27.10. 2022	Dr. G.Raja, Assistant Professor, Department of Chemistry, Sri Ramakrishna Mission Vidyalyaya College of Arts and Science, Coimbatore	72 students of chemistry, 8 faculty members and two research scholars	Electrochemical concepts and their basics were understood which is important for energy storage, energy conversion studies
2.	“Chemical safety and Lab Awareness Programme”	31.10. 2022	Dr.V.Mahalingam, Founder Director, QualiGrafe Author Services Pvt. Ltd, Coimbatore	Chemistry-99 Students from Department of Physics and Botany- 26 Lab Assistants –14 Faculties -8	Students, faculties and lab assistants came to know about the hazardousness of various chemicals and their safer usage methods. Dos and donts in the laboratories were given. First aid measures for various chemical accidents were learnt
3.	Enrichment Programme DBT Star College Scheme	08.11. 2022	Dr. R. Rajendran, Former Principal, Associate Professor of Microbiology, PSG College of Arts and Science, Coimbatore	All participatory department students	Students can able to know about salient features and benefits of the DBT. Star College Scheme
4.	Invited talk on “Futuristic trends and opportunities in Chemical science”	06.01. 2023	Dr. V. Sivakumar, Assistant Professor, Department of Chemistry, Sri Vasavi College, Erode	71 Students	Students learnt opportunities in the field of chemical science and attained divergent thinking and scientific temper which strengthen scientific attitude
5.	Guest lecture on “Recent concepts and application in Pharmaceutical Chemistry”.	06.02. 2023	Dr. R.Nandhakumar, Associate Professor, Department of Chemistry, Karunya Institute of Technology and Sciences, Coimbatore.	113 students	Student understand the pharmacological actions of different categories of drugs, study in detailed about mechanism of drug action at organ system/sub cellular/ macromolecular levels and understand the application of basic pharmacological knowledge in the prevention and treatment of various diseases
6.	Invited talk on “Nanomaterials for energy applications and Indian science Engineering facilities map delivered lectures related to nanosynthesis and ISTEM mapping”. (Interdisciplinary with Physics)	04.02. 2023.	Prof.Sakthivel, Department of Nanoscience and Technology, Alagappa University, Karaikudi & Dr.K.Saminathan, Assistant Professor of Chemistry, KASC	9 faculties and 185 students	Gained knowledge regarding preparation of nanoparticles and their characterisation using ISTEM

7.	Invited talk on “Recycling of Chemical waste” - National pollution control day 14.02.23 event as a part of National pollution control day	14.02. 2023	Dr. M. Rajkumar, Professor, Department of Environmental science Bharathiar University, Coimbatore – 46	58 Students (III B.Sc, II B.Sc. Chemistry) and 7 Faculties	Students learnt about how to recycle chemical waste and Industrial effluents.
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2023-2024

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Invited lecture on “Recent Advancement and Opportunities in Chemistry”	11-07-2023	Dr R Venkateswaran Assistant Professor Department of Chemistry PSG College of Arts and Science Coimbatore.	63 Students and 07 Faculties	Student came to know about Recent advancement techniques and opportunities in Chemistry.
2	Invited lecture on “Evolution of Concepts of Acids and Bases: Their Applications in Chemical Sciences”	14-09-2023	Prof. I. V. Muthu VijayanEnoch Professor & Head of Nanosciences, Karunya Institute of Technology, Coimbatore.	64 Students 07 Faculties	Students gained a deeper understanding of various concepts of acids and bases and their wide range of applications in chemical industries.
3	Invited talk on “Multi functional metal Organic Framework for Environment Application”	22-01-2024	Dr. D. Gangadharan Assistant Professor Department of Sciences AmirtaViswa Vidyapeetham University, Coimbatore.	Students - 56 Faculty - 7	Students curiously learnt how to prepare multi -functional metal organic framework and how it is highly used to conserve aquatic system and environment.
4	Enrichment Programme on “Intellectual Property Rights (EPIPR)”	02-02-2024	Dr. M. Selvakumar Associate Professor, Department of Chemistry, Manipal University, Karnataka.	81 Students	Students and faculty were exposed to their rights in intellectual property as copyright, patent and Trademark.

2024-2025

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Guest Lecture on “Experience with Experiments in Chemistry”	04.07.2024	Dr. Ilangoan S A, Former Deputy Director, Vikram Sarabhai Space Center, ISRO, Trivandrum.	150 students	Students gained knowledge on battery systems, space-related chemical reactions, thermal protection systems, and special polymers used in ISRO missions.

2.	Guest Lecture on Future Perspective and Challenges in Nanoscience and Nanotechnology (jointly organized with Physics Department)	31.07.2024	Dr. P. Premasudha, Assistant Professor, Department of Nanoscience and Technology, Bharathiar University, Coimbatore.	Chemistry: 54 Physics: 29	Students came to know about the applications of various advanced materials and learnt to apply photocatalytic concepts in their projects.
3	Invited talk on “Acids and Bases: A Molecular Tug of War”	11.07.25	Dr. M. Suganthi Associate Professor of Chemistry, Department of Science and Humanities Adithya Institute of Technology, Coimbatore-641107	63 Students, 6 Faculty	Students came to know about the different concepts of acids and bases and their applications in various fields like catalysis, analysis, compound formation, stability etc
4	An invited talk on “Hand shaking of atoms: Chemical bonding”	17.07.2025	Dr. R. PRAKASH Assistant Professor, Department of Chemistry, Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore-641020	38 students, 6 Faculty	Students gained knowledge in chemistry field and compared with day to day life.
5	Invited talk on “Decoding the scientific facts”	18.09.25	Dr. V. Rajapandian Assistant Professor Department of Chemistry Sri Ramakrishna Mission Vidyalaya College of Arts and Science SRKV(Post), Coimbatore– 641020	54 students and 6 faculty	The talk inspired curiosity and encouraged students to explore the scientific principles behind everyday phenomena The talk fostered a spirit of inquiry, motivating students to view science as a dynamic and evolving process rather than a set of fixed facts.

DEPARTMENT OF COMPUTER SCIENCE

9.7 No. of Hands-on Experiments being Conducted/ List of Activities Undertaken by Students

i) Hands-on Experiments being Conducted

2022-2023					
S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	A One Day Training Programme on “Usage of IOT Devices”	02.11.22	Mr. M. Muthu Kumar, Managing Trustee & Mr. R. Antony Vijay, Technical Coordinator, Honey Bees Skill and Social Explore Foundation, Coimbatore	143 Students	Students learnt about • Building blocks of IOT, its characteristics, usage and Applications. • Revolution of Internet in Mobile Devices, Cloud & Sensor Networks.
2	Training programme on “Personality Development”	06.02.23	P. Roopa Director Operations Imran Ahmed Operations Head - Corporate & S. Deepak Raj Training Head Grace Pathway Abroad, Coimbatore	161 Students	Students learnt about • Interview Skills • Resume Writing • Negotiation Skills • Grooming and Body Language skills
3	Hands on Workshop on “SPSS”	11.02.23	Dr. Vennila J, Assistant Professor of Statistics, Kristu Jayanti College (Autonomous), Bengaluru	63 Students	Students learnt to • Calculate and prepare data for analysis. • Understand descriptive and basic inferential statistics to be familiarity with SPSS.
4	Workshop on “Android Application Development”	16.02.23	Mr. Salman Faris, Android Developer, Altitudes, Coimbatore,	78 Students	Students learnt to • Develop robust, intuitive Android applications using core components and services • Design seamless user interfaces adaptable to multiple screen sizes.
5	Hands-on Training on “Tableau” (Interdisciplinary with Mathematics)	25.03.23	Dr. V. Parthiban, Assistant Professor of Mathematics, School of Advanced Sciences, Vellore Institute of Technology, Chennai.	60 Students	Students learnt to • Extract, sort, filter, and compare data using sets • Create visualizations and analytical charts using Tableau
2023-2024					
1.	Hands-on Training on “Internet of Things (IoT) using Arduino”	24-06-23	Mr. Mohamed Imam Ali, Senior Cloud Developer, JNET Technologies, Coimbatore.	59 students	Students understood the concepts and functionalities of the devices and the usage of Arduino Board, Sensors useful in developing real time projects.
2.	A Hands-on-Training on “High Quality Interfaces”	10-10-23	Mrs. N. V. Brindha Assistant Professor of Computer Science, Suguna College of Arts and Science, CBE	52 students 02 Faculty	Students learnt about the concept of User Interfaces and the Characteristics of a High-Quality User Interface Design.

3.	A Hands-on Training on “Chip-Level Testing and Debugging for Mobile Phones and Tablets”	22-01-24	Mr. A. Sajith & Mr. R. Karthi Service Technicians & Trainers, New Technology Institutions, Coimbatore	58 students 02 Faculty members	The workshop highlighted quality assurance practices, compliance standards, and quality control measures to ensure reliable mobile device manufacturing.
4.	A Hands-on Training on “Computer Servicing and Trouble Shooting”	23-01-24	Mr. A. Sajith & Mr. L. Raja Service Technicians & Trainers, New Technology Institutions, Coimbatore	46 students 02 Faculty Members	Participants developed practical skills in hardware installation, software diagnosis, data backup, and network troubleshooting.
5.	A Hands-on Training on “Empowering Insights: Unleashing the potential of Data with R Programming”	31-01-24	Dr. C. Nagarani Assistant Professor of Computer Science PSG College of Arts and Science, Coimbatore.	II B.Sc: 47 Faculty members -2	Students learnt about the features of R studio and R studio Interface. Students practically learned about creating plots, data frames and graphs which are used in their projects.

2024-2025

1.	Hands on Training Programme on “Problem Solving Techniques Using Mobile App”	19.08.24	Dr. K. Rajalakshmi, Assistant Professor of Mathematics, Sri Krishna College of Engineering & Technology, Coimbatore.	Students: 72 Faculty: 3	Students learnt to use the P/S (Price-to-Sales) Calculator for statistical analysis and apply MATLAB and Online Octave for efficient matrix computations.
2.	Hands on Training Programme on “Machine to Machine Communication ”	03.09.24	Dr. N. V. Brindha, Assistant Professor of Computer Science, PSGR Krishnammal College for Women, Coimbatore.	Students: 71 Faculty: 3	Students gained hands-on experience with machine systems through real-time monitoring, data exchange, and predictive maintenance, and five students completed an M2M communication project.
3.	Hands on Training Programme on “Pervasive Computing”	20.09.24	Mr. Mohamed Ibrahim, Cross Platform Developer, Accent Techno Soft, Coimbatore.	Students: 55 Faculty: 2	Students gained practical knowledge of how pervasive computing impacts daily life, especially in education, skill development.
4.	Hands on Training Programme on “DevOps and Docker”	20.01.25	M. Harish Goutham, Cloud Architect, Oracle, Bengaluru. & B. Karthick Prakash, CEO, Heycloud Innovations, Coimbatore.	Students: 54 Faculty: 3	Students learned how DevOps and Docker enable faster software delivery, improve system reliability, enhance collaboration between development and operations teams, and increase customer satisfaction and business agility.
5.	Hands on Training Programme on “IoT & Robotics”	26.02.25	Dr. T. Kalaiselvi, Associate Professor of Computer Science & Applications, Gandhigram Rural Institute, Dindigul	Students: 41 Faculty: 4	Students gained hands-on experience with microcontrollers, sensors, and communication protocols, and 17 students completed IoT-based automation projects.

6.	Hands on Training on “Exploring R in Data Science”	14.03.25	Dr. S. P. Gayathri, Department of Computer Science, Gandhigram Rural Institute, Dindigul	Students: 45 Faculty: 4	Students gained knowledge in data manipulation, visualization, statistical analysis, and machine learning, and applied R programming to analyze and visualize data.
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2025-2026

1	Hands on Training Programme on “MongoDB & NoSQL: Advanced Concepts and Practices”	01.09.25	Dr.J.Lekha, Associate Professor, School of Sciences, Christ University, Bangalore	48 Students	Participants learned when to use SQL versus NoSQL databases, understood MongoDB internals, and developed skills to build strong professional profiles for job seeking.
2	Hands on Training Programme on “Arduino based Microcontroller”	15.09.25	Dr. Sabarishwaran Arunagirisamy, Junior Data Scientist Accent Technosoft, Coimbatore	66 Students	Participants understood Arduino architecture, learned to write and debug programs, and developed skills to interface sensors and actuators for various applications.

ii) List of Activities Undertaken by Students

a) Industrial Visits

2022-2023

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	III B.Sc. and II B.Sc. Computer Science	Enthu Technology Solutions India Pvt Ltd., Coimbatore	20.12.22	45 Students 3 faculty members	Students learnt about the protocols such as LoRa, ZigBee and NB-IoT, hardware components and gained knowledge on development of real -time applications.
2	II B.Sc. Computer Science	Bharat Sanchar Nigam Limited Office, Coimbatore.	09.02.23	40 Students 2 faculty members	Students gained knowledge on various Mobile Services and its usages. Visited the power room and interacted with the staff to know about its working process.
3	III B.Sc Computer Science	Radio Astronomy Centre, Tata Institute of Fundamental Research, National Centre for Radio Astrophysics, Ooty, Tamil Nadu	23.03.23	48 Students 4 faculty members	Students gained information about basics of radio astronomy the radio telescope, and about the solar system.

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1	III B.Sc. Computer Science	Cutting-edge labs at KPR Institute of Engineering and Technology, Coimbatore.	20.12.23	50 students 02 Faculty members	Students visited several innovative laboratories and gained hands-on exposure to robotics design, mechatronics and electric vehicles, the evolution of pump technologies, drone control and applications, and game design and animation, including motion-capture systems used in movies.
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2	II B.Sc. Computer Science	Research Lab, Bannari Amman Institute of Technology, Erode.	01.02.24	28 students 02 Faculty	Students visited Haritha Lab, where they learned Scratch programming for developing animations and games; the Mechatronics Robotics Lab, where they studied basic robot components and built a line-following robot; and the Research Park and AI Lab, where they learned about digitizing ancient palm-leaf manuscripts.
3	II B.Sc. Computer Science	BSNL office, Coimbatore.	20.02.24	38 students 02 Faculty	Students acquired knowledge on working principles of telecommunication and various operations of mobile services.
4	I B.Sc. Computer Science	Regional Science Centre and Science Museum, Coimbatore	22.02.24	52 students 03 Faculty	Students experienced the application of science in various domains which enriched the students' technical knowledge and fostered creativity and innovative thinking.
5	III-B.Sc. Computer Science	“Tech By Heart” & “Visvesvaraya” Industrial and Technological Museum, Bengaluru.	28.02.24 to 01.03.24	40 students 2 Faculty	Students learnt the life cycle of the software development and were exposed to the functionalities of various departments of IT industry.

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1.	III-B.Sc. Computer Science	Regional Science Centre and Science Museum, Coimbatore.	26.09.24	Students: 48 Faculty: 4	Students experienced real-world applications of science, enhanced their technological knowledge, and developed interest, creativity, and innovative thinking.
2.	II-B.Sc. & III-B.Sc. Computer Science	Industrial Visit to A-Cube Tech Skills Lead, Mysuru.	04.12.24 - 08.12.24	Students: 51 Faculty: 4	Students learned the software development life cycle, gained awareness of IT subdomain opportunities .
3.	I-B.Sc. & II-B.Sc. Computer Science	Vijnan Sagar Science and Technology Park, Thrissur, Kerala.	25.02.25	Students: 50 Faculty: 4	The visit provided practical exposure to emerging technologies like robotics, sensors, and computing systems, and enhanced understanding of interdisciplinary innovation and real-world problem solving through computer science.
4.	II-B.Sc. Computer Science	BSNL office, Coimbatore.	03.03.25	Students: 32 Faculty: 3	Students gained knowledge of telecommunication industry operations, customer services, and mobile services, and visited the power room to interact with personnel and understand working processes.
5.	III-B.Sc. Computer Science	ISRO Satish Dhawan Space Centre, SHAR, Sriharikota.	28.03.25	Students: 5 Faculty: 1	Students gained insights into ISRO's advanced space science and technology, learned about upcoming missions like Gaganyaan, and developed a sense of national pride in ISRO's global achievements.

b) Summer School/ Internship

2022-2023

- ❖ 58 students of III B. Sc. Computer Science underwent Internship Training Programme at **Aakkam Industrial Training and Research Institute**, Coimbatore.
- ❖ Mr. M. Hariharan of III B. Sc. Computer Science underwent an Online Internship Training Programme at **SHIASH Info solutions**, Chennai.

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- ❖ M. Yuvaraj, W.B. Preethi, S.V. Shri Varsha of (III- B.Sc. Computer Science), R. M. Sakthi Pooja, P. Mithun, S. Thrishok, P. Monish of (II-B.Sc. Computer Science), K.S. Suriya (I-B.Sc. Computer Science) underwent **“Internship Training Programme”** at Brain O Vision.
- ❖ 25 Students of II-B.Sc. Computer Science underwent Internship Training Programme at Gate Way Software Solutions have completed his/her internship on **“Python With Data Science”**.
- ❖ S. Blessy Jeba Sijho, M. Mahalakshimi, R. Tharunraja, V. Gobikrishna, S. Abinaya, R. Sibiraj, V. Balaji, S. Adharsh, M. Gowtham, V. Shivendra, B. Vignesh, K. Indhuja, S. Dhanalakshmi, R.R. Vijay, P. Prajusha, (II-B.Sc. Computer Science) - 15 Students underwent Internship Training Programme at Gate Way Software Solutions have completed his/her internship on **“Web Development”**.
- ❖ R. Dhanya, G. Sounder Kumar, E. Srikanth, K. Abarnarth, N. Kiruthika, C.S. Aacika, R.V. Pooja Padmasree (II-B.Sc. Computer Science) - 7 Students underwent Internship Training Programme at Gate Way Software Solutions have completed his/her internship on **“Embedded / IoT”**.
- ❖ S. Harish as attended Internship Program at Sakthi InfoTech on **“Full Stack Development”**.
- ❖ M. Janagan, K. Nithyanantham, M. Sibivasan, S. Praveen Mathesh, S. Ranjith Kumar, S. Kannan, C. Velmurugan, R. Anbazhagan - 9 Students Underwent Internship Training Programme in the field of **“Full Stack Developer Trainee”** at Insource Technologies.
- ❖ B. Dharshana underwent Internship Programme on **“Roots Products Information System”** at Roots Industries India Limited.

2024-2025

- ❖ 17 Students of II-B.Sc. Computer Science underwent Internship Training Programme at Techvolt Software Pvt Ltd., on **“Full Stack Development with Python”** from 27.05.24 to 18.06.24.
- ❖ 17 Students of II-B.Sc. Computer Science underwent Internship Training Programme at GateWay Software Solutions on **“Python with MYSQL”** from 18.05.24 to 07.06.24.
- ❖ 8 Students of II-B.Sc. Computer Science underwent Internship Training Programme at GateWay Software Solutions on **“Python with Data Science”** from 27.05.24 to 14.06.24.
- ❖ P. Monish has attended Internship Program at Brain o Vision on **“Amazon Web Services”** from 29.01.24 to 02.04.24.
- ❖ R. Prasanth has attended Internship Program at Movements Digital India Pvt Ltd., on **“App Development”** from 29.01.24 to 02.04.24.
- ❖ S. Thrishok has attended Internship Program at Brain O Vision on **“Data Science with ML using Python”** from 29.01.24 to 22.04.24.
- ❖ M. Akash has attended Internship Program at Net Tel Solutions India Pvt Ltd., on **“Python with AI”** from 23.05.24 to 07.06.24.
- ❖ A Total of 5 Students of II-B.Sc. Computer Science underwent Internship Training Programme in the field of **“Mobile Application Development”** at GateWay Software Solutions from 20.05.24 to 31.05.24.
- ❖ M. K. Sushmitha has attended Internship Program at ACE Edutech on **“Python Programming”** from 01.04.24 to 15.06.24.

- ❖ A Total of 4 Students of II-B.Sc. Computer Science underwent an Internship Program on “**Web Development**” at GateWay Software Solutions during the period of 20.05.24 to 07.06.24.

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- ❖ 56 students have completed their internship in various fields such Application Software which is very much useful for the society.

c) Conferences / Seminars / Workshops/ Competitions/ Training Attended

2022-2023

- ❖ 6 Students of II B. Sc. Computer Science, participated in the “**International Conference on Mathematical Analysis in Computational Biology and Data Science**” Organized by the Department of Mathematics from 24.01.23 to 25.01.23 at PSGR Krishnammal College for Women, Coimbatore
- ❖ Preeti W B of II B.Sc Computer Science participated and **Won II Prize** and M. Asha Devi of II B.Sc Computer Science participated in the Science Exhibition for the National Science Day Tesla Fest 23’ conducted by the Department of Physics, Kongunadu Arts and Science College on 27.02.23.
- ❖ 1 Student of III B.Sc Computer Science and 4 Students of II B.Sc Computer Science, participated in the “ISCA, Kolkata Sponsored Two Day National Conference on Scientific Input, Technological Advancement and Women Empowerment for Sustainable Development” from 2.02.23 to 3.02.23 at Kongunadu Arts and Science College, Coimbatore.
- ❖ 10 Students of I.B.Sc Computer Science, attended the 3 – **Days International Workshop on “Unleash Your Analytics Potential with Power BI an Analytics – Career Building Workshop**”, organized by the Department of B. Com (Accounting and Finance), and B. Com (Business Analytics), from 21.02.23 to 23.02.23 at PSGR Krishnammal College for Women, Coimbatore.
- ❖ 11 Students of II B.Sc Computer Science, participated in the “**International Conference on Recent Developments in Computational and Biological Sciences**” organized by Sri Ramakrishna College of Arts and Science for Women on 10.03.23.

2023-2024

- ❖ K. Harsha Pradha of III-B.Sc. Computer Science participated and won **I Prize** in the Science Exhibition for the “**National Science Day Celebration, TESLA FEST-24**” conducted by the Department of Physics, Kongunadu Arts and Science College on 28-02-24.
- ❖ K. Priyadharshan of II-B.Sc. Computer Science, Won the **First Prize** in the Code Debugging event at the “**National Level Technical Symposium - GENIX’24**” conducted by the Department of Computer Science (SF) & CS with Data Analytics, KASC on 21-02-24.
- ❖ G. Sounderkumar and R. Tharunraja of III-B.Sc. Computer Science Won the **First Prize** in the Discover (Quiz) event at the “**National Level Technical Symposium - GENIX’24**” conducted by the Department of Computer Science (SF) & CS with Data Analytics, KASC on 21-02-24.
- ❖ B. Dharshana and P. Mukesh Kanna of III-B.Sc. Computer Science, P. Ajai Selvam, P. Monish, V. Deepak, V. Vikram, K. Sri Durga Devi, V. Mirdhula of II-B.Sc. Computer Science participated in Code Debugging, Dumb charades, Discover(Quiz), Connect Tech at the “**National level Technical Symposium-24 GENIX’24**” conducted by the Department of Computer Science & CS with Data Analytics, KASC on 21-02-24.

- ❖ B. Dharshana, P. Mukesh Kanna, M. Kiruthika, M. Sakthi Subashree, G. Sounderkumar of III-B.Sc. Computer Science attended the **“National Level Hands-on workshop on Business Intelligence Platform from Data Integration to Visualization”** organized by the Department of Information Technology at Karpagam College of Engineering on 26-09-23.
- ❖ 22 students of II-B.Sc. Computer Science participated in various competitions including Quiz, Connection, Debugging, Treasure Hunt in **“BYTE BLAST '24 an Inter Departmental Technical Fest”** Organized by the Department of Information Technology at Kongunadu Arts and Science College on 13-03-24.
- ❖ P. Monish of II-B.Sc. Computer Science and R. Tharunraja of III-B.Sc. Computer Science have won **II place** in **“Top Code event in KNOCK-IT'24”** organized by the Department of Computer Studies at Sri Ramakrishna Mission Vidhyalaya College of Arts and Science on 6th March 24.
- ❖ P. Monish of II-B.Sc. Computer Science, R. Tharunraja and G. Sounder Kumar of III-B.Sc. Computer Science have participated in **“Valorize and Castalia-24 National Level Tech and Management fest”** organized by Sri Venkateswara Institute of IT and Management.
- ❖ Rahul and R. Athira of II-B.Sc. Computer Science won **I place** in **“Debugging at the Inter Departmental Technical Fest (Byte Blast'24)”** organized by the Department of IT at KASC held on 13.03.24.
- ❖ V. Mirdhula and J. Madhumitha II-B.Sc. Computer Science won **III place** in **“Debugging at the Inter Departmental Technical Fest (Byte Blast'24)”** organized by the Department of IT at KASC held on 13.03.24.
- ❖ R. Tharunraja, G. Soundar Kumar of III-B.Sc. Computer Science has won **I prize** in **“Technical Quiz at the State Level Intercollegiate XIANZE”** organized by Department of Software Systems and Computer Science (PG) at KG college of Arts and Science on 24.02.24.
- ❖ M. Ravivarma of I-B.Sc. Computer Science has won **II place** in **“CHESS organized by SNS College of Technology-SNS Colors”** (A National Design Thinking Contest and Festival) on 12.09.23.
- ❖ M. Agalya of II – B.Sc. Computer Science and Preethi Williams. W.B of III-B.Sc. Computer Science participated in the **“World Space Week Celebration 23”** conducted by Satish Dhawan Space Centre Shar, Sriharikota, Indian Space Research Organization and Kongunadu Arts and Science College from 5-10-23 to 7-10-23.
- ❖ M. Ravivarma of I-B.Sc. Computer Science has won **II place** in **“Antiquity and Continuity Collage Making Competition Siruvani Youth Literary Festival-24”** organized by Directorate of School Education and Public Library
- ❖ M. Ravivarma I-B.Sc. Computer Science has won **III place** in **“Extempore (Tamil)”** competition as **“World Space Week Celebration 23”** conducted by Satish Dhawan Space Centre Shar, Sriharikota, Indian Space Research Organization and Kongunadu Arts and Science College from 5-10-23 to 7-10-23.

2024-2025

- ❖ D. Helanisha Shelin, M. Haridha, K. Balanethra, B. B. Shalini, Juliyanan of III B.Sc Computer Science has participated in the **“DHR – ICMR”** sponsored **Two days National Level Workshop on Integrating MRI and AI: Towards Personalized Medicine in Neurology** Organized by Department of Computer Science and Engineering and Technology from 21.02.25 to 22.02.25.
- ❖ Rahul of III B.Sc. Computer Science has won **Second place** in **BUG HUNT in National Level Symposium INSPIRE-SJ** Conducted on 13.12.24 & 14.12.24 at B.V. Raju College (A), Bhimavaram, Andhra Pradesh.

- ❖ P. Mithun of III B.Sc. Computer Science has won **Consolation prize** in **BUG HUNT** in national level symposium INSPIRE-SJ Conducted on 13.12.24 & 14.12.24 at B.V. Raju College (A), Bhimavaram, Andhra Pradesh.
- ❖ K. S. Suriya and S. Hari Prasath of II B.Sc. Computer Science has won **Second Place** in **Discover (Quiz)** at the **National Level Technical Symposium-TecKtrix'25** organized by the Department of Computer Science with Data Analytics and Department of Artificial Intelligence and Machine Learning on 31.01.25.
- ❖ S. Thrishok and R. Prasanth of III B.Sc. Computer Science has participated in BLITZKERGOTZ'25 Organized by Department of Computer Technology, Kongunadu Arts and Science College "Treasure hunt" event in the Intra-Collegiate Technical Meet'25 held on 09.01.25.

d)Paper/ Poster Presentation by Students

2022-2023

- ❖ B.Dharshana and K.Therasa of II B.Sc Computer Science presented a paper on the topic "**Big Data Analysis**" in the International Conference on Mathematical Analysis in Computational Biology and Data Science Organized by the Department of Mathematics from 24.01.23 to 25.01.23 at PSGR Krishnammal College for Women, Coimbatore.
- ❖ B.Dharshana of II B.Sc Computer Science, presented a paper on the topic "**Block Chain Technology**", in the International Conference on Recent Developments in Computational and Biological Sciences organized by Sri Ramakrishna College of Arts and Science for Women on 10/03/23.
- ❖ W.B.Preeti of II B.Sc Computer Science, presented a paper on "**Artificial Intelligence**", in the International Conference on Recent Developments in Computational and Biological Sciences organized by Sri Ramakrishna College of Arts and Science for Women on 10/03/23.

2025-2026

- ❖ Vishalini and L. Dharshini of III B.Sc. Computer Science presented a paper on "**Study on Green Cloud Computing**" in the proceedings of the International Conference on Recent Advances in Cloud Computing and Communication Technology (ICRACCT'24) organized by Noorul Islam College of Arts and Science Kumaracoil, Kanyakumari District held on 06.09.24.
- ❖ M.S. Thaaryunaa and P. Madhumitha of III B.Sc. Computer Science presented a paper on "**Survey on Threats and Attacks with Cyber Security**" in the proceedings of the International Conference on Recent Advances in Cloud Computing and Communication Technology (ICRACCT'24) organized by Noorul Islam College of Arts and Science Kumaracoil, Kanyakumari, District held on 06.09.24.
- ❖ S. Surendar and S. Krishnaprasath of III B.Sc. Computer Science presented a paper on "**Study on Internet of Things**" in the proceedings of the International Conference on Recent Advances in Cloud Computing and Communication Technology (ICRACCT'24) organized by Noorul Islam College of Arts and Science Kumaracoil, Kanyakumari, District held on 06.09.24.
- ❖ S. Amirtha and S. Navaneetha of III B.Sc. Computer Science presented a paper on "**Study on Applications of Big Data in Indian Healthcare**" in the proceedings of the International Conference on Recent Advances in Cloud Computing and Communication Technology (ICRACCT'24) organized by Noorul Islam College of Arts and Science Kumaracoil, Kanyakumari, District held on 06.09.24.
- ❖ P. Monish and A. Dharshana of III B.Sc. Computer Science presented a paper on "**Study on Artificial Intelligence**" in the International Conference on Innovative Digital Technologies (ICIDT'24) organized by Dr. R.V. Arts and

Science College Department of Computer Science, Coimbatore held on 28.08.24.

- ❖ K. Malarmathi and S. Shamini of II B.Sc. Computer Science presented a paper on “**Study on Internet of Things**” in the International Conference on Innovative Digital Technologies (ICIDT’24) organized by Dr. R.V. Arts and Science College Department of Computer Science, Coimbatore held on 28.08.24.
- ❖ M. Dilip Remo and N. Nishanth of II B.Sc. Computer Science presented a paper on “**Study on Wireless Technology**” in the International Conference on Innovative Digital Technologies (ICIDT’24) organized by Dr. R.V. Arts and Science College Department of Computer Science, Coimbatore held on 28.08.24.
- ❖ C. K. Narmatha of II B.Sc. Computer Science presented a paper on “**Study on Latest Trends in Digital Image Processing**” in the International Conference on Innovative Digital Technologies (ICIDT’24) organized by Dr. R.V. Arts and Science College Department of Computer Science, Coimbatore held on 28.08.24.
- ❖ M. Dhivya of III B.Sc. Computer Science presented a paper on “**Water Pollution**” in the 2nd International Conference on Socioeconomic Impact of Pollution in Water Bodies and Remedial Measures (ICPWRM-25) as a part of Scheme for promotion of academic and research collaboration (SPARC) jointly organized by KASC, Teesside University, SPARC, TamilNadu Agricultural University held on 07.01.25.

e) Inter Departmental Activities

2022-2023

- ❖ 5 Students of III B.Sc Computer Science participated in the programme “**One Day Workshop on MATLAB for beginners - Hands on Training**”, by the Department of Mathematics KASC was held on 30.08.22.
- ❖ 4 Students of I B.Sc Computer Science participated in “**One Day Workshop on Vedic Maths**” by the Department of Mathematics, KASC held on 12.1.23
- ❖ 5 Students of I B.Sc Computer Science participated in the “**National Mathematics Day**” organized by the Department of Mathematics, KASC held on 9.02.23.
- ❖ 7 Students of II B.Sc Computer Science attended a “**One Day National Seminar on Climate Change and Biodiversity**” Organized by the Department of Biochemistry and Eco-club held on 13.02.23
- ❖ 5 students of B.Sc Computer Science attended “**Orientation Programme on Electrical Safety Management**” organized by Department of Physics, KASC on 21.02.23
- ❖ 6 Students of II B.Sc Computer Science Participated in the “**Hands-on- Training on Tableau**”, organized by the Department of Mathematics, KASC held on 25.03.23.

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- ❖ P. Monish, P. Ajay Selvam, K. Priya Darshan of II-B.Sc. Computer Science have participated in “**Career Opportunities in Abroad**”, organized by Department of Mathematics, KASC on 07.08.23.
- ❖ P. Monish, S. Thrishok, R. Prasanth. R. Srinath, K. Priya Darshan of II-B.Sc. Computer Science had participated in “**Hands on Training on Basics of MATLAB**”, organized by Department of Mathematics, KASC on 03.07.23.
- ❖ Few of our students have participated in the “**Guest lecture on Understanding Intellectual Property Rights**” organized by the Department of Physics, KASC on 20.09.23.
- ❖ K. Induja, S. Abinaya, P. Prajusha, B. Darshana, K. Therasa, P. Mukesh Kanna, V. Gobi Krishna, M. Yuvaraj, E. Srikanth, R. Tharunraja, G. Soundar Kumar of III-B.Sc. Computer Science had participated in “**Students project idea – Interdisciplinary Approach**”, organized by Department of Mathematics, KASC on 21.09.23.

- ❖ M.K. Sushmitha, R.M. Sakthi Pooja, K. Sri Durga Devi, A. Diviya, A. Benita of II-B.Sc. Computer Science and E. Srikanth, G. Soundar Kumar, R. Tharunraja of III-B.Sc. Computer Science had participated in **“Capacity Building Programme an Interdisciplinary approach for non-mathematics students”**, organized by Department of Mathematics, KASC on 11.12.23.

2024 – 2025

- ❖ 12 students of II B.Sc. Computer Science Students attended the Awareness Programme on **“Pitching an Idea for Staggering Genius”** on 15.7.24 organized by the Department of Mathematics.
- ❖ 20 students of I B.Sc. Computer Science Students attended Guest Lecture on **“Navigating Complexity: Interdisciplinary learning for non-Mathematics students”** on 02.08.24 Organized by the Department of Mathematics.
- ❖ 11 students of I B.Sc., Computer Science Students attended **“Hands on Training in MATLAB programming for beginners”** organized by Department of Mathematics on 07.08.24.
- ❖ 10 students of II B.Sc. Computer Science Students attended **“A Guest lecture on Students project ideas- Interdisciplinary approach”** organized by department of Mathematics on 23.09.24.
- ❖ 4 students of II B.Sc. Computer Science Students attended **“A Workshop on SPSS”** organized by department of Mathematics on 16.12.24.
- ❖ 8 students of I B.Sc. & II B.Sc. Computer Science Students **attended “An Exhibition on Expo’24”** organized by Department of Zoology on 11.12.24.
- ❖ 3 students of III B.Sc. Computer Science Students attended **“Hands on Training programme on Arduino”** on 08.10.24 organized by Department of Physics.
- ❖ 5 students of III B.Sc. Computer Science Students attended **“Hands on Training programme on Electrical Safety and Maintenance”** 27.12.24 organized by Department of Physics.
- ❖ 10 students of B.Sc. Computer Science participated and exhibited their science models in the Science Exhibition in connection with science day celebration **“Tesla fest 25”** organized by the Department of Physics.
- ❖ 5 students of B.Sc. Computer Science participated in the Guest lecture **“Importance of Science Innovation in Higher Education”** on 09.10.24 organized by the Department of Physics.
- ❖ 5 students of B.Sc. Computer Science participated in the Guest lecture **“Crafting the Future: Innovation and IPR for Aspiring Minds”** on 12.12.24 organized by the Department of Physics.
- ❖ II B.Sc. Computer Science Students **M. R. Afrin Fathima, M. Mythili, K. Gopika, S. Shamini, K. Maheswari, S. Lakshana** won **First Prize** in Group Dance the Interdepartmental Fest BAZOOKA’24 Organized by Department of English on 1.10.24
- ❖ I B.Sc. Computer Science **M. Santhanalakshmi, S. Siji, A. Dhiyaana** has secured **Second Place** in “Thattangal” event of Advaita’25 National Level Intercollegiate Students Technical Symposium held on 13th March 25 Organized by Avinashilingam Institute for Home Science and Higher Education for Women of Arts and Science for Women.
- ❖ II B.Sc. Computer Science Students **M. R. Afrin Fathima, S. Lakshan** won **Third Place** in Dance in the Inter-College Lit Fest FLORIANA ’25 Organized by Department of English (Aided), Kongunadu Arts and Science College, Coimbatore held on 18.02.25.

- ❖ I B.Sc. Computer Science **Balanethraa. K, B.B. Shalini** participated in the event “Canvas Painting & Mehendi Competition” in Fantabulous, All India Inter Collegiate Cultural Fiesta held on 26th September 24 at Nehru Arts and Science College.
- ❖ I B.Sc. Computer Science **Balanethraa. K, Shalini B B** participated in the “DHR-ICMR sponsored Two days National Level Workshop on Integrating MRI and AI: Towards Personalized Medicine in Neurology” organized by Department of Computer Science and Engineering, KPR Institute of Engineering and Technology from 21.02.25 to 22.02.25.
- ❖ I B.Sc. Computer Science **Divya. A, Sanjeevini A** secured **Third prize** in “Snapssell – The Ultimate Ad Battle” in ADZAP competition conducted during the Intercollegiate Meet held on 4th February 25 at Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- ❖ I B.Sc. Computer Science **Priyadharshini. V** participated in “Creative Splash” competition conducted during the Intercollegiate Meet held on 4th February 25 at Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- ❖ III B.Sc. Computer Science **K. Priya Dharshan, H. Mohammed Arshad Jawahir, A. Rahul, P.L. Swasthika** participated in an Intercollegiate Event “Solve4Society” Hackathan’24 held on 09.08.24 conducted by the Department of Computer Science, KG College of Arts and Science.

9.8 No. of New Experiments Introduced

2022-2023

Course Code & Title: 21UCS4S2 & Mobile Application Development Lab

List of Practical Programs

1. Develop an application that uses GUI components, Font and Colors.
2. Develop an application that uses Layout Managers and event listeners.
3. Develop a native calculator application using UI Widgets.
4. Write an application that draws basic graphical primitives on the screen.
5. Develop an application that uses Multiple Font and Colors using UI Widgets.
6. Develop a native application that uses GPS location information.
7. Implement an application that writes data to the SD card using UI Widgets.
8. Implement an application that creates an alert upon receiving a message.
9. Write a mobile application that creates alarm clock using UI Widgets.
10. Develop a mobile application to send an email.

Practical Paper II

Course Code & Title: 21UCS5CP & Python Programming and Internet of Things Lab

List of Practical Programs

1. Write a python program that displays the following information: Your name, Full address Mobile number, College name, Course subject.
2. Write a python program to find the largest three integers using if-else and conditional operator.
3. Write recursive functions for the factorial of positive integer.

4. Write recursive functions for Fibonacci sequence up to given number n.
5. Write a python program that writes a series of random numbers to a file from 1 to n and display.
6. (i) Write a Python program for Switching LED on/off from Raspberry Pi console. (ii) Write a Python program for blinking LED.
7. Write a python program on Raspberry Pi to publish temperature data to MQTT broker.
8. To interface Bluetooth with Raspberry Pi and write a program to send sensor data to smartphone using Bluetooth.
9. Write a Python program for sending an E-mail on switch press with Raspberry Pi.
10. To interface LED and Switch with Raspberry Pi and write a python program to control an LED with a switch.
11. Write a python program to create TCP server on Raspberry Pi and respond with humidity data to TCP client.
12. To interface motor using relay with Raspberry Pi and write a program to turn ON motor.
13. Write a Python program for implementation of the intrusion detection service that runs on Raspberry Pi.
14. Write a Python program for implementation of the Smart Parking service that runs on Raspberry Pi.
15. Write a Python program for weather reporting bot that tweets weather updates to Twitter.

2023-2024

Course Code & Title: 21UCS6S3 & Data Analytics Lab

List of Practical Programs

1. Exercise to implement the matrix addition and subtraction operations in Scilab.
2. Exercise to find the Eigenvalues and eigenvectors in Scilab.
3. Exercise to solve equations by Gauss elimination in Scilab.
4. Exercise to implement the associative and commutative property in a matrix in Scilab.
5. Exercise to find the reduced row echelon form of a matrix in Scilab.
6. Exercise to plot the functions and to find its first and second derivatives in Scilab.
7. Exercise to present the data as a frequency table in SPSS.
8. Exercise to find the outlier detection in a dataset in SPSS.
9. Exercise to find the most risky project out of two mutually exclusive projects in SPSS
10. Exercise to draw a scatter diagram, residual plots, outliers leverage and influential Datapoints using R
11. Exercise to calculate correlation using R
12. Exercise to implement Time series Analysis using R.
13. Exercise to implement linear regression using R.
14. Exercise for implementing sorting technique and mining weather data using Map reduce.
15. Setting up a Hadoop environment

Core practical – C programming lab - 23UCS1CL

List of Practical Programs beyond the syllabus

1. Write a program to arrange a set of numbers in DESCENDING ORDER using SELECTION SORT.
2. Write a C program to Print Pascal's Triangle
3. Write a program to implement BINARY SEARCH and find a particular name in the list of names.
4. Write a C Program to Print Boundary Elements of a Matrix

Core Practical – Java Programming Lab - 23UCS3CN

List of Practical Programs beyond the syllabus

1. Write a java program to create graphics animation with applet
2. Write a java program to create Mirror Image Triangle Pattern

Core Practical – Visual Basic Lab- 23UCS4CO

List of Practical Programs beyond the syllabus

1. Design a form for speed control program using scroll bars.
2. Design a form using shape control to display signal and change it timely using timer control.
3. Design form to create a font dialog box using combo/ list, text, option buttons, and check box control.

Core Practical – PHP Programming Lab - 23UCS6CQ

List of Practical Programs beyond the syllabus

1. Develop a PHP script to validate an email address entered by the user
2. Write a PHP script to find the first character that is different between two strings.
3. Develop a PHP program to find the LCM of two numbers using user defined functions.
4. Write a PHP Script to sort the given associative array in descending order according to key

2024-2025

Core Practical 1 – C Programming–Lab

1. Write a C program to display a month-by-month calendar for a given year.
2. Write a C program to Read/Write structure to a file.
3. Write a C program to check if a String is Palindrome using pointers.

Core Practical 2 – Object Oriented Programming with C++ - Lab

1. Write a C++ Program to Store Information of a Student in a Structure.
2. Write a C++ Program to print Inverted Pyramid Pattern.
3. Write a C++ Program to check if a given year is leap year.

Core Practical 3 – Java Programming – Lab

1. Write a java program to convert string value to byte value.
2. Write a java program to convert linked list to an array.
3. Write a java program to rotate an elements of an list.

Core Practical 4 – Visual Basic and Oracle Lab

1. Design a form to display a picture using image box/picture box selected from a file in file list box directory list box, drive list box.
2. Design a simple application using OLE control.
3. Write a php program to create an analog clock which shows all the three hands (Hours, Minutes, Seconds). You can add an option to change the background of the clock.

Core Practical 5 – Python Programming and IoT – Lab

1. Potentiometer and IR Sensor interfacing with Arduino.

- 2.TDS Sensor Interfacing with Arduino.
- 3.Actuators controlling by mobile using Arduino.

Core Practical 6 – PHP Programming Lab

- 1.Create a simple HTML form with fields for name and email. Write a PHP script to handle form submission and display the entered data.
- 2.Write a php program to check whether a given number is Armstrong or not.
- 3.Write a php program to find the largest values of two numbers using nesting of functions.

9.9 Publications (Scopus indexed) /Patents, if any

2022-2023

- ❖ Dr.A.Kavitha, Associate Professor, Department of Computer Science, presented a paper on the topic Different Methods in Malware Detection in Wireless Sensor Networks in the International Conference on Mathematical Analysis in Computational Biology and Data Science Organized by the Department of Mathematics from 24.01.23 to 25.01.23 at PSGR Krishnammal College for Women, Coimbatore.
- ❖ Dr.A.Kavitha, Associate Professor, Department of Computer Science presented a paper on the topic Efficient Watermarking Technique for Secure Data Transmission over Wireless Sensor Networks in the ISCA, Kolkata Sponsored Two Day National Conference on Scientific Input, Technological Advancement and Women Empowerment for Sustainable Development_from 2.02.23 to 3.02.23 at Kongunadu Arts and Science College, Coimbatore.

2023-2024

- ❖ Dr. A. Kavitha, M. Usha Devi, Dr. A. Marimuthu, Dr. S. Santhana Megala as Published a Paper entitled “**Bipartite Graph Matching in Donor-Recipient Using Enhanced Drpm Algorithm for Liver Transplantation**” by Res Militaris Published, Volume 13, Issue 02 January 23 (**Scopus Database**).
- ❖ Dr. A. Kavitha, K. Manimekalai published a **Book Chapter** on “IOT – Enable Convolutional Neural Networks: Techniques and Applications” under the topic **Classification of Myocardial Infarction in ECG Signals Using Enhanced Deep Neural Network Technique** on 23.
- ❖ Dr.A.Kavitha, Ms.S.Vishalini published a paper entitled “An Optimal Decision Method for Intrusion Detection System In Wireless Sensor Networks with Enhanced Cooperation Mechanism” 6th International Conference on Current Scenario In Pure Applied Mathematics held on 27,28 January 23 Organised by KASC, Cbe -29.
- ❖ Dr.A.Kavitha, Ms.S.Vishalini published a paper entitled” Different Methods in Malware Detection in Wireless Sensor Networks” by International Conference on Mathematical Analysis In Computational Biology and Datascience (ICMACBDS’23) held on 24th and 25th January 23 at PSGR Krishnammal College for Women, Cbe
- ❖ Dr.A.Kavitha, Ms.S.Vishalini published a paper entitled “Efficient Watermarking Technique for Secure Data Transmission over Wireless Sensor Networks” in National level Conference on Scientific Input, Technological Advancement and Women Empowerment for Sustainable Development held on 2nd ,3rd February 23 Sponsored by Indian Science Congress Association(ISCA) Kolkata, Jointly Organized by Indian Science Congress Association(ISCA), Coimbatore Chapter and KASC..

2024-2025

- ❖ Dr.A.Kavitha, Ms.S.Vishalini published a paper entitled “A Comprehensive survey on the Improvement of Wireless Sensor Networks Security and Energy Consumption Using Optimization Based Deep Learning Approaches” in Journal of Emerging Technologies and Innovative Research Published on January 25, Volume 12, Issue 1, ISSN -2349-5162
- ❖ Dr.A.Kavitha, Ms.S.Vishalini published a paper entitled “Enhancing Security Using Deep Learning Based Capsule Neural Networks (CAPSNETS) with Enhanced Animal Migration Algorithm (EAMO) In Wireless Sensor Network in International Journal of Advanced Science and Engineering, Volume 12, Issue 1, 18.07.25
- ❖ Dr.A.Kavitha, D.Sathish has published a paper entitled “DDoS Attack Detection Using Optimized Long Short-Term Memory Based on Improved Bacterial Foraging Optimization” in IEEE Xplore Proceedings of 2nd International Conference on Sustainable Computing and Smart Systems (ICSCSS 24) Organized Hindusthan College of Engineering and Technology held on 12.07.24
- ❖ Dr.A.Kavitha, D.Sathish has published a paper entitled “Survey on Distributed Denial of Service Attack Using Deep Learning Approaches” by Karpagam JCS Volume 19, Issue 01, Jan –February 24.

9.10 Training Received by Faculty/ List of Activities Undertaken by Faculties

a) i) Training Received by Faculty

2022-2023

- ❖ Mrs.A. Manickathai, Mr.A. Sivabalan, Dr.A. Kavitha, Mr.B. Manogaran & Mr.P.Kaliraj attended a “Seven Days Faculty Development Programme on Impact of Industry 4.0 on 21st Century Higher Education”, organized by the Internal Quality Assurance Cell (IQAC) and Curriculum Development Cell (CDC), Kongunadu Arts and Science College, Coimbatore, between 01.03.23 and 08.03.23.
- ❖ Sundaramoorthi L, Computer Lab Administrator and Krishna Prasad L, Computer Lab Technician, of Kongunadu Arts and Science College, attended a “One Day Workshop on Advanced Networking” for their Technical Up skilling on 26.02.23 at Accent techno Soft Coimbatore.

2023-2024

- ❖ Dr. A. Kavitha has attended “**One-week online FDP on Visual Intelligence: Exploring Image Processing and Computer Vision**”, organized by Department of Computer Science and Engineering in association with Computer Society of India (CSI)-SB, CVR College of Engineering, Hyderabad from 26th March to 30th March 24.
- ❖ Dr. A. Kavitha has attended “**7 Days National Level FDP on Future Prospects of Innovations in Computational Intelligence**” organised by Department of Computer Studies (CS/CA/IT/CT/CGS/AIML), Hindustan College of Arts and Science, Coimbatore from September 20 to September 27, 23.
- ❖ Dr. A. Kavitha has attended “**12 Days Virtual Faculty Development Programme on Development Human Potentials in Emerging Technologies in Computer Science**” organised by School of Computer Science, Kongunadu Arts and Science College, Coimbatore between 04.09.23 to 16.09.23.
- ❖ Dr. A. Kavitha has attended “**6 Days Professional Development Programme on Upskilling Core Competencies for Computer Science Professionals**” organised by School of Computer Science, Kongunadu Arts and Science College, Coimbatore between 09.10.23 to 14.10.23.

- ❖ Dr. A. Kavitha has attended **“One-Week National Level Faculty Development Programme on Cloud Infrastructure (AWS)”** organised by Karpagam College of Engineering, Coimbatore in collaboration with Brain O vision Solutions India Pvt Ltd and All India Council for Technical Education (AICTE) During the period of 21st to 25th August, 23.
- ❖ Dr. A. Kavitha has attended **“NSE India (National Stock Exchange of India Ltd) Sponsored online investor Awareness Programme on Introduction of Financial Planning”** organised by Brighture Edu Tech Solutions.
- ❖ Dr. A. Kavitha has participated in a **“Faculty Development Programme on Computational Mathematics Using Python and Scilab”** organized by the Department of Computer Science (Aided) and Department of Mathematics, KASC under DBT Star College Scheme on 12/01/24.
- ❖ Dr. A. Kavitha has attended the **“One Week International Faculty Development Programme on Emerging Trends in Information Technology”** Organized by the Internal Quality Assurance Cell (IQAC) and School of Computational Science held from 04.12.23 to 11.12.23, Shri Shankarlal Sundarbai Shasun Jain College for Women, Chennai -17.
- ❖ Mr. P. Kaliraj attended **“A Twelve days Virtual Faculty Development Programme on Developing Human Potentials in Emerging Technologies in Computer Science”** Organized by School of Computer Science, Kongunadu Arts and Science College, Coimbatore-29 From 04.09.23 to 16.09.23.

2024 - 2025

- ❖ Dr. S. Radharani Participated in the International Webinar on **“The New Education Policy and the Revival of Indian Knowledge System based on Sanskrit”** organized by Department of Sanskrit, Faculty of Arts, Communication and Indic Studies, Sri Sri University, Cuttack, Odisha in collaboration with HRDC, Sri Sri University and Department of Sanskrit, University of Calcutta, held from 29.07.24 to 31.07.24.
- ❖ Dr. S. Radharani has presented paper on the topic **Vision of youth towards self reliant bharat through IKS** in the International Seminar on Bharathiyasastras & Samskrta Bridging Traditional Wisdom & Modern Innovation for Vikasith Bharath organized by ABRSM in collaboration with Rajiv Gandhi Center for Biotechnology, central Sanskrit University & ICFAI University supported by UVAS (Kerala) on 03.01.25-04.01.25.
- ❖ Dr. S. Radharani has Participated and presented a paper on 8th International Conference on Yoga Sastra Organized by Vivekananda Rock Memorial and Vivekananda Kendra, Yoga Sastra Sangamam held on 28.02.25 to 02.03.25.
- ❖ Dr. S. Radharani has Participated in a Four-day Workshop on **“Vagvipakaha”** Organized by Department of Vyakarana, Karnataka Sanskrit University, Bengaluru held on 23rd September 24 to 26th September 24.

ii) Conference/ Seminars / Workshops Attended

2022-2023

- ❖ Dr.A.Kavitha, Associate Professor, Department of Computer Science, participated in the **“International Conference on Mathematical Analysis in Computational Biology and Data Science”** organized by the Department of Mathematics from 24.01.23 to 25.01.23 at PSGR Krishnammal College for Women, Coimbatore.
- ❖ Mrs.A. Manickathai, Mr.A. Sivabalan, Dr.A. Kavitha, Mr.B. Manogaran & Mr.P.Kaliraj attended a **“Hands on workshop on SPSS”**, organized by the Department of Computer Science on 11.02.23.

- ❖ Mrs.A. Manickathai, Mr.A. Sivabalan, Dr.A. Kavitha, Mr.B. Manogaran & Mr.P.Kaliraj attended a “Two days Faculty Development Programme on Python with Data Science”, organized by the Department of Computer Science from 13.02.23 to 14.02.23.
- ❖ Mrs.A. Manickathai, Mr.A. Sivabalan, Dr.A. Kavitha, Mr.B. Manogaran & Mr.P.Kaliraj attended a “Workshop on Android Application Development”, organized by the Department of Computer Science, on 16.02.23.

2023-2024

- ❖ Mr. P. Kaliraj has participated in “**ACM Webinar in title of ChatGPT A Step Forward to Conversational Excellence (online)**” held on 6th July 23 Organized by Yelagiri Hills ACM Professional Chapter and PG Department of Computer Science, Don Bosco College (Co-Ed) Yelagiri Hills, Tirupattur District.
- ❖ Mr. P. Kaliraj has participated in “**International Webinar on Application of MATLAB**” Organized by Department of Mathematics and Statistics on 13.7.23 ST. Francis College, Koramangala, Bengaluru.
- ❖ Mr. P. Kaliraj has participated in “**2 Days NAAC Collaborated National Virtual Seminar on Holistic and Multidisciplinary Approach towards National Higher Education Quality Framework**” Organized by Cauvery College for Women, Annamalai Nagar, Trichy on 05.07.23 to 06.07.23.

2024-2025

- ❖ Dr. A. Kavitha Presented a paper entitled “**Study on Wireless Technology**” in the International Conference on Innovative Digital Technologies ICIDT’24 held on 28.08.24 organized by Dr. R.V. Arts and Science College, Department of Computer Science, Coimbatore.
- ❖ K. Deekshana Presented a paper entitled “**Study on Artificial Intelligence**” in the International Conference on Innovative Digital Technologies ICIDT’24 held on 28.08.24 organized by Dr. R.V. Arts and Science College, Department of Computer Science, Coimbatore.
- ❖ Dr. S. Radharani Presented a paper entitled “**Study on Latest Trends in Digital Image Processing**” in the International Conference on Innovative Digital Technologies ICIDT’24 held on 28.08.24 organized by Dr. R.V. Arts and Science College, Department of Computer Science, Coimbatore.
- ❖ Dr. S. Radharani Presented a paper on “**Study on Green Cloud Computing**” in the International Conference on recent Advances in Cloud Computing and Communication Technology (ICRACCCT’24), 06.09.24, organized by Department of Computer Science, Information Technology and Computer Applications, Noorul Islam College of Arts and Science Kumaracoil.
- ❖ Dr. S. Radharani Presented a paper on “**Survey on Threats and Attacks with Cyber Security**” in the International Conference on recent Advances in Cloud Computing and Communication Technology (ICRACCCT’24), 06.09.24, organized by Department of Computer Science, Information Technology and Computer Applications, Noorul Islam College of Arts and Science Kumaracoil.
- ❖ Dr. S. Radharani has Participated in a webinar titled “**Guarding Your Digital Legacy - Cyber Security for Seniors and Adults**” organized by Computer Society of India, Coimbatore Chapter held on 09.10.24.
- ❖ Dr. S. Radharani has Participated and Presented a Paper in Two days International Level Seminar on “**Harmonizing Tribal Development and Biodiversity Conservation on Western Ghats**” held on 6th & 7th March 25 Organized by Department of Tamil in association with PG & Research Department of Zoology and Wildlife Biology.
- ❖ **Dr. A. Kavitha, Ms. K. Deekshana** has attended the Online Webinar on “**Cloud Computing Simplified: An Introduction to Microsoft Azure**” Organized by the School of Computer Science and Engineering and School of

Information Science of the Presidency University, Bangalore on 16th November 24.

- ❖ **Ms. K. Deekshana**, has presented a paper “**Study on Data Mining Technology**” at the International Conference on “**Recent Advances in Cloud Computing and Communication Technology**”– ICRACCCT '24 Organized by Department of Computer Science, Information Technology and Computer Applications, Noorul Islam College of Arts & Science in Collaboration with ICT Academy of Tamil Nadu on September 6, 24.
- ❖ Dr. S. Radharani Participated in the International Webinar on “**The New Education Policy and the Revival of Indian Knowledge System based on Sanskrit**” organized by Department of Sanskrit, Faculty of Arts, Communication and Indic Studies, Sri Sri University, Cuttack, Odisha in collaboration with HRDC, Sri Sri University and Department of Sanskrit, University of Calcutta, held from 29.07.24 to 31.07.24.
- ❖ Dr. S. Radharani has presented paper on the topic **Vision of youth towards self reliant bharat through IKS** in the International Seminar on Bharathiyasastras & Samskrtam Bridging Traditional Wisdom & Modern Innovation for Vikasith Bharath organized by ABRSM in collaboration with Rajiv Gandhi Center for Biotechnology, central Sanskrit University & ICFAI University supported by UVAS (Kerala) on 03.01.25-04.01.25.
- ❖ Dr. S. Radharani has Participated and presented a paper on 8th International Conference on Yoga Sastra Organized by Vivekananda Rock Memorial and Vivekananda Kendra, Yoga Sastra Sangamam held on 28.02.25 to 02.03.25.
- ❖ Dr. S. Radharani has Participated in a Four-day Workshop on “Vagvipakaha” Organized by Department of Vyakarana, Karnataka Sanskrit University, Bengaluru held on 23rd September 24 to 26th September 24.

b) List of Projects undertaken by Students

2022-2023

- ❖ Ajay C S (III B.Sc. Physics), Arun Joseph (III B.Sc. Computer Science), Sarvesh G (III B.Sc. Mathematics) and Selladurai S (III B.Sc. Computer Science) developed a project entitled **Home Safety Automation Using IoT** (*Interdepartmental Project with Physics*).
- ❖ Naresh Kumar N (III B.Sc. Physics), Arun Joseph (III B.Sc. Computer Science) and Selladurai S (III B.Sc. Computer Science), developed a project entitled **Smart Agriculture** (*Interdepartmental Project with Physics*).
- ❖ Tamil Selvi R (III B.Sc. Physics), Preeti W.B (II B.Sc. Computer Science) and Saranya Priya A (II B.Sc. Computer Science) developed a project entitled **Arduino Robot** (*Interdepartmental Project with Physics*).
- ❖ Durgadevi M (III B.Sc. Physics), Hariharasudhan M (III B.Sc. Physics), Sriram B (III B.Sc. Physics) and Kabaleeshwaran (III B.Sc. Computer Science) developed a project entitled **IOT Based ICU Patient Monitoring System** (*Interdepartmental Project with Physics*).
- ❖ Monisha Parisy (I B.Sc. Physics), Sowndhariya S (I B.Sc. Physics), Kaviya T (I B.Sc. Physics), Priyadhashini S (I B.Sc. Physics) and Hariharan M (III B.Sc. Computer Science) developed a project entitled **Line Follower Robot** (*Interdepartmental Project with Physics*).
- ❖ Manoj Kumar R (II B.Sc. Physics), Anandhakumar M (II M.Sc. Physics), Thanusree S (III B.Sc. Computer Science) and Mithranjali M (III B.Sc. Computer Science) developed a project entitled **3D Printed Robotic Arm** (*Interdepartmental Project with Physics*).
- ❖ Saranya Priya A (III B.Sc. Computer Science) and Sushma G.H(III B.Sc. Maths) developed a project entitled **Earthquake Alarm** (*Interdepartmental Project with Mathematics*).

- ❖ Dharani.M, Varshini G developed a Project entitled **Gate Pass Management System (Interdisciplinary)**.
- ❖ Neha S, Harini R developed a Project entitled **Online Notice Board Management System (Interdisciplinary)**.
- ❖ Sakthivel C, Mariya Jebastin A developed a Project entitled **College Android Application**.
- ❖ Pavithra A, Kavinkishore E developed a Project entitled **Home Service App (Interdisciplinary)**.
- ❖ Haripriya R, Anushya Krishnan K developed a Project entitled **On Road Vehicle Breakdown Assistance (Interdisciplinary)**.
- ❖ Venkadeswaran M, Ruban Jabastine K developed a Project entitled **Blood Donation Website (Interdisciplinary)**.
- ❖ Apoorva N, Sharmi K developed a Project entitled **Women Security Web Application (Interdisciplinary)**.
- ❖ Deepika. R, Kabaleeshwaran R developed a Project entitled **Food Waste Distribution System (Interdisciplinary)**.
- ❖ Sabarish. R, Vignesh S P developed a Project entitled **Chemical Management System (Interdisciplinary)**.

2023-2024

- ❖ D. Vigneshwar, S. Raju, V. Gowthamraj of II-B.Sc. Physics and P. Mukesh Kanna of III-B.Sc. Computer Science developed a project entitled **“Fire Fighting Robot” (Interdepartmental Project with Physics)**.
- ❖ D. Selvam of III-B.Sc. Physics, S. Ramya (of I-M. Sc. Physics, S. Deepika of I-B.Sc. Physics, M. Yuvaraj and R. Aravind Kandeepan of III-B.Sc. Computer Science developed a project entitled **“Pet feeder using IoT” (Interdepartmental Project with Physics)**.
- ❖ T. Kannan of III-B.Sc. Physics, A.S. Shri Varsha and B. Dharshana of III-B.Sc. Computer Science developed a project Entitled **“Ultrasonic Radar Using IoT” (Interdepartmental Project with Physics)**.
- ❖ R. Shalini of III-B.Sc. Physics, S. Sowndhariya, A. Monisha Prasiy of II-B.Sc. Physics, K. Harshapradha of III-B.Sc. C developed a project entitled **“Smart Helmet” (Interdepartmental Project with Physics)**.
- ❖ B. Dharshana of III-B.Sc. Computer Science developed a project entitled **“Smart Street Lighting System” (Interdisciplinary Project)**.
- ❖ Saranya Priya and S. Sridurgeswari of III-B.Sc. Computer Science developed a project entitled **“Anti-sleep alarm for drivers” (Interdisciplinary Project)**.
- ❖ K. Therasa and J. Ajish Ruban of III-B.Sc. Computer Science developed a project entitled **“Indoor Air Quality Monitoring System” (Interdisciplinary Project)**.
- ❖ G. Aarthi Priya and K. Harsha Pradha of III-B.Sc. Computer Science developed a project entitled **“Green House Monitoring System” (Interdisciplinary Project)**.
- ❖ S. Shri Varsha and S. Savitha of III-B.Sc. Computer Science developed a project entitled **“Secure Fingerprint Bank Locker System” (Interdisciplinary Project)**.
- ❖ S. K. Manoj Kumar and R. A. Sakthi of III-B.Sc. Computer Science developed a project entitled **“Medical Pill-Box Remainder” (Interdisciplinary Project)**.
- ❖ K. Induja and S. Dhanalakshmi of III-B.Sc. Computer Science developed a project entitled **“Smart Vacuum Cleaner Robot” (Interdisciplinary Project)**.
- ❖ R. R. Vijay and B. Vignesh of III-B.Sc. Computer Science developed a project entitled **“Smart Dustbin” (Interdisciplinary Project)**.
- ❖ S. Aacika and S. Priyanka of III-B.Sc. Computer Science developed a project entitled **“Automatic roof Control” (Interdisciplinary Project)**.

- ❖ R. Dhanya and N. Kiruthika of III-B.Sc. Computer Science developed a project entitled **“LPG Leakage Detecting System” (Interdisciplinary Project).**
- ❖ K. Abarnath and V. Sivendra of III-B.Sc. Computer Science developed a project entitled **“Smart Blind Stick” (Interdisciplinary Project).**
- ❖ R.V Pooja Padmashree and M. Asha devi of III-B.Sc. Computer Science developed a project entitled **“TV Bag Monitoring and Alert System” (Interdisciplinary Project).**
- ❖ Mohammed Tariq and R. Aravind Kandeepan of III-B.Sc. Computer Science developed a project entitled **“Water Level Monitoring System” (Interdisciplinary Project).**
- ❖ M. Jangan and R. Ram Pradhap of III-B.Sc. Computer Science developed a project entitled **“Smart Parking System” (Interdisciplinary Project).**
- ❖ S. Ranjith Kumar and M. Sibi Vasan of III-B.Sc. Computer Science developed a project entitled **“Breathing level Monitoring and Alerting System” (Interdisciplinary Project).**
- ❖ S. Kannan and S. Blessy Jeba Sijho of III-B.Sc. Computer Science developed a project entitled **“IoT Based Industry Protection System” (Interdisciplinary Project).**
- ❖ R. Anbazhagan and V. Balaji of III-B.Sc. Computer Science developed a project entitled **“Fire Alarm Security System” (Interdisciplinary Project).**
- ❖ Vel Murugan and K. Nithiyanantham of III-B.Sc. Computer Science developed a project entitled **“IoT Based CAM Laser Light Security System” (Interdisciplinary Project).**
- ❖ M. Kiruthika of III-B.Sc. Computer Science developed a project entitled **“Laser Security System” (Interdisciplinary Project).**
- ❖ R. Sibiraj and S. Adharsh of III-B.Sc. Computer Science developed a project entitled **“Coin Based Charging System Using Arduino” (Interdisciplinary Project).**
- ❖ Keerthana, S. Arthi, S. Swathi of III-B.Sc. Mathematics, V. Balaji of III-B.Sc. Computer Science developed a project entitled **“Statistical Analysis Using Python” (Interdepartmental Project with Mathematics).**

2024-2025

- ❖ P. Monish, R. Anushree of III-B.Sc. Computer Science developed a project entitled **“Deep fake Detection using Deep learning”** using AI, Machine Learning. **(Interdisciplinary Project).**
- ❖ M. K. Sushmitha, P. Mithun of III-B.Sc. Computer Science developed a project entitled **“Book Hub Web Application”** using Web Application. **(Interdisciplinary Project)**
- ❖ V. Pavithra, J. Madhumitha of III-B.Sc. Computer Science developed a project entitled **“RFID Based Attendance System”** using Automation. **(Interdisciplinary Project)**
- ❖ Barathkumar, S. Sumathi of III-B.Sc. Computer Science developed a project entitled **“Smart House Monitoring System”** using IoT. **(Interdisciplinary Project)**
- ❖ M. Dhivya, R. Srilatha of III-B.Sc. Computer Science developed a project entitled **“IoT Based Automatic Height Adjusting Bridge”** using IoT. **(Interdisciplinary Project)**
- ❖ M. Akash of III-B.Sc. Computer Science developed a project entitled **“Online Job Portal”** using Web Application. **(Interdisciplinary Project)**

- ❖ R. M. Shakti Pooja, V. Mirdhula of III-B.Sc. Computer Science developed a project entitled **“Face Recognition Attendance System”** using AI, Machine Learning. **(Interdisciplinary Project)**
- ❖ C. Srithar, V. Siranjeevi of III-B.Sc. Computer Science developed a project entitled **“Agri Helpline Management System”** using Web Application. **(Interdisciplinary Project)**
- ❖ J. Jesina Kethyrin, A. Deepaishwarya of III-B.Sc. Computer Science developed a project entitled **“Sunflower Solar Tracking System”** using Ardiuno and IoT. **(Interdisciplinary Project)**
- ❖ K. Priya Dharshan, P. Nikil of III-B.Sc. Computer Science developed a project entitled **“Stock Market Trend Strength Analysis”** using ADX, AI, Machine Learning. **(Interdisciplinary Project)**
- ❖ Benitta, A. Divya of III-B.Sc. Computer Science developed a project entitled **“IoT Based Automatic Fish Feeder with Turbidity Test”** using IoT. **(Interdisciplinary Project)**
- ❖ S. Subaksha, B. Harini of III-B.Sc. Computer Science developed a project entitled **“Smart Car Parking System”** using IoT. **(Interdisciplinary Project)**
- ❖ J. Sree Sahana, V. Sanjana of III-B.Sc. Computer Science developed a project entitled **“A Patient Medical Help Treatment Forgery Detection”** using AI, Machine Learning. **(Interdisciplinary Project)**
- ❖ H. Mohammed Arshad Jawahir, G. Sakthi Vignesh of III-B.Sc. Computer Science developed a project entitled **“Plant Disease Detection and Remedy Suggestion”** using IoT. **(Interdisciplinary Project)**
- ❖ G. Suresh of III-B.Sc. Computer Science developed a project entitled **“Wild Animal Detection System”** using IoT. **(Interdisciplinary Project)**
- ❖ S. Vishnu Pathi, R. Aravinth of III-B.Sc. Computer Science developed a project entitled **“Web Portal for Agricultural Insurance”** using Web Application. **(Interdisciplinary Project)**
- ❖ G. Revathi, A. Dhanu Sri of III-B.Sc. Computer Science developed a project entitled **“E- Commerce Website”** using Web Application. **(Interdisciplinary Project)**
- ❖ R. Srinath, V. Madhumitha of III-B.Sc. Computer Science developed a project entitled **“Gas Level Detection and Automatic Booking”** using IoT. **(Interdisciplinary Project)**
- ❖ V. Deepak, V. Vikram of III-B.Sc. Computer Science developed a project entitled **“OLX – 2.0 Product Exchange App Zonex”** using Web Application. **(Interdisciplinary Project)**
- ❖ A. Rahul, R. Athira of III-B.Sc. Computer Science developed a project entitled **“Arduino Based Mini Satellite with Base Station”** using IoT. **(Interdisciplinary Project)**
- ❖ P. Arjunan of III-B.Sc. Computer Science developed a project entitled **“Online Sports Management System”** using Web Application. **(Interdisciplinary Project)**
- ❖ K. Sri Durga Devi, S. Nithya of III-B.Sc. Computer Science developed a project entitled **“Automatic Fire Extinguish Vehicle”** using Arduino and IoT. **(Interdisciplinary Project)**
- ❖ Dharshana, H. Lidia Jenifer of III-B.Sc. Computer Science developed a project entitled **“Wrong Posture Muscle Strain Detector”** using IoT. **(Interdisciplinary Project)**
- ❖ N. Kiruthika, M. Farhana Sherin of III-B.Sc. Computer Science developed a project entitled **“Smart Health Monitoring System”** using IoT **(Interdisciplinary Project)**
- ❖ S. Abiruba, V. Ananditha of III-B.Sc. Computer Science developed a project entitled **“Smart Billing System”** using IoT **(Interdisciplinary Project)**

- ❖ P. Ajai Selvam, K. M. Nandhini of III-B.Sc. Computer Science developed a project entitled “**Agriculture Management System**” using Web Application. **(Interdisciplinary Project)**
- ❖ V. Dhanalakshmi, N. Narmatha Sri of III-B.Sc. Computer Science developed a project entitled “**Air Pollution Monitoring System**” using IoT **(Interdisciplinary Project)**
- ❖ B. Dhanya, S. Shabeetha of III-B.Sc. Computer Science developed a project entitled “**Predicting Solar Panel Efficiency Using Weather Data**” **(Interdisciplinary Project)**
- ❖ M. Agalya of III-B.Sc. Computer Science developed a project entitled “**Online File Sharing Web Application**” using Web Application. **(Interdisciplinary Project)**
- ❖ D. Mukilan, M. Venubabish of III-B.Sc. Computer Science developed a project entitled “**Alpha Trading App**” using Web Application. **(Interdisciplinary Project)**
- ❖ S. Niveaditha of III-B.Sc. Computer Science developed a project entitled “**Crypto Alert System Using IoT**” **(Interdisciplinary Project)**
- ❖ R. Prasanth, S. Thrishok of III-B.Sc. Computer Science developed a project entitled “**Suspicious Activity Detection**” **(Interdisciplinary Project)**
- ❖ P. L. Swasthika of III-B.Sc. Computer Science developed a project entitled “**Crime Rate Analysis**” using cyber-Security. **(Interdisciplinary Project)**

9.11 List of Exhibitions/ Seminars/ Training Courses Conducted

a) Conferences/Seminars/Workshops organized

2022-2023					
S. No	Name of the Event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	A Seminar on “Cloud Computing”	19.09.22	Dr. K. Ramesh, Professor, Department of Computer Science and Engineering, Sri Krishna College of Engineering and Technology, Coimbatore	190 students	Students learned the basic concepts of cloud computing, cloud-based computing and storage, methods for developing cloud applications.
2	Workshop on “Development of real time applications using IOT”	03.11.22	Mr. M. Ranjith Kumar, Trainer & Mr. R. Antony Vijay, Technical Coordinator, Honey Bees Skill and Social Explore Foundation, Coimbatore.	101 students	Students learned the key components of IoT systems, the use of sensors for data transmission, and developed skills to create solutions for societal problems.

3	Entrepreneurship Skills for “Mobile Phone Servicing and Troubleshooting”	22.02.23	Mr.R.Karthi & Mr. A. Sajith Service Technician & Trainer, New Technology, Mobile Service Centre & Training Institute, coimbatore.	69 students	Students learned mobile phone repair tools and skills, practiced assembling and disassembling phones, and identified key entrepreneurial competencies.
4	Seminar on “Robotics and its Applications”	17.03.23	Mr. Anand Jilo, Skill & Personality Developer, Pahir Impact, Coimbatore.	55 students	Students learned the fundamentals of robotics and automation, including robot classification and design, industrial applications, and the operation of various robotic sensors.
5	Seminar on “Artificial Intelligence- Future Scope and Career”	25.03.23	MR.T. Akil, Software Engineer & Certified Ethical Hacker, Machpro Technologies, Coimbatore.	66 students	Students learned the fundamentals of artificial intelligence, how to categorize AI problems, the principles of intelligent systems, and the application of machine learning techniques for prediction tasks.

2023-2024

1	Two days Workshop on “Arduino Based Application Development”	31-08-23 & 01-09-23	Dr. K. Subramanian Technical Lead, Mr. Dinesh Babu. S Technical Engineer, Enthu Technology Solutions India Pvt. Ltd., Coimbatore.	III B.Sc. - 54 II B.Sc. - 56 Faculty Member - 1	The concepts and the working principles of IoT and the functionalities of different types of sensors were clearly explained to the students along with the demonstration of the experiments using Arduino board, IoT sensors and actuators.
2	Workshop on Unlocking the Future: Bridging NLP and Open AI for Intelligent Communication	12-09-23	Mr. T. Nandha Kumar Software Developer, MECHPRO Technologies, Coimbatore.	III B.Sc. - 43 Faculty Member - 1	Awareness about the recent advancements in AI such as capabilities, content creation, language translation, coding, and creative endeavors of ChatGPT were provided
3	A Seminar and Demonstration on “Demystifying Networking Essentials”	12-10-23	Mr. B. Meinathan Technical consultant, Macro vision Telnet, Karnataka	III B.Sc. - 45 Faculty members -2	The functions of switches and types of routers were demonstrated, and the characteristics of hackers along with mobile and app security features were explained.
4	Workshop on “Mobile Application Development”	10-01-24	Mr. C. Surendar Corporate Trainer & Software developer, Aakam Institute, Coimbatore	III B.Sc. - 01 II B.Sc. - 55 Faculty members -03 Total = 59	Students learned application frameworks and design concepts, the steps in mobile development, the use of emulators, and coding in Android Studio.

2024-2025

1	A Seminar on “Exploring the Power of Gen-AI Tools”	12.08.24	Dr.S. Karpagavalli, Associate Professor of Computer Science, PSGR Krishnammal College for Women, Coimbatore.	Students:60 Faculty: 3	Students gained knowledge of AI, machine learning, deep learning, and generative AI, understood the importance of GenAI tools, and applied them in their projects.
2.	A Seminar on “IPR Infringement & Consumer Affairs”	04.10.24	J. Cibil Samuel, B.A, B.L(Hons)., Advocate, District Court, Coimbatore.	Students:145 Faculty: 4	Students gained awareness of IPR infringement, its impact on consumers, and a clearer understanding of consumer rights and responsibilities related to IPR.

3.	A Seminar on “AI Applications and Practical Insights”	08.01.25	Dr. Venkatapathy Subramanian, Director, Anaadi Rural AI Center, Palani.	Students: 36 Faculty: 4	Students understood the basics of AI and machine learning, including reinforcement learning, NLP, and computer vision, and learned to apply predictive analytics and explore generative AI techniques for real-world problems.
4.	A Seminar on “Power BI: Insights and Applications”	30.01.25	Dr.V. Radhamani, Assistant Professor of Mathematics, J.K.K Nataraja College of Arts and Science, Namakkal.	Students: 41 Faculty: 3	Students understood Power BI features for creating interactive reports and dashboards and learned how data visualization supports effective business decision-making.
5.	A Seminar on “Emerging Trends in Cyber Security”	11.03.25	Mr. Karthikeyan, Nagaraj, Cloud Consultant, Coimbatore.	Students: 65 Faculty: 4	Students gained insight into modern cyber threats such as ransomware, phishing, and APTs, and developed cybersecurity-based projects.
6.	A workshop on “Web Application Development”	02.09.24	Dr.V.K. Narendira Kumar, Associate Professor of Computer Science, Gobi Arts and Science College, Gobi.	Students: 69 Faculty: 3	Students explored the fundamentals of building websites and web applications, gained basic knowledge of core web technologies, and developed web application projects.
7.	A Workshop on “Ubiquitous Computing”	12.09.24	Mr. Mohamed Ibrahim, Cross Platform Developer, Accent Techno Soft, Coimbatore.	Students:60 Faculty: 3	Students learned how computing is integrated into daily life and enhances productivity, user experience, accessibility, decision-making, and personalized healthcare.
8.	A Workshop on Mobile Phone Servicing and Troubleshooting	22.01.25	Mr. B. Krishnakumar Founder / CEO, New Technology Institutions, Coimbatore.	Students: 50 Faculty: 3	Students learned to diagnose and repair mobile hardware and software issues, use advanced troubleshooting tools, perform preventive maintenance, and replace faulty components.
9.	A Workshop on “Machine Learning Using Python”	05.03.25	Dr. P. Sriramakrishnan Assistant Professor, Department of Mathematics, Amrita Vishwa Vidhyapeetham, Coimbatore.	Students: 52 Faculty: 4	Students learned key machine learning concepts, including improving prediction accuracy, automating tasks, and enhancing decision-making, explored pattern recognition for complex problems, and developed ML projects using Python.
10.	A Workshop on “Data Analytics using Tableau”	10.03.25	Dr.S. Ramkumar, Associate Professor, Department of Computer Science, Christ University, Bangalore	Students: 73 Faculty: 4	Students learned the basics of Tableau, data connection and preparation, and creating interactive dashboards, reports, and advanced data visualizations.
2025-2026					
1	Two Days Workshop on “Animation and Game Design”	08.07.25 and 09.07.25	Mr.A.R. Vigneshwarar Co-Founder, Moving frames Animation Institute, Chennai	116 Students	Participants learned the fundamentals of animation, character design, storytelling, game mechanics, and created basic animated scenes and interactive game elements through hands-on sessions.

2	Workshop on “Campus to Corporate Training”	28.08.25	Ms.S.Omega, Executive Communication Trainer, Coimbatore	81 Students	Participants learned to communicate effectively in verbal and written formats and demonstrated proper workplace behavior, dress code, and corporate etiquette.
3	Workshop on “Prompt Engineering”	12.09.25	Dr.N.Sasirekha, Associate Professor, Vidyasager College of Arts and Science Udumalpet	53 Students	Participants learned key principles of prompt engineering, improved their ability to design clear and context-rich prompts, and enhanced critical thinking in evaluating AI outputs.
4.	A Seminar on “Carrer opportunities in AI”	01.07.25	Mr.K.M.Keerthi Raajan, Software Engineer, Bangalore.	45 Students	Students gained insight into career paths in computer science and AI, received guidance on improving technical skills through online platforms, and learned to build strong professional profiles for job seeking.
5	Seminar on “Exploring AI: From Smart Tools to Future Careers”	19.09.25	Mr. C. Ramachandran Assistant Professor, Computer Applications, Dr. NGP Arts and Science College, Coimbatore.	52 Students	Participants learned core AI concepts and their applications, gained hands-on experience with popular AI tools, and developed awareness of the ethical and societal implications of AI technologies.

b) Exhibition/Competitions Organized

2022-2023				
S. No.	Name of the Event/Activity	Date	Number of Beneficiaries	Outcome
1	Inter-Departmental Fest under the theme “DIGITAL INDIA”	21.02.23	58 Students	Competitions such as paper presentations, poster presentations, and quizzes raised students’ digital awareness, promoting the use of technology to access Digital India initiatives and government services.
2023-2024				
1	Exhibition for School Students “IOT Devices”	07-07-23	47 students	School students were motivated toward science and gained hands-on experience with IoT devices.
2	Exhibition for School Students “Network Communication”	05-10-23 and 06-10-23	513 students	Working models of a robot, smart agriculture system, and earthquake alarm were demonstrated, raising awareness of various sensors used in IoT.
3	Competition for School Students in Python and PHP (for XII Standard students of Green Fields Matriculation School)	27-12-23	45 students	Students’ interest towards learning more computer science areas was kindled. The competition sparked students' enthusiasm for delving into various computer science domains, broadening their understanding of the programming world.
4	Competitions for School Students (Quiz, Drawing, Essay Writing and Oratorical)	11-01-24	58 students	Students were motivated to learn advanced scientific developments, and a competitive spirit sparked their interest in science education.

5	Inter Departmental Competition, Poster Presentation on “Igniting Scientific Thinking”	26-03-24	12 students	Students explored interdisciplinary links between mathematics, engineering, and other sciences.
2024-2025				
1.	IDEAL IGNITION Competitions	04.09.24	92 Students	Students boosted confidence and self-esteem, developed and improved problem-solving and critical thinking.
2.	Competitions for School Students	08.10.24	64 School Students	Students enhanced their diverse skills, were motivated to learn advanced developments in computer science.
3.	Science Fest '24-Exhibition	08.10.24	98 School Students	School students were motivated toward science and gained practical understanding through real-time models.
4.	“Techno Fusion 2k24” Competitions for College Students (Poster, Paper Presentation, Connection, Advertisement, Web designing, Quiz)	17.12.24	316 Students	Students developed teamwork and presentation skills, and fostered innovation and creativity by applying theory to practice.
5.	“Filmfest '25” for Science students.	20.02.25	20 Students	Motivated students to delve deeper into emerging trends and advanced developments in science, fostering a passion for continuous learning and innovation.

c) Training courses conducted

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Two days FDP on “Python with Data Science”	13.02.23 & 14.02.23	D.A .Kumaran, Python & Django Developer, AWS-Technical Consultant, Lab Glo Technologies LLP, Thiruvananthapuram, Kerala	57 Participants from various Colleges	Training covered basic Python data types, the pandas library for data frames and data import, and using Django for rapid, secure, and maintainable web development.

2023-2024

1	Faculty Development Programme on on “Inter disciplinary Approaches of Machine Learning”	21.10.23	Dr. P. Shanmuga vadivu, Professor of Computer Science and Applications, The Gandhigram Rural Institute, Dindigul. and Mrs. G. Kanimozhi, Software Engineer, Gen Digital, Chennai.	58 Participants from various Colleges got Benefited.	Participants gained knowledge of AI, machine learning, and data science, and were introduced to machine learning models, training algorithms, evaluation metrics, and their applications.
2	Faculty Development programme on “Computational Mathematics	12.01.24	Dr.V. Parthipan Assistant Professor of Mathematics,	44 Participants from various Colleges got Benefited.	The participants were taught about the salient features of Python and SCILAB for scientific computing along with their applications.

	using Python and Scilab”. (Organized along with Department of Mathematics)		Vellore Institute of Technology, Chennai. Dr.T. Senthil Kumar, Associate Professor, School of Computing, Amritha Vishwa Vidhyapeetham Coimbatore		
3	School Teachers Induction Programme (Organized along with Department of Mathematics)	13.02.24	Mr.N. Tamilselvan Assistant Head master & PG Assistant in Mathematics, Government Higher Secondary School, Kalapatti, Coimbatore Dr. V. Chandran Former Headmaster, CSI Boys Higher Secondary School, Erode, Former Dean(S&H), RVS Technical Campus, Coimbatore	20 Participants from various schools got benefited.	Teachers were empowered with skills and tools to design innovative lesson plans, create interactive learning experiences, and integrate computer science and mathematics, fostering interdisciplinary learning and critical thinking among students.
4	Hands-on Training on “Upskilling Networking Skills for Lab Technicians”	16.03.24	Mr. K. J. Bhagavathy System Engineer, Precision Infomatic Pvt Ltd, Coimbatore	16 Lab Technicians	Equipped the lab technicians with knowledge and tools to troubleshoot and intricate networks.
<u>2024-2025</u>					
1	5 Days Virtual FDP “Future Prospects of Innovations in Artificial Intelligence”	2.12.24 to 6.12.24	Mr. Ramesh Lekshmyanarayanan, Digital & Business Transformation, Green Catapult Duke University, New York, US. Mr. Bhairav Mehta Senior Manager, Data Science and Product Management Amazon Cornell University, California, US. Dr. Anand Nayyar, Professor, Scientist, Vice-Chairman and Director, School of	83 Faculty	The outcome of leveraging AI Tools in fostering academic excellence in research and innovation is a paradigm shift towards streamlined processes, enhanced collaboration, and groundbreaking discoveries. By integrating AI – Driven solutions, researchers can efficiently navigate novel insights and trends with ease.

			Computer Science, Duy Tan University,Vietnam. Mrs. Rose Oviya Ramasamy, Senior Cloud Architecture & Consultant, New York SenOvi Software Consultants Dr. Anand Ranganathan, Co-founder, Chief AI Officer.		
2	Training Programme for Lab Technician on “Laptop Servicing and Networking Credentials”	22.1.25	Mr.A. Sajith Trainer Technician, New Technology Institutions, Coimbatore	12 Lab Technicians	Technicians acquired practical knowledge about various types of Laptops servicing and troubleshooting through hands-on training.
3	Faculty Development Programme on “IPR Insights and Digital Tools for Teaching”	27.01.25	Dr. B. Gayathri, Associate Professor of Computer Science, Bishop Heber College, Trichy. Dr. M. Rani, Professor, Kumaraguru College of Technology and Business School, Coimbatore.	63 Faculty from various Science Departments	• The Programme enhanced the importance and awareness of IPR. • Faculty members gained clear understanding of Patents, Copyrights, Trademarks, Research ethics and equipped with skills to use digital platforms.

9.12Details of Books & Journals Subscribed from DBT Grant

2022-2023

S. No.	Bill no	Date	Company name	Author	Title	Qty	Amount Rs.
1.	31	20.03.23	TBH Publishers & Distributors	Acharya	Big Data and Analytics 2ed	2	973.5
2.	31	20.03.23	TBH Publishers & Distributors	Bhuvaneswari	Big Data Analytics	3	495
3.	31	20.03.23	TBH Publishers & Distributors	Vijay Madiseti	Internet Of Things: A Hands-on Approach	2	1342.5
4.	31	20.03.23	TBH Publishers & Distributors	Khattak	Big Data Fundamentals Concepts Drivers and Techniques	2	862.5
5.	31	20.03.23	TBH Publishers & Distributors	Ganis	Social Media Analytics	2	870
6.	31	20.03.23	TBH Publishers & Distributors	Rossum	Introduction To Python an Tutorial And whats New Version 3.11	3	1320
7.	31	20.03.23	TBH Publishers & Distributors	Lutz	Learning Python, 5th Ed (Updated For 3.3 And 2.7): Powerful Object-Oriented Programming	2	2880

8.	31	20.03.23	TBH Publishers & Distributors	Downey	Think Python 2nd Ed	4	1680
9.	31	20.03.23	TBH Publishers & Distributors	Vanderplas	Python Data Science Handbook 2ed	2	2800
10.	31	20.03.23	TBH Publishers & Distributors	Lutz	Programming Python, 4 Ed	1	2240
11.	31	20.03.23	TBH Publishers & Distributors	Grus	Data Science from Scatch 2/Ed : First Principles With Python	2	2040
12.	31	20.03.23	TBH Publishers & Distributors	Han	Data Mining: Concepts and Techniques	4	2625
13.	31	20.03.23	TBH Publishers & Distributors	Lambert	Fundamentals Of Python First Programs	3	1235.25
14.	31	20.03.23	TBH Publishers & Distributors	Marsland	Machine Learning an Algorithmatic Perspective 2nd Ed	4	3885
15.	31	20.03.23	TBH Publishers & Distributors	Russell	Artificial Intelligence-4 Ed	3	2250
16.	31	20.03.23	TBH Publishers & Distributors	Hanes	IoT Fundamentals	2	1087.5
17.	31	20.03.23	TBH Publishers & Distributors	Bratko	Prolog: Programming for Artificial Intelligence, 3ed	2	1897.5
18.	31	20.03.23	TBH Publishers & Distributors	Khemani	Artificial Intelligence	2	1462.5
19.	31	20.03.23	TBH Publishers & Distributors	Guy Harrison	Next Generation Databases: No SQL and Big Data	2	1198.5
20.	31	20.03.23	TBH Publishers & Distributors	Mueller	Machine Learning (In Python And R) For Dummies	1	524.25
21.	31	20.03.23	TBH Publishers & Distributors	Thareja	Python Programming Using Problem Solving Approach	2	922.5
22.	31	20.03.23	TBH Publishers & Distributors	Raj Kamal	Big Data Analytics	2	1192.5
23.	31	20.03.23	TBH Publishers & Distributors	Talukder	Mobile Computing	4	3195
24.	31	20.03.23	TBH Publishers & Distributors	Peter Flach	Machine Learning	2	2842.5
25.	31	20.03.23	TBH Publishers & Distributors	Kolman Busby Ross	Discrete Mathematical Structures	1	592.5
26.	31	20.03.23	TBH Publishers & Distributors	Simon	An Embedded Software Primer +Cd	1	783.75
27.	31	20.03.23	TBH Publishers & Distributors	Pfleeger	Security In Computing, 5ed	4	3210
28.	31	20.03.23	TBH Publishers & Distributors	Kahate	Cryptography And Network Security	4	2475
29.	31	20.03.23	TBH Publishers & Distributors	Han	Data Mining: Concepts and Techniques	3	1968.75
30.	31	20.03.23	TBH Publishers & Distributors	Raj Kamal	Embedded Systems 4ed	2	1417.5
31.	31	20.03.23	TBH Publishers & Distributors	Simon	An Embedded Software Primer +Cd	2	1567.5
32.	31	20.03.23	TBH Publishers & Distributors	Russell	Artificial Intelligence-4 Ed	2	1500
33.	31	20.03.23	TBH Publishers & Distributors	Marsland	Machine Learning an Algorithmatic Perspective 2nd Ed	3	2913.75
34.	31	20.03.23	TBH Publishers & Distributors	Lutz	Learning Python, 5th Ed (Updated For 3.3 And 2.7) : Powerful Object-Oriented Programming	1	1440
35.	31	20.03.23	TBH Publishers & Distributors	Lambert	Fundamentals Of Python First Programs	2	823.5

36.	31	20.03.23	TBH Publishers & Distributors	Schiller	Mobile Communications, 2ed	1	731.25
37.	31	20.03.23	TBH Publishers & Distributors	Vijay Madiseti	Internet Of Things: A Hands- on Approach	5	3356.25
38.	31	20.03.23	TBH Publishers & Distributors	Summerfield	Programming In Python 3 (2ed)	2	1237.5
39.	31	20.03.23	TBH Publishers & Distributors	Gupta	Elements Mathematical Statistics (Madras Uni)	1	221
40.	31	20.03.23	TBH Publishers & Distributors	Bratko	Prolog: Programming for Artificial Intelligence, 3ed	2	1897.5
41.	31	20.03.23	TBH Publishers & Distributors	Grus	Data Science from Scratch 2ed: First Principles with Python	1	1020
42.	31	20.03.23	TBH Publishers & Distributors	Hanes	IoT Fundamentals	2	1087.5
43.	31	20.03.23	TBH Publishers & Distributors	Bhuvaneswari	Big Data Analytics	5	825
44.	31	20.03.23	TBH Publishers & Distributors	Winston	Artificial Intelligence	2	1500
45.	31	20.03.23	TBH Publishers & Distributors	Peter Flach	Machine Learning	2	2842.5
46.	31	20.03.23	TBH Publishers & Distributors	Bratko	Prolog: Programming for Artificial Intelligence, 3ed	1	948.75
47.	31	20.03.23	TBH Publishers & Distributors	Hwang	Distributed & Cloud Computing	1	543.75
48.	31	20.03.23	TBH Publishers & Distributors	Kahate	Cryptography And Network Security	2	1237.5
49.	31	20.03.23	TBH Publishers & Distributors	Thareja	Data Science and Machine Learning With R	2	975
50.	31	20.03.23	TBH Publishers & Distributors	Cochran	Data Visualization Exploring and Ex	2	1498.5
51.	31	20.03.23	TBH Publishers & Distributors	Bharti Motwani	Data Analytics Using Python	1	576.75
52.	31	20.03.23	TBH Publishers & Distributors	Kumar Rahul	Machine Learning Using R	2	1168.5
53.	31	20.03.23	TBH Publishers & Distributors	Paul deitel	Python For Programmers 1ed	2	1125
54.	31	20.03.23	TBH Publishers & Distributors	Dutt/Chandra mouli/Kumar	Machine Learning	1	487.5
55.	31	20.03.23	TBH Publishers & Distributors	Negnevitsky	Artificial Intelligence: A Guide to Intelligent Systems, 3ed	2	1282.5
56.	31	20.03.23	TBH Publishers & Distributors	Freeman	Programming Skills for Data Science 1ed	1	506.25
57.	31	20.03.23	TBH Publishers & Distributors	Witten	Data Mining Practical Machine Learning Tools and Techniques 4ed (Pb 2020)	1	525
58.	31	20.03.23	TBH Publishers & Distributors	Maheshwari	Big Data 2nd editon	1	506.25
59.	31	20.03.23	TBH Publishers & Distributors	Ohlhorst	Big Data Analysis Turning Big Data in To Big Money	1	637.5
60.	31	20.03.23	TBH Publishers & Distributors	Russell	Artificial Intelligence-4 Ed	2	1500
61.	31	20.03.23	TBH Publishers & Distributors	Allen b. Downey	Python For Software Design (South Asia Edition)	2	592.5
62.	31	20.03.23	TBH Publishers & Distributors	Murali Mohan	Python With Machine Learning	1	337.5
63.	31	20.03.23	TBH Publishers & Distributors	Fenner	Machine Learning with Python for Every	1	596.25
64.	31	20.03.23	TBH Publishers	Forouzan	Data Communications and	1	708.75

			& Distributors		Networking-6th Ed		
65.	31	20.03.23	TBH Publishers & Distributors	Martin brown	Python The Complete Reference	1	671.25
66.	31	20.03.23	TBH Publishers & Distributors	Stallings	Cryptography & Network Security-7th Ed	1	618.75
67.	31	20.03.23	TBH Publishers & Distributors	Chun	Core Python Application Programming	1	633.75
68.	31	20.03.23	TBH Publishers & Distributors	Anuradha	Machine Learning	1	461.25
69.	31	20.03.23	TBH Publishers & Distributors	Acharya	Big Data and Analytics 2ed	1	486
70.	31	20.03.23	TBH Publishers & Distributors	Raj Kamal	Big Data Analytics	1	596.25
71.	31	20.03.23	TBH Publishers & Distributors	Bharti Motwani	Data Analytics with R	1	546.75
Total						140	95000

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S. No	Bill No.	Date	Company name	Publisher	Author	Title	Qty	Amount
1	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt. Ltd.,	Harvey M. Deitel	Operating System	4	3978
2	SIN V032 14	09.02.24	TBH Publishers & distributors	Mc Graw Hill Education India Pvt Ltd,	Steven Holzner,	PHP: The Complete Reference	2	1870.44
3	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt. Ltd.,	Dan. W. Patterson	Introduction To Artificial Intelligence and Expert Systems	3	1579.50
4	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt. Ltd.,	George F. Luger	Artificial Intelligence Structures and Strategies for Complex Problem Solving	3	2340
5	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt. Ltd.,	David. E. Simon	An Embedded Software Primer	3	2620.80
6	SIN V032 14	09.02.24	TBH Publishers & distributors	Cambridge University Press	Peter Flach	Machine Learning	3	4434.30
7	SIN V032 14	09.02.24	TBH Publishers & distributors	Crc Press Taylor & Francis Group.,	Stephen Marsland,	Machine Learning: An Algorithmic Perspective	3	3030.30

8	SIN V032 14	09.02.24	TBH Publishers & distributors	Mc Graw Hill Education India Pvt Ltd	Roger S. Pressman, Bruce R. Maxim	Software Engineering: A Practitioners Approach	5	3896.10
9	SIN V032 14	09.02.24	TBH Publishers & distributors	Mc Graw Hill Education India Pvt Ltd	E. Balagurusamy	Introduction to Computing and Problem-Solving Using Python	4	1747.20
10	SIN V032 14	09.02.24	TBH Publishers & distributors	Mc Graw Hill Education India Pvt Ltd	Raj Kamal	Embedded Systems	4	3182.40
11	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt Ltd	Lan Sommerville	Software Engineering	3	2468.70
12	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt Ltd	Jochen H.S chiller	Mobile Communications	3	2340
13	SIN V032 14	09.02.24	TBH Publishers & distributors	Universities Press	Arshdeep Bahga, Vijay Madiseti,	Internet Of Things: A Hands-on Approach	3	2223
14	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt Ltd	Charles P Pfleeger, Shari Lawrence Pfleeger, Jonathan Margulies,	Security In Computing	4	3603.60
15	SIN V032 14	09.02.24	TBH Publishers & distributors	Pearson India Education Services Pvt Ltd	Ramez Elmasri, Shamkant B Navathe,	Fundamentals Of Database Systems	3	2468.70
16	SIN V032 14	09.02.24	TBH Publishers & distributors	Tata Mc Graw Hill Education Pvt. Ltd.,	Rajkumar Buyya, Christian Vecchiola, S. Thamaraiselvi	Mastering Cloud Computing	2	1513.70
17	SIN V032 14	09.02.24	TBH Publishers & distributors	Vijay Nicole Imprints Pvt Ltd	Alex Leon, Mathews Leon	Essential Of Database Management System	2	928.20
18	SIN V032 14	09.02.24	TBH Publishers & distributors	Mc Graw Hill Education India Pvt Ltd	Behrouz A Forouzan	Data Communications and Networking with Tcp/Ip Protocol Suite	1	775.32
TOTAL							55	45000

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S. No	Bill No	Date	Company Name	Publisher	Author	Title	Qty	Amount
1.	SINV 03100	14.03.25	TBH Publishers & distributors	CRC TBH	KumarI Sadas	Edge Computing Fundamentals Advances App	2	1492.50
2.	SINV 03100	14.03.25	TBH Publishers & distributors	PEARSON	Desikan	Software Testing: Principles & Practice	1	570.00
3	SINV 03100	14.03.25	TBH Publishers & distributors	MHE	Buyya	Mastering Cloud Computing	1	727.50
4	SINV 03100	14.03.25	TBH Publishers & distributors	PEARSON	Tanenba um	Computer Networks 6ED	2	1395.00
5	SINV 03101	14.03.25	TBH Publishers & distributors	PEARSON	Tanenba um	Computer Networks 6ED	1	697.50
6	SINV 03101	14.03.25	TBH Publishers & distributors	SCITECH	Bhuvan eshwari	Big Data Analytics	1	165.00
7	SINV 03101	14.03.25	TBH Publishers & distributors	CRC TBH	KumarI Sadas	Edge Computing Fundamentals Advances App	1	746.25
8	SINV 03101	14.03.25	TBH Publishers & distributors	CAMBRIDGE	Misra	Introduction to IOT	1	596.25
9	SINV 03101	14.03.25	TBH Publishers & distributors	ORIENT B	Arshdee p	Cloud Computing: A Hand on Approach	1	712.50
10	SINV 03102	14.03.25	TBH Publishers & distributors	MHE	Buyya	Mastering Cloud Computing	1	727.50
11	SINV 03102	14.03.25	TBH Publishers & distributors	PEARSON	Tanenba um	Computer Networks 6ED	1	697.50
12	SINV 03102	14.03.25	TBH Publishers & distributors	PEARSON	Desikan	Software Testing: Principles & Practice	1	570
13	SINV 03103	14.03.25	TBH Publishers & distributors	SCITECH	Bhuvan eshwari	Big Data Analytics	1	165.00
14	SINV 03103	14.03.25	TBH Publishers & distributors	MHE	Buyya	Mastering Cloud Computing	2	1455.00
15	SINV 03103	14.03.25	TBH Publishers & distributors	PEARSON	Tanenba um	Computer Networks 6ED	2	1395.00
16	SINV 03103	14.03.25	TBH Publishers & distributors	CRC TBH	KumarI Sadas	Edge Computing Fundamentals Advances App	2	1492.50
17	SINV 03103	14.03.25	TBH Publishers & distributors	OXFORD	Reema Tharej	Python programming	1	468.75
18	SINV 03108	14.03.25	TBH Publishers & distributors	SCITECH	Bhuvan eshwari	Big Data Analytics	2	330.00
19	SINV 03108	14.03.25	TBH Publishers & distributors	MHE	Buyya	Mastering Cloud Computing	1	727.50
20	SINV 03108	14.03.25	TBH Publishers & distributors	PEARSON	Tanenba um	Computer Networks 6ED	3	2092.50
21	SINV 03108	14.03.25	TBH Publishers & distributors	PEARSON	Desikan	Software Testing: Principles & Practice	3	1710.00
22	SINV	14.03.25	TBH Publishers &	OXFORD	Reema	Python	1	468.75

	03108		distributers		Tharej	programming		
23	SINV 03108	14.03.25	TBH Publishers & distributers	CRC TBH	KumarI Sadas	Edge Computing Fundamentals Advances App	3	2238.75
24.	SINV 03108	14.03.25	TBH Publishers & distributers	CRC	Tripathy	Internet of things (IOT): Technologies Application Challenges an	1	2246.25
25	SINV 03108	14.03.25	TBH Publishers & distributers	CAMBRIDGE	Misra	Introduction to IOT	1	596.25
26	SINV 03207	20.03.25	TBH Publishers & Distributors	PEARSON	Tanenbaum	Computer Networks 6ED	4	2790.00
27.	SINV 03207	20.03.25	TBH Publishers & Distributors	PEARSON	Desikan	Software Testing: Principles & Practice	3	1710.00
28	SINV 03207	20.03.25	TBH Publishers & Distributors	MHE	Buyya	Mastering Cloud Computing 2NE ED	1	581.25
29.	SINV 03207	20.03.25	TBH Publishers & Distributors	OXFORD	Reema Tharej	Python programming	1	500.00
TOTAL							29	30,065

9.13 Outreach / Extension Activities

2022-2023					
S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Outreach Hands-on Training programme on “Teaching techniques using Digital tools”	17.12.22	Mr. N. Senthilkumar, Assistant Professor of Computer Technology, Kongunadu Arts and Science College, Coimbatore	26 participants from the Annai Violet Matriculation Higher Secondary School	Knowledge was imparted on technology-centered teaching, integrating online tools into instruction, and selecting ethically appropriate digital pedagogy to enhance learning for both students and teachers.
2	Extension activity to Sensitize the people of Keeranatham Village for their Holistic Development	05.01.23 to 07.01.23	17 students of I B.Sc and II B.Sc Computer Science	150 people of Keeranatham Village	17 Computer Science students conducted a door-to-door campaign in Keeranatham and Puthupalayam villages to use digital devices for accessing e-Government services.
3	Awareness Programme on “Familiarization of Science Education to school students”	10.02.23	Dr. S. Paulsamy, Dean Research and Development, Kongunadu Arts and Science College, Coimbatore	Around 103 students from neary by schools	Aid the school students to attain the knowledge in science subject through lab visit to Physics laboratory, Chemistry laboratory, Computer laboratory, Math Model Lab.

4	Stress Management Programme	04.03.23	R. Nanda Kumar, Emotional Wellness Coach and Author, Member ICF (International Coach Federation), Coimbatore	40 Staff Members from Annai Violet Matriculation Higher Secondary School and 10 non-teaching faculty members of our college	Faculty members gained knowledge on stress management, handling stress in and out of the classroom, and managing it through lifestyle habits.
5	Awareness of e-Government Services among Low-Income group	08/03/23 to 09/03/23	Mr. K. Venkatesh, & Mr. S. Vijay, PMGDISHA District Co-ordinator, CSC e-Governance Services, Coimbatore.	Around 114 people of nearby Villages, attended the Programme	Enabling 114 participants to apply using their biometric information
2023-2024					
1	Workshop on “Empowering Young Minds: Building Resilience in students”	24.08.23	Mr. P. Nanda Kumar, Member ICF, International Coach Federation, Coimbatore.	80 students	This workshop created an awareness towards empowering and shaping young minds.
2	Hands-on-Training Programme in “Python and PHP” (for students of Green Fields Matriculation School)	27-12-23	B. Dharshana W. B. Preethi III-B.Sc. Computer Science	58 students	Students learned the advantages and applications of Python and PHP, and explored their basic concepts and syntax through quizzes.
2024-2025					
1.	Hands on Training Programme in “Python and PHP” (XII Standard students)	01.02.25	Students of III B.Sc. Computer Science.	70 Students	Students learned the advantages and applications of Python, practiced coding basic Python programs, and explored PHP fundamentals for website development.
2.	Hands on Training Programme in “HTML” (XI Standard students)	06.02.25	Dr. M. Jagadeeswari, Assistant Professor of Computer Science, KASC, Coimbatore.	38 Students	Students learned basic web design skills, enhancing their computer knowledge, fostering creativity, and understanding website development for the digital world.
3.	Awareness Programme on “Digital Literacy for Non-Computer Science students”	08.07.24 - 11.07.24	Students of III B.Sc. Computer Science.	Students: 70 Faculty: 2	Imparted the Knowledge of Basic Operations of Computers, functionality of ChatGPT, Scratch and Cloud Computing about Artificial Intelligence (AI).

2025-2026					
1.	Awareness Programme on “Cyber Hygiene and Security Awareness	01.08.25	Mrs.Theepika Jayasekaran, Cyber Security Researcher, Founder and CEO, Vetri Tec Solutions, Coimbatore	52 Students	Students became aware of cyber threats, practiced safe digital habits, learned to identify and avoid risks like phishing and scams, and improved protection of personal and sensitive information online.

9.15 Invited Lectures

2022-2023					
S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Enrichment Programme DBT Star College Scheme	08.11.22	Dr. R. Rajendran, Associate Professor of Microbiology, PSG College of Arts and Science, Coimbatore	All participatory department students	Students can able to know about salient features and benefits of the DBT Star College Scheme
2	Seminar on “Robotic Process Automation – Student Project Ideas”	17.02.23	Dr. S. Karpagavalli, Associate Professor and Head of Computer Science, PSGR Krishnammal College for Women, Coimbatore.	40 students	Students learned the basic concepts and applications of RPA, including different types of variables, control flow, and data manipulation techniques.

2023-2024					
1	A Guest Lecture on “Securing the Future: IoT and Big Data in the Cloud Navigating the Realm of Cloud Computing and Security”	14.09.23	Dr. G. Kalpana Associate Professor of Computer Science, Sri Ramakrishna College of Arts and Science for Women, Coimbatore.	III B.Sc. - 52 Students Faculty members -2	The participants acquired the basic and advanced concepts of cloud computing and cloud security and learnt how IoT is used in cloud computing.
2	Guest Lecture on “Unveiling the Distinctions and Insights into Virtual Reality, Augmented Reality and Mixed Reality”	18.12.23	Dr. S. Karpagavalli Associate Professor and Head of computer Science, PSGR Krishnammal College for Women, Coimbatore	III B.Sc. -53 Students Faculty member - 1	Students gained insight into Virtual Reality, Augmented Reality, and Mixed Reality, through clear examples and demonstrations and acquired knowledge about the applications of Augmented Reality.
3	Guest lecture on “Securing the Digital Frontiers: Exploring the Latest Trends and Applications in Cyber Security”	21.12.23	Dr. S. Marutha Vijayan, Assistant Professor, The Tamil Nadu Dr. Ambedkar Law University, Chennai.	III B.Sc. - 58 students Faculty Member =1	Students were exposed to the Cyber Laws and various applications of Cyber Security such as Network Security Surveillance, Identification, Access control etc.,

2024-2025					
1.	A Guest Lecture on “Nurturing Youth Entrepreneurship the need of the hour”	19.07.24	Dr. R. Mayilsamy, Assistant Professor of Co-operation, SRMV College of Arts and Science, Coimbatore.	Students:47 Faculty: 3	Students gained knowledge of entrepreneurship and its importance, and four students completed an interdisciplinary project in commerce.

2.	A Guest Lecture on “Cyber Threats”	23.07.24	Mrs. Dilipa Sub Inspector, Thudiyalur Police Station, Coimbatore.	Students:68 Faculty: 4	Students learned about cyber offences like morphing, data theft, cash hacking, fake calls, and banking fraud, with one student completed a project on cyber threats.
3.	A Guest Lecture on “Impact of AI”	7.01.25	Dr. V. T. Balamurugan, Professor & Head of Biomedical Engineering, Bannari Amman Institute of Technology, Sathyamangalam.	Students: 52 Faculty: 4	Students gained comprehensive knowledge of AI, machine learning, and deep learning algorithms, enabling them to analyze problems and develop solutions for real-time applications.
4.	Guest Lecture on “Cyber Security & Intelligence”	28.1.25	Dr. T. Velumani, Assistant Professor, Department of Cyber Security & DCFS, Rathinam College of Arts and Science, Coimbatore.	Students: 45 Faculty: 3	The program highlighted the importance of cybersecurity, provided insights into cyber threats, focused on data protection strategies and intelligence in preventing cybercrimes, and two students completed projects in cybersecurity.
5.	A Guest Lecture on “Evolution of AI in Medical Field”	12.3.25	Dr. V. Manikandan, Medical Officer, Sakthi Siddha Medical Centre, Kumaraguru Institutions, Coimbatore.	Students: 64 Faculty: 4	Students learned how AI helps doctors by automating tasks and reducing paperwork, understood challenges like data privacy and fairness, and three students completed projects in the medical field.
2025-2026					
1.	A Guest Lecture on “Digital Marketing”	10.07.25	Mr.M.Vinoth B.E Managing Director, SVT Digital Infotech, Tiruppur	63	Participants learned the significance of digital marketing strategies, including SEO, SEM, social media, content, and email marketing, and how to align campaigns with online consumer behavior and preferences.
2.	Guest Lecture on “Digital Disruption and the Future of the Global Business”	22.07.25	Dr.R.Mayilsamy, Assistant Professor of Cooperation, SRMV College of Arts and Science, Coimbatore	48	Students gained a comprehensive understanding of digital disruption and its impact on global business, explored emerging technologies like AI, Blockchain, IoT, Cloud Computing, and Big Data, and studied real-world strategies through case studies of Amazon, Tesla, and Tata Digital.
3.	Guest Lecture on “Cyber Security Careers and real-World Insights	28.07.25	Mr. Mark Roshan, Business Consultant, Crossbow Labs	47	Participants gained awareness of the importance and scope of cybersecurity, understood diverse career opportunities in the field, and learned about the skills, certifications, and academic paths needed for a successful cybersecurity career.

DEPARTMENT OF MATHEMATICS

9.7 No. of Hands-on Experiments being Conducted/ List of Activities Undertaken by Students

i) Hands-on Experiments being conducted

2022-2023

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	Hands on Training on "MATLAB for Beginners"	30.08.2022	Dr. V. Parthiban, Assistant Professor of Mathematics, Vellore Institute of Technology, Chennai	58 students	Students are able to use MATLAB programming and graphical features effectively in real-time applications.
2	Hands on Training "LaTeX for Beginners"	09.11.2022	Dr. A. Manivannan, Assistant Professor of Mathematics, Vellore Institute of Technology, Chennai	58 Students	The programme enables participants to effectively use LaTeX software for documentation.
3	Workshop on "MATLAB"	23.03.2023	Dr. V. Parthiban, Assistant Professor of Mathematics, Vellore Institute of Technology Chennai	64 Students and 02 Research Scholars	The session introduced basic MATLAB syntax, simple calculations and the graphical workspace interface.
4	Hands on Training on "TABLEAU Applications"	25.03.2023	Dr. V. Parthiban, Assistant Professor of Mathematics, Vellore Institute of Technology, Chennai	60 Students	Participants gained insights into Tableau and its tools for data visualization.

2023-2024

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Hands on Training on "Basics of MATLAB"	03.07.2023	Dr. R. Krishnasamy Assistant Professor of Applied Mathematics PSG College of Technology, Coimbatore	58 Students	Improved participants' MATLAB skills for effective use in projects and research.
2.	Hands on Training on "R-Programming"	23.02.2024	Dr. V. Kaviyarasu Associate Professor of Statistics, Bharathiar University, Coimbatore	44 Students	Students learned data analysis and visualization using R programming.
3.	Hands on Training on "LaTeX"	06.03.2024	Dr. J. Vernold Vivin Assistant Professor of Mathematics, Anna University Regional Campus, Coimbatore.	PSGR: 4 KASC: 39 Total: 43	Students learned to use the software for drawing, and documentation.
4.	Hands on Training on "Mathematical Modelling using MATLAB"	14.03.2024	Dr. L. Shangerganesh Assistant Professor & Head of Applied Sciences, NIT, Goa.	43 students	It helped students to gain practical skills in using MATLAB for data processing and analysis.
5.	Hands on Training on "Microsoft Power BI"	27.3.2024	Dr. V. Radhamani Assistant Professor of Mathematics, J. K. K. Nataraja College of Arts & Science Namakkal.	35 students	Students gained practical knowledge of using Power BI for data preparation and effective decision-making.

6.	Hands on Training on “Data Analysis”	28.3.2024	Dr. Rajkumar Rajasekaran Associate Professor, School of CSE, Vellore Institute of Technology, Vellore	KASC: 31 Govt Arts College: 6 Total: 37	Participants learned data collection, analysis, and visualization using Python and R.
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2024-2025

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Hands on Training on “MATLAB - Programming for Beginners”	07.08.2024	Dr. P. Murali Krishna Assistant Professor of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore	Maths: 53 Computer: 9 Chemistry: 5	The program enhanced students’ MATLAB proficiency in basics, functions, and graph plotting.
2.	One Day Hands on Training on “Power BI”	20.09.2024	Dr. V. Radhamani, Assistant Professor of Mathematics, J.K.K. Nataraja College of Arts and Science, Komarapalayam.	Maths: 49 Physics: 03 Chemistry: 05	Students developed practical skills in data visualization and learned to use Power BI for managing large datasets.
3.	Hands on Training on “R Programming”	21.01.2025	Dr. V. Parthiban, Associate Professor of Mathematics, Vellore Institute of Technology, Chennai.	44 Students	Students gained skills in R programming for statistical analysis.
4.	Hands on Training on “Data Analysis using Python”	26.02.2025	Dr. Rajkumar Rajasekaran, Professor, Vellore Institute of Technology, Vellore.	50 Students	Students used Python to analyze and visualize secondary data.
5.	Hands on Training “Programme on Sage Mathematics”	10.03.2025	Dr. M. Gilbert Rani, Assistant Professor of Mathematics, Arul Anandar College, Madurai.	37 Students	Students gained practical experience using Sage Mathematics for algebra, calculus, and differential equations.
6.	A Hands-on Training on “SCILAB Programming”	14.03.2025	Dr. C. Periyasamy, Assistant Professor of Mathematics, SRM Institute of Science & Technology, Chennai.	59 Students	Students enhanced their computational skills using SCILAB for mathematical modeling, simulation, and problem-solving.

2025-2026

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Hands –On-Training on “Exploring Calculus through MATLAB: Bridging Theory, Visualisation and Application”	28.08.2025	Dr. R. Krishnasamy Assistant Professor Department of Mathematics PSG College of Technology Coimbatore	39 students	Students gained practical experience in applying calculus concepts using MATLAB for visualization and problem solving. Participants learned to connect theoretical calculus principles with real-world applications through computational tools.

ii) List of Activities Undertaken by Students
a) Industrial Visits

2022-2023

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1.	I, II & III B.Sc. Mathematics	Radio Astronomy Centre and Tea Factory, Ooty.	22.12.2022	I B.Sc. – 12 II B.Sc. – 16, III B.Sc. – 35 students and 6 Faculty members	Students observed sensitive radio telescopes and learned their mathematical applications in measurements and celestial objects.
2.	II & III B.Sc. Mathematics	Regional Science Centre, Coimbatore.	24.12.2022	II B.Sc. – 16, III B.Sc. – 10 students and 5 Faculty members	Students explored interactive science experiments to understand daily-life science and ancient knowledge.
3.	III B.Sc. Mathematics	Visvesvaraya Industrial and Technological Museum, Birds Sanctuary, Bangalore.	20.02.2023 to 22.02.2023	III B.Sc. – 50 students and 5 Faculty members	Students learned the practical applications of mathematics in rocketry, fluid dynamics, and engine and printer mechanisms.
4.	III B.Sc. Mathematics	Mysore Palace, Mysore	20.02.2023 to 22.02.2023	III B.Sc. – 50 students and 5 Faculty members	Students learned how mathematics was applied in ancient architecture and using geometry and trigonometry.
5.	II B.Sc. Mathematics & III B.Sc. Mathematics	Fluid Control Research Institute, Palakkad	31.03.2023	7 Faculties II B.Sc. – 36 III B.Sc. - 44	Students learned fluid dynamics applications and how industrial processes measure and control various fluids.

2023-2024

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1	I and II B.Sc. Mathematics	Regional Science Center and Science Museum, Coimbatore	15.12.2023	Faculty - 4 I UG- 26 II UG – 29	Students learned the practical applications of science and mathematics in daily life.
2	III B.Sc. Mathematics	GD Museums,CBE.	23.01.2024	Faculty - 3 III UG- 32	Students explored the practical applications of mathematical concepts in daily life.
3.	II B.Sc. Mathematics	Research Lab, Bannari Amman Institute of Technology, Sathyamangalam	01.02.2024	Students - 27 Faculty - 02	The visit enhanced students' creativity, problem-solving skills, and interest in the subject.
4.	B.Sc. Mathematics	Industrial Visit to Mysore, Coorg and Chikkmangaluru	21.02.2024- 24.02.2024	Students - 32 Faculty - 05	Students witnessed the practical role of mathematics in life, fostering a new perspective on learning.

2024-2025

S. No	Class	Place of Visit	Date	No. of Beneficiaries	Outcome
1.	I, II & III B.Sc. Mathematics	- Radio Astronomy Centre - Tata Fundamental Research Centre, Ooty.	15.10.2024	Students: 40 Faculty :05	Students explored mathematical applications in astronomy and research, gaining insights into data analysis, signal processing, and computational methods.
2.	I, II & III B.Sc. Mathematics	- Pilikula Regional Science Center. Karnataka - Golden Temple Karnataka	21.12.2024 to 24.12.2024	Students: 25 Faculty :05	Students deepened their understanding of mathematics and strengthened problem-solving skills by applying concepts to architecture, nature, engineering, and scientific exhibits.
3.	I, II & III B.Sc. Mathematics	- Vijnan Sagar Science and Technology Park, Thrissur. - State Museum- Thrissur	25.02.2025	Students: 49 Faculty: 5	The visit showed students how mathematics is applied in science and technology, supporting advancements in engineering, physics, and biology.
4.	III B.Sc., II B.Sc., Mathematics	ISRO, Satish Dawan Space Center, Sriharikota.	28.03.2024	Students: 5 Faculty: 2	Students learned to model space missions and satellite orbits, applying mathematics to optimization and scheduling.

b) Summer School/ Internship

2022-2023

- ❖ Keerthi Krishna. K, Swetha. M, Aishwarya. S, Sowmya. M, Rhithika. S, Sivakavinesh. N, Sarvesh. G, Lekha Shree. V, Sushma. G.H, Madhumathi. R, Jeslin Joy. S, Lakshmanan. M, Monal. S, Preethi. S, Lingeshwaran. R and Mayuri Santhosh Rao Bhokare of III B.Sc. Mathematics underwent an internship on **Python with Data Analytics** at Accent Techno Soft, Coimbatore.
- ❖ Karhikeyan. J, Anushruthi. S, Abiraami. V and Manisha. V of III B.Sc. Mathematics underwent an internship on **Web Designing** at Knila IT Solutions, Coimbatore.
- ❖ Tamil Ilakiya. K and Balaji. M of III B.Sc. Mathematics underwent an internship on **Web Designing** at Zeoner, Coimbatore.
- ❖ Sajina Parveen. K, Jacquelin. S, Aparna. K, Muthulakshmi. K, Fathima Thanjeela. N, Pavithra. P and Anu Shree. P of III B.Sc. Mathematics underwent an internship on **Web Development** at NXT logics, Coimbatore.
- ❖ Malavika. P. M, Benitta Mary. S, Keerthana. D, Jeevanandham. S, Sabari. K, Jagathish. M, Gowshikan. N. R, Sandhiya. S, Suresh. V, Dinesh. A and Ramana Chandar. Rand Nandha Kumar. S of III B.Sc. Mathematics underwent an internship on **Photoshop** at Accent Techno Soft, Coimbatore.
- ❖ Nirupama. T of III B.Sc. Mathematics underwent an internship on **Statistics with Data Analytics in Excel** at Premier Industry, Coimbatore.
- ❖ Swetha. R M and Supraja. S of III B.Sc. Mathematics underwent an internship on **Data Science with R Programming** at Aakam Institute, Coimbatore.
- ❖ Shruthika. S of III B.Sc. Mathematics underwent an internship on **Industrial Statistics** at Nanjanad Indco Tea Factory, Coimbatore.

- ❖ Prashanth. R. J, Kabilan. K and Jana. M of III B.Sc. Mathematics underwent an internship on **Web Development and Introduction to MATLAB** at Zeoner, Coimbatore.

2023-2024

- ❖ S. Sivadharshini of III B.Sc. Mathematics underwent an internship on **“Basics of Auditing”** at PPS Associates, Tirupur.
- ❖ R. Yogapriya, S. Harini, S. Keerthana, G. Sujitha and P. Keerthana of III B.Sc. Mathematics underwent an internship on **“Applications of Mathematics using MATLAB”** at Aakam Industrial Training and Research Institute, Coimbatore.
- ❖ V. M. Sastha Sai of III B.Sc. Mathematics underwent an internship in **“Python Programming”** at Neelavathi Software Solutions, Coimbatore.
- ❖ M. Abhishek of III B.Sc. Mathematics underwent an internship in **“Java Programming”** at Sangam Soft Solution, Coimbatore.
- ❖ R. Mathavan, A. Arul, K. Jayasurya, R. Vishnu of III B.Sc. Mathematics underwent an internship in **“Photoshop (Effects)”** at Accent Techno Soft, Coimbatore.
- ❖ S. Thirisha, R. Srimathi, and R. Brindha of III B.Sc. Mathematics underwent an internship in **“Machine learning”** at Internshala Training, Coimbatore.
- ❖ M. Durairaj of III B.Sc. Mathematics underwent an internship in **“Finance”** at Blaze Trust, Coimbatore.
- ❖ Santhoshini of III B.Sc. Mathematics underwent an internship on **“Accounts”** at GS & Company, Coimbatore.
- ❖ P. Sowndharya of III B.Sc. Mathematics underwent an internship in **“Finance”** at Sakthi Finance, Coimbatore.
- ❖ S. Sakthi Packia Rathna of III B.Sc. Mathematics underwent an internship on **“A Study on Deposits and Interest”** at Sakthi Finance, Coimbatore.
- ❖ R. Sanmathi of III B.Sc. Mathematics underwent an internship on **“Basic of Mathematical functions in MATLAB”** at Aakam Industrial Training and Research Institute, Coimbatore.
- ❖ M. Srurthi of III B.Sc. Mathematics underwent an internship in **“Introduction to MATLAB with plotting”** at Aakam Industrial Training and Research Institute, Coimbatore.
- ❖ S. Arthi and S. Vishnupriya of III B.Sc. Mathematics underwent an internship in **“Data Analytics using R-Programming”** at Aakam Industrial Training and Research Institute, Coimbatore.
- ❖ U. Gokila of III B.Sc. Mathematics underwent an internship on **“Introduction to MATLAB”** at Aakam Industrial Training and Research Institute, Coimbatore.
- ❖ B. Keerthana of III B.Sc. Mathematics underwent an internship on **“Data Basis in R-Programming”** at Aakam Industrial Training and Research Institute, Coimbatore.
- ❖ Y. Swetha of III B.Sc. Mathematics underwent an internship on **“Calculation of Cibil Report”** at Blaze Trust, Coimbatore.
- ❖ M. Divya of III B.Sc. Mathematics underwent an internship in **“Introduction to MATLAB and SIMULINK”** at Aakam Industrial Training and Research Institute, Coimbatore.
- ❖ M. Saranya Devi and V. Deepa of III B.Sc. Mathematics underwent an internship in **“Procedures of Accounting”** at Prismatic Engineers India Private Limited, Coimbatore.
- ❖ S. Swathi of III B.Sc. Mathematics underwent an internship in **“Management Information Systems in Insurance”** at the Oriental Insurance Company Limited, Coimbatore.
- ❖ C. Sabitha of III B.Sc. Mathematics underwent an internship in **“Finance”** at Micro Mini Finance, Thiruchengode.

- ❖ S. Dharshini of III B.Sc. Mathematics underwent an internship in “**Auto Finance**” at Sri Lakshmi Finance, Mulanur.

2024-2025

- ❖ Shalini, A. Keerthi, S. Thakshinya Shri, B. S. Thanya Shri, S. Karthikeyan, R. Arockiya Reshma and S. H. Vaideeswari of III B.Sc. Mathematics underwent an internship on **Python Programming** at Stuvells Software Solutions, Coimbatore.
- ❖ N. Rakshna of III B.Sc. Mathematics underwent an internship on **Textile Industry** at Sree Knm Spinning Private Limited, Coimbatore.
- ❖ K. Priyadarshini, B. Santhiya and K. K. Dharani of III B.Sc. Mathematics underwent an internship on **Accounts and Finance** at Sree Vaari Industries, Coimbatore.
- ❖ S. Nisha, S. Shyamala and M. Karthikeyan of III B.Sc. Mathematics underwent an internship on **Number Theory** at Periyar University, Coimbatore.
- ❖ P. Katharine Merry and P. Jaculine Merry of III B.Sc. Mathematics underwent an internship on **Mathematical Modelling in Biological Applications** at Bharathiar University, Coimbatore.
- ❖ K. Priyadarshini, D. Girija and C. Tamilselvan of III B.Sc. Mathematics underwent an internship on **Python Programming** at Gateway Software Solutions, Coimbatore.
- ❖ Smrutilipi Jena of III B.Sc. Mathematics underwent an internship on **Python Programming** at Seeree Training and Development, Coimbatore.
- ❖ R. Sandhiya, S. Srivarshini and R. R. Subasri of III B.Sc. Mathematics underwent an internship on **Auditing** at Giri and Co, Coimbatore.
- ❖ K. Danya and D. Vaitheeswari of III B.Sc. Mathematics underwent an internship on **Dye Casting Moulding Tools of CNC Machine** at Mathi Engineering Industries, Coimbatore.
- ❖ P. Hariprasath of III B.Sc. Mathematics underwent an internship on **Goods and Services Tax** at Jds Associates Charter, Coimbatore.
- ❖ Abinaya Sri of III B.Sc. Mathematics underwent an internship on **Auditing and GST Filling** at Lakshmi Associates, Coimbatore.
- ❖ G. Ganthi of III B.Sc. Mathematics underwent an internship on **Impact of Graphic Designing Social media** at Tamil News TN, Coimbatore.
- ❖ M. Gokulakannan of III B.Sc. Mathematics underwent an internship on **Machinery and Tissue paper manufacturing** at Feathure Touch Tissues, Coimbatore.
- ❖ P. Sandhiya of III B.Sc. Mathematics underwent an internship on **Tally ERP 9** at Royal Institute of Fire and Safety, Coimbatore.

2025-2026

- ❖ Rokini R of III B.Sc. Mathematics underwent an internship on Chrome Electro Plating at **Auto Plates**, Coimbatore from 12.05.2025 to 28.05.2025.
- ❖ Sruthi Sree N of III B.Sc. Mathematics underwent an internship on Python Development at **Adhoc Softwares**, Coimbatore from 07.05.2025 to 26.05.2025.
- ❖ Sri Ramalashami S, Sathya G, Ridhanya S K, Divinkumar K, Kaviya S, Aswanth S Kumar and Rakshana K of III B.Sc. Mathematics underwent an internship on Python with Data Science at **Accent Techno Soft**, Coimbatore from 08.05.2025 to 24.05.2025.

- ❖ Richard Edison D and Harish N of III B.Sc. Mathematics underwent an internship on Python with Data Analytics at **Accent Techno Soft**, Coimbatore from 19.05.2025 to 04.06.2025.
- ❖ Pavithra M of III B.Sc. Mathematics underwent an internship on Python with Artificial Intelligence at **Net Tet Solutions**, Coimbatore from 23.05.2025 to 09.06.2025.
- ❖ Priyanka Teres M, Boomidharshini P, Akshara P, Akalya S, Birunda Devi K and Nazarin A of III B.Sc. Mathematics underwent an internship on R-Programming at **Gateway Software Sollutions**, Coimbatore from 19.05.2025 to 06.06.2025.
- ❖ Pawan Krishnan B, Karthikai Kumaran S R and Pavithra V S of III B.Sc. Mathematics underwent an internship on Tally Software – An Accounting Tool at **Shanmugam Vasudevan and Company**, Coimbatore from 12.05.2025 to 28.05.2025.
- ❖ Prathiksha M, Sowndarya R, Arthi N, Muthumari S, Sharmila R and Eshasagar S of III B.Sc. Mathematics underwent an internship on Artificial Intelligence for Mathematics at **Bannari Amman Institute of Technology**, Coimbatore from 12.05.2025 to 26.05.2025.
- ❖ Raaghav M of III B.Sc. Mathematics underwent an internship on Data Analytics Using Python at **Knowrich Academy**, Coimbatore from 19.05.2025 to 04.06.2025.
- ❖ Sakthisudharsan J and Kowshikan B of III B.Sc. Mathematics underwent an internship on Python Development at **Nextlogic Software Solution**, Coimbatore from 13.05.2025 to 29.05.2025.
- ❖ Visakan R of III B.Sc. Mathematics underwent an internship on Tall Prime – Accounting Software at **Thathvamasi Business Software**, Coimbatore from 19.05.2025 to 13.06.2025.

c) Conferences / Seminars / Workshops/ Competitions/ Training Attended 2022-2023

- ❖ Manisha. V, Abiraami. V, Sushma and Pavithra of III B.Sc. Mathematics participated in **Intercollege meet Infinnovation- 2023** organized by Sri Krishna Arts and Science College, Coimbatore on 25-01-2023. Manisha. V and Abiraami. V won the **Second Place** in podcast.
- ❖ Jayasurya. K and M. Abishek of II B.Sc. Mathematics participated in Intercollege meet **Infinnovation- 2023** organized by Sri Krishna Arts and Science College, Coimbatore on 25-01-2023. Jayasurya. K won the **First Place** in podcast event
- ❖ Jagathish. M and Mayuri Santhosh Rao Bhokare of III. B.Sc. Mathematics attended **International Conference on Recent Development in Computation and Biological Science** on 10.03.2023 at Sri Ramakrishna College of Arts and Science for Women, Coimbatore.
- ❖ Gowshikan N. R, Karthikeyan. J, Nandhakumar and Sivakavinesh of III B.Sc. Mathematics participated and won the **Overall Runners Trophy** in Intercollege meet **SESHAT-2023** organized by PSGR Krishnammal College for Women, Coimbatore on 07.02.2023
- ❖ Sabari. K, Suresh. Y and Prashanth. R of III B.Sc. Mathematics participated in Intercollege meet **X.TASY- 2023** organized by Dr.N.G.P Arts and Science College, Coimbatore on 09.03.2023. Sabari won the **First Place** in drawing event.

2023-2024

- ❖ S. Swathi and M. Saranya Devi of III B.Sc. Mathematics participated in “**A Two day State Level workshop on LaTeX**” organized by Sri Ramakrishna College of Arts and Science held on 03.08.2023 – 04.08.2023.
- ❖ R. Vishnu, A. Arul, M. Durairaj, K. Jayasuriya and M. Abhisek of III B.Sc. Mathematics participated in the “**National level seminar on Joy of Mathematics in Music**” organized by Coimbatore Institute of Technology held on 04.09.2023.
- ❖ K. Jayasurya, S. Dharshini, C. Sabitha, S. Swathi, and B. Keerthana of III B.Sc. Mathematics attended the “**Python Foundation Course**” organized by Zenteiq Edtech, Bangalore held from 15.09.2023 to 17.09.2023.
- ❖ S. Santhoshini and K. Jayasurya participated in III B.Sc. Mathematics participated in “**VIT – MATHFEST 2023**” organized by Vellore Institute of Technology, Vellore held on 18.12.2023.
- ❖ S. Vishnupriya, S. Dharshini, B. Keerthana, A. Arthi, M. Sruthi, S. Santhoshini and C. Sabitha of III B.Sc. Mathematics participated in “**State Level Inter-Collegiate Competitions**” organized by RVS College of Arts and Science and S. Dharshini, C. Sabitha won **II place** in the Rangoli Competition held on 20.12.2023.

2024-2025

- ❖ K. Priya Dharshini, R. Arockiya Reshma, and S. H. Vaideeswari of III B.Sc. Mathematics participated in “**PIESTA 2k24 Vellalar College for Women**” organized by The Department of Mathematics of Vellalar College for Women (Autonomous), Erode, held on 22.07.2024. **R. Arockiya Reshma and S. H. Vaideeswari won I place in Manculator, while K. Priyadharshini won a prize in Puzzle.**
- ❖ M. Induja of I B.Sc. Mathematics participated in **Elocation** on the occasion of **Sri Ramakrishna Paramahansa’s Birthday Celebrations in Ramakrishna Mission Vidyalaya** on 24.09.2024
- ❖ R. Arockiya Reshma, and H. S. Vaideeswari of III B.Sc. Mathematics participated in “**A two-day MTTS programme at SNR College**” organized by **Sri Ramakrishna College of Arts & Science for Women** held on 9.12.2024 & 10.12.2024.
- ❖ M. Induja of I B.Sc. Mathematics participated in the **Idea Ignite** competition on “**Innovation from concepts 2 Creation**” conducted by **Institution’s Innovation Council, Nirmala College for Women** on 10.12.2024.
- ❖ L. Shalini, P. Jaculine Merry, R. Arockiya Reshma, and H. S. Vaideeswari of III B.Sc. Mathematics participated in the **Workshop on “AI Tools for Research**” organized by **Sri Ramakrishna College of Arts & Science for Women** held on 23.01.2025.
- ❖ L. Shalini, P. Jaculine Merry, R. Arockiya Reshma, and H. S. Vaideeswar of III B.Sc. Mathematics participated the **International Conference on “Innovations in Intelligent Computing and Biological Sciences**” organized by **Sri Ramakrishna College of Arts & Science for Women** held on 24.01.2025.
- ❖ Santhosh of I B.Sc. Mathematics **won III place** in the event **Math Modelling in Infifnity-2k25** organized by **Gandhigram Rural Institute**, held on 20.03.2025.

2025-2026

- ❖ Priyanka Teres D of III B.Sc. Mathematics participated in “**Quiz Whiz on Statistics in commemoration of National Statistics Day**” organized by the Department of Mathematics, PSGR Krishnammal College for Women, Coimbatore, held from 28.06.2025 to 30.06.2025.

- ❖ Priyanka Teres D of III B.Sc. Mathematics participated in **“The three-day National Level Workshop titled Advanced Microsoft Excel for Data Analysis”** organized by Digi Skill Development Centre & Training Institute, Mumbai, held from 06.07.2025 to 07.07.2025.
- ❖ Pawan Krishnan B and Prathiksha M of III B.Sc. Mathematics participated in **“Quiz – GRAVIX”** at PSGR Krishnammal College for Women, Coimbatore on 07.08.2025.
- ❖ Boomi Dharshini P and Priyanka Teres D of III B.Sc. Mathematics participated in **“the Essay Competition”** organized by the Regional Office, Coimbatore on 25.08.2025.

d) Paper Presentation

2022-2023

- ❖ Gowshikan N.R, Karthikeyan. J, Sajina Parveen, Anushree, Jacqueline and Fathima presented a paper on **Applications of Golden Ratio in International Conference on Mathematical Analysis in Computational Biology and Data Science** in PSGR Krishnammal College for Women, Coimbatore from 24.01.2023 to 25.01.2023
- ❖ Suresh, Nandhakumar, Sarvesh, Shruthika and Supriya. S participated in **National Conference on Differential Equation and their Application in Mathematical Model** in JANSONS Institute of Technology, Coimbatore from 27.10.2022 to 8.10.2022.
- ❖ Nirupama.T presented a paper on **Statistics in Data Analysis in National Science Conclave** in Jamal Mohamed College, Tiruchirappalli on 27.02.2023.
- ❖ Abiraami. V, Jeslin Joy. S, Mayuri Santosh Rao Bhokare, Shruthika. S and Jagatish. M presented a paper on **Mathematical Modelling on Plant Virus using Differential Equation in International Conference on Recent Developments in Computational and Biological Sciences** at Sri Ramakrishna College of Arts and Science Women on 10.03.2023.
- ❖ Lingeshwaran, Sarvesh, Sushma and Supraja presented a paper **on Earthquake Data Analysis using MATLAB in International Conference in Innovative Technologies and its Application** at Dr. R. V. Arts and Science College on 21.03.2023. Sushma won the **Best Paper Presentation award**.

2023-2024

- ❖ K. Jayasurya presented a paper on **“Prime Numbers in Cryptography”** at the International Conference on Emerging Trends in Mathematics and Statistics organized by Sri Ramakrishna College of Arts & Science, Coimbatore on 23.02.2024.
- ❖ K. Jayasurya presented a paper on **“Python Program to generate Topology with the aid of a basis”** at the National Conference on Mathematical Modeling and Computation organized by PSGR Krishnammal College for Women, Peelamedu on 14.03.2024 – 15.03.2024.
- ❖ S. Dharshini and C. Sabitha presented a paper on **“Monitoring the level of Water Pollution using Dilutional Factors”** at the International Conference on Socioeconomic Impact of Pollution in Water Bodies and Remedial Measures organized by Kongunadu Arts and Science College on 18.12.2023.
- ❖ S. Sakthi and S. Santhoshini presented a paper on **“Detection of Water Pollution using Mathematical formula”** at the International Conference on Socioeconomic Impact of Pollution in Water Bodies and Remedial Measures organized by Kongunadu Arts and Science College on 18.12.2023.

- ❖ K. Jayasurya and M. Abhishek presented a paper on **“Mathematical approach to Water pollution control”** at the International Conference on Socioeconomic Impact of Pollution in Water Bodies and Remedial Measures organized by Kongunadu Arts and Science College on 18.12.2023.
- ❖ S. Sakthi presented a paper **“On Grundy Coloring of Join graph of Path graph with Star graph Families and Complete graph”** at the 7th International Conference on Current Scenario in Pure and Applied Mathematics (ICCSPAM 2024) organized by Kongunadu Arts and Science College, Coimbatore on 30.01.2024 – 31.01.2024 and bagged the **Best Paper Award**.
- ❖ S. Swathi presented a paper **“An In-Depth Fundamental Assessment of Tata Powers Financial Factors”** at the 7th International Conference on Current Scenario in Pure and Applied Mathematics (ICCSPAM 2024) organized by Kongunadu Arts and Science College, Coimbatore on 30.01.2024 – 31.01.2024.
- ❖ S. Arthi presented a paper **“Analyzing the Stock price movement of Tata power - A Comprehensive Technical Analysis for Investment Decisions”** at the 7th International Conference on Current Scenario in Pure and Applied Mathematics (ICCSPAM 2024) organized by Kongunadu Arts and Science College, Coimbatore on 30.01.2024 – 31.01.2024
- ❖ Richard Edison. M, Pawan Krishnan. B, Prathiksha. M and Arthi. N presented a poster on the theme **“Igniting Scientific Thinking”** organized by the Department of Computer Science, Kongunadu Arts and Science College on 26.03.2024.

2024-2025

- ❖ C. Tamilselvan and P. Hariprasath of III B.Sc. Mathematics presented a paper entitled **Applications of differential equations in medical field** in the **National Level Inter-Collegiate South Indian Cultural Fest, NAYA 2K25**, in Sankara College of Science & Commerce, Coimbatore, from 21.02.2025.
- ❖ K. Priyadarshini and K. Priyadharshini of III B.Sc. Mathematics presented a paper entitled **Applications of operations Research** in the **National Level Inter-Collegiate South Indian Cultural Fest, NAYA 2K25**, in Sankara College of Science & Commerce, Coimbatore, from 21.02.2025.
- ❖ Arockiya Reshma R and Vaideeswari S H of III B.Sc. Mathematics presented a paper entitled **RSA Algorithm for Tamil Language** at Sri Ramakrishna College of Arts and Science for women on 24.01.2025.
- ❖ Shalini L and Jaculine Merry of III B.Sc. presented a paper entitled **Statistical Analysis of Share Price Movement of Sun Pharmaceutical Industries Ltd** at Sri Ramakrishna College of Arts and Science for women on 24.01.2025.
- ❖ Priyadarshini K, Sandhiya P and Girija D of III B.Sc. Mathematics presented a paper entitled **Applications of Operations research** at International Conference on Current Scenario in Pure and Applied Mathematics 2025 in Kongunadu Arts and Science College, Coimbatore.
- ❖ Smrutilipi Jena and Gokulakannan M presented a Paper entitled **Mathematical Modelling in Machinery** in PSG College of Arts and Science on 27.02.2025 and 28.02.2025.
- ❖ D Priyankateres of II B.Sc. Mathematics Presented a paper on **Cultural Heritage and Lifestyle changes due to Aquatic Pollution** in the second International conference on Socio Economic impacts of Pollution in Water Bodies and Remedial Measures on 6th and 7th January 2025 at Kongunadu Arts and Science College, Coimbatore.

2025-2026

- ❖ Priyanka Teres D of III B. Sc. Mathematics has participated in Paper presentation organized by **“One day workshop on Innovations in Learning Mathematics- SOLSTICE-2025”** at Department of Mathematics, Kongunadu Arts and Science College, Coimbatore, held on 19.09.2025.

e) Inter Departmental Activities

2022-2023

- ❖ Ramana Chandar. R, Preethi. S of III. B.Sc. Mathematics attended workshop on Cloud Computing on 19.09.2022 at Department of Computer Science, Kongunadu Arts and Science College, Coimbatore.
- ❖ Jagathish. M, Sandhiya. S of III. B.Sc. Mathematics attended **Hands on Training Programme on Servicing of Electric and Electronic Lab Equipment** on 24.01.2023 at Department of Physics, Kongunadu Arts and Science College, Coimbatore.
- ❖ **3 Students** of III B.Sc. Mathematics attended two day National Conference on **Scientific Input, Technological Advancement and Women Empowerment for Sustainable Development**, jointly organized by Indian Science Congress Association, Coimbatore Chapter and Kongunadu Arts and Science College, Coimbatore on 02.02.2023 and 03.02.2023
- ❖ Anushruthi. S of III. B.Sc. Mathematics attended workshop on **Nanomaterials for energy and its applications** on 04.02.2023 at Department of Physics, Kongunadu Arts and Science College, Coimbatore.
- ❖ Lakshmanan. M of III. B.Sc. Mathematics attended workshop on **Usage of IOT devices** on 11.02.2023 at Department of Computer Science, Kongunadu Arts and Science College, Coimbatore.
- ❖ Deepa. V, Swetha. Y, Saranya Devi. M of II B.Sc. Mathematics and Rakshna of I B.Sc. Mathematics attended the **Workshop on SPSS** on 11.02.2023 at Department of Computer Science, Kongunadu Arts and Science College, Coimbatore.
- ❖ Tamil Ilakiya.K, Sowmya.M and Supraja. S of III. B.Sc. Mathematics attended **Workshop on Robotics and its Application** on 14.03.2023 at Department of Physics, Kongunadu Arts and Science College, Coimbatore.
- ❖ R Vishnu Vardhan, A Arul, S Swathi, V Deepa, M Saranya Devi and M Abishek of II B.Sc. Mathematics participated in **Workshop on Mobile Service** on 24.03.2023 at Department of Computer Science, Kongunadu Arts and Science College, Coimbatore.

2023-2024

- ❖ Keerthana, S. Dharshini, S. Arthi, S. Santhoshini, S. Vishnupriya, P. Sowndarya participated in an International Webinar on “**Awareness Programme on Higher Education and Job Opportunities in Science**” organized by Department of Physics under DBT Star College Scheme on 24-01-2024.
- ❖ Few of our students attended a Seminar on “**Futuristic trends and opportunities in Basic Science**” organized by the Department of Physics under DBT Star College Scheme on 08.09.2023
- ❖ UG Students from Department of Mathematics participated in the “**National Science Day celebrations- Tesla Fest 2024**” organized by the Department of Physics on 28.02.2024
- ❖ 5 students from our department attended a guest lecture on “**Understanding Intellectual Property Rights**” organized by the Department of Physics on 20.09.2023

2024-2025

- ❖ S. Gayathri, P. Nagalakshmi, D. Kiruthika and G. Karthika of I B.Sc. Mathematics participated in a “**Awareness Programme on Digital Literacy on MS Office, Current Technology and Common Digital Utility**”, organized by the Department of Computer Science Under DBT Star college Scheme from 08.07.2024-12.07.2024.
- ❖ S. Gnamini of I B.Sc. Mathematics **won I place in Drawing**, organized by the Department of Computer Science, in connection with **National Space Day 2024** under DBT Star College Scheme from 08.07.2024-03.09.2024.

- ❖ C. Tamilselvan of III B.Sc. Mathematics **won I place in Poetry** organized by the Department of Tamil as part of **Mahakavi Bharathiyar's Memorial Day** on 11.09.2024.
- ❖ R. R. Subasri and R. Arockiya Reshma of III B.Sc. Mathematics participated in **Quiz** in the **Inter departmental Fest BAZOOKA'24** organized by the Department of English on 01.10.2024.
- ❖ A. M. Induja, G. Karthika, K. Sathya and S. Gnamini of I B.Sc. Mathematics participated in **Face Painting** in the **Inter departmental Fest BAZOOKA'24** organized by the Department of English on 01.10.2024.
- ❖ S. Gayathri, S. Gnamini and K. Sathya of I B.Sc. Mathematics participated in **Spell Bee** in the **Inter departmental Fest BAZOOKA'24** organized by the Department of English on 01.10.2024.
- ❖ B. Pawan Krishnan and D. Richard Edison of I B.Sc. Mathematics participated **"National Level Symposium"** organized by the Department of Mathematics on 13.12.2024 & 14.12.2024.
- ❖ R. R. Subasri, R. Arockiya Reshma and K. Priyadharshini of III B.Sc. Mathematics participated in **"Interdepartmental fest TECHNO FUSION'24"** organized by Department of Computer Science on 17.12.2024. **R. Arockiya Reshma won V place in Quiz, R. R. Subasri won II Place in Poster Presentation, and K. Priya Dharshini won II place in Connection.**
- ❖ A. M. Induja and S. Srivarshini of B.Sc. Mathematics participated in a national-level conference on **"Artificial Intelligence in Shifting Global Business"** organized by the Department of Commerce on 03.01.2025.
- ❖ S. Gnamini of I B.Sc. Mathematics **won Second Place** in the **Drawing competition** conducted on the occassion of **World Wetland Day 2025** organized by Department of Zoology on 03.02.2025.
- ❖ A. Santhosh of I B.Sc. Mathematics participated in **Science Exhibition** conducted by the Department of Physics on 25.02.2025.
- ❖ K. Priyadharshini, B. Santhiya, C. Tamilselvan, K. K. Dharani and D. Vaideeswari of III B.Sc. Mathematics participated in **"The Western Ghats Fest"** organized by the PG and Research Department of Zoology and Wildlife Biology on 06.03.2025 & 07.03.2025.
- ❖ B. Santhiya of III B.Sc. Mathematics participated in the **National level Students Start-up Conclave, Expro and Intercollegiate Meet** and **won I place** in the event Mathematical Model organized by Department of Commerce with Information Technology and Department of Mathematics of Kongunadu Arts and Science College held on 13.03.2025.

2025-2026

- ❖ **Pawan Krishnan B** of III B.Sc. Mathematics participated in *Debate* in **"GRAVIX"** organized by the Anti-Corruption District at Kongunadu Arts and Science College, Coimbatore on 13.09.2025.
- ❖ Pavithra V S of III B. Sc. Mathematics participated Poster making and Quiz comeptitions held commemorate **"World's Coconut day-2025"** organized by PG and Research Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore on 02.09.2025.
- ❖ Divin Kumar K, Eshasagar S, Visakaran R, Boomi Dharshini P, Sruthi Sree N and Priyanka Teres D of III B. Sc. Mathematics participated in the Poster making held to commemorate **"World's Coconut day-2025"** organized by PG and Research Department of Biotechnology, Kongunadu Arts and Science College, Coimbatore on 02.09.2025.
- ❖ Divin Kumar K, Rokini R and Harish of III B. Sc. Mathematics participated in the Connection competition in **"BAZOOKA 2025"** organized by the Department of English at Kongunadu Arts and Science College, Coimbatore on 21.08.2025.

- ❖ Rokini R, Priyanka Teres D and Sruthi Sree N of III B. Sc. Mathematics participated Spell Bee in “BAZOOKA 2025” organized by the Department of English at Kongunadu Arts and Science College, Coimbatore on 21.08.2025.

9.8 No. of New Experiments Introduced

2022-2023

III B.Sc Mathematics - Programming in C - Practical

- (i) Find the correlation and regression
- (ii) Find the trace of the matrix
- (iii) Find the standard deviation
- (iv) Program for Bisection Method.
- (v) Program for Newton Raphson Method

III B.Sc Mathematics - Fundamentals of LaTeX-Practical

- (i) Use the LaTeX package “tikz” to draw the Petersen and Nauru diagrams.
- (ii) Create molecular orbital diagrams for Homo and Hetero diatomic molecules by using MO diagram package.
- (iii) Merge the coding of R with the LaTeX document and generate the output.
- (iv) Create scientific poster using Tikz poster or beamer poster package.

Practicals done beyond the syllabus

- i) Analysing the Earthquake data using MATLAB
- ii) Plotting of statistical data using MATLAB
- iii) Compute the maxima and minima for the two variable functions using MATLAB
- iv) Plot 3D curves and surfaces using MATLAB
- v) Solve the system of linear equations using MATLAB
- vi) Draw the figures for chemistry formula using the LaTeX package \chemfig.
- vii) C Program to identify the different kinds of roots for quadratic equations.
- viii) C Program to find rank correlation.
- ix) C Program to find coefficient of variation.

2023-2024

III B.Sc. Mathematics – Core Practical - Programming in C - Practical

- i)** Program to calculate value of nCr using recursion
- ii)** Program to find the Geometric mean of n numbers
- iii)** Program to find the Harmonic mean of n numbers

Program done beyond the syllabus

- i)** Image segmentation using MATLAB
- ii)** Visual cryptography using MATLAB
- iii)** Preparation of Research Papers using LaTeX Template of various Journals
- iv)** Prepare various documents as per the Templates of Overleaf in www.overleaf.com

MATLAB Programs:

- i) Plot multiple 2D graphs in a single figure window using subplots for sine, cosine and tangent functions using MATLAB.
- ii) Perform matrix operations like addition, multiplication and transpose using MATLAB.
- iii) Program to find the roots of a quadratic equation and display whether they are real and distinct, real and equal or complex using MATLAB.
- iv) Plot a 3D surface plot for the function $z=x^2+y^2$ over a specified range of x and y values using MATLAB.

LaTeX Programs:

- i) Write a thesis or project report template in LaTeX with structured sections, title page, and bibliography.
- ii) Prepare a document compiling mathematical derivations, multi-line equations, and theorems using amsmath and breqn packages in LaTeX.

9.9 Publications (Scopus Indexed) / Patents, if any.

- ❖ J.Christy Jenifer and V.Kokilavani, **Intuitionistic fuzzy generalized α -connectedness in Intuitionistic fuzzy topological spaces**, Mathematical statistician and Engineering Applications, Pg. no.3732-3737, August 2022, - Scopus Indexed.
- ❖ C. Ravichandran, V. Sowbakiya and Kottakkaran Sooppy Nisar, **Study on existence and data dependence results for fractional order differential equations**, Chaos, Solitons & Fractals, Vol. No.: 160, Pg. No. 1-8, 2022 –SCI and Scopus Indexed.
- ❖ K. Kaliraj, M. Manjula and C. Ravichandran, **New existence results on nonlocal neutral fractional differential equation in concepts of Caputo derivative with impulsive conditions**, Chaos, Solitons & Fractals, Vol. No.: 161, Pg. No. 1-1, 2022 – SCI and Scopus Indexed.
- ❖ K. Kaliraj, KS. Viswanath, K. Logeswari and C. Ravichandran, **Analysis of Fractional Integro–Differential Equation with Robin Boundary Conditions Using Topological Degree Method**, International Journal of Applied and Computational Mathematics, Vol. No.: 8, Pg. No. 1-17, 2022 – Scopus Indexed.
- ❖ Kottakkaran Sooppy Nisar, C. Ravichandran, Abdel-Haleem Abdel-Aty, Ibrahim S Yahia and Choonkil Park, **Case study on total controllability and optimal control of Hilfer neutral non-instantaneous fractional derivative**, Fractals, Vol. No.: 30, Pg. No. 1-17, 2022 – SCI, SCIE and Scopus Indexed.
- ❖ Kottakkaran Sooppy Nisar, V Vijayaraj, N Valliammal, K Logeswari, C Ravichandran, Abdel-Haleem Abdel-Aty and Ibrahim S Yahia, **A Note On Controllability Of Noninstantaneous Impulsive Atangana–Baleanu–Caputo Neutral Fractional Integrodifferential Systems**, Fractals Pg. No.: 2240203, 2022 - SCI, SCIE and Scopus Indexed.
- ❖ C. Ravichandran, K. Jothimani, Kottakkaran Sooppy Nisar, Emad E Mahmoud and Ibrahim S Yahia, **An interpretation on controllability of Hilfer fractional derivative with nondense domain**, Alexandria Engineering Journal, Vol. No.: 61, Pg. No. 9941-9948, 2022 – SCIE and Scopus Indexed.

- ❖ K Jothimani, **C Ravichandran**, Vipin Kumar, Mohamed Djemai, and Kottakkaran Sooppy Nisar, **Interpretation of Trajectory Control and Optimization for the Nondense Fractional System**, Interpretation of Trajectory Control and Optimization for the Nondense Fractional System, Vol. No.: 8, Pg. No. 1 - 14, 2022 – Scopus Indexed.
- ❖ K Kaliraj, PK Priya and **C Ravichandran**, **An Explication of Finite-Time Stability for Fractional Delay Model with Neutral Impulsive Conditions**, Qualitative Theory of Dynamical Systems, Vol. No.: 21, Pg. No. 1 - 17, 2022 – Scopus Indexed.
- ❖ Veliappan Vijayaraj, **C Ravichandran**, Thongchai Botmart, Kottakkaran Sooppy Nisar, Kasthurisamy Jothimani, **Existence and data dependence results for neutral fractional order integro-differential equations**, AIMS Mathematics, Vol. No.: 8, Pg. No. 1055 - 1071, 2022 – SCIE and Scopus Indexed.
- ❖ Kottakkaran Sooppy Nisar, R Jagatheeshwari, **C Ravichandran**, P Veerasha, High performance computational method for fractional model of solid tumour invasion, Ain Shams Engineering Journal, 102226, 2023– SCIE and Scopus Indexed.
- ❖ Ahmed Morsy, Kottakkaran Sooppy Nisar, **C Ravichandran**, Chandran Anusha, Sequential fractional order Neutral functional Integro differential equations on time scales with Caputo fractional operator over Banach spaces, AIMS Mathematics, Volume 8, Issue 3, 5934-5949, 2023– SCIE and Scopus Indexed.
- ❖ M Manjula, K Kaliraj, Thongchai Botmart, Kottakkaran Sooppy Nisar, **C Ravichandran**, Existence, uniqueness and approximation of nonlocal fractional differential equation of sobolev type with impulses, AIMS Mathematics, Volume 8, Issue 2, 4645-4665, 2023– SCIE and Scopus Indexed.
- ❖ Ika H. Agustin, Liliek Susilowati, Dafik, Ismail N. Cangul and **N. Mohanapriya**, **On the vertex irregular reflexive labeling of several regular and regular-like graphs**, Journal of Discrete Mathematical Sciences and Cryptography, <https://doi.org/10.1080/09720529.2022.2063543>, 2022 – Scopus and SCIE Indexed.
- ❖ Raúl M. Falcón, **Nagaraj Mohanapriya** and Venkatachalam Aparna, Optimal Shadow Allocations of Secret Sharing Schemes Arisen from the Dynamic Coloring of Extended Neighborhood Coronas, Mathematics, Vol.No. 10(2), 2022, <https://doi.org/10.3390/math10122018> - Scopus and SCIE Indexed.
- ❖ T Nandhini, **M Vigneshwaran**, On α $g\# \psi$ μ^* -closed sets and α $g\# \psi$ μ^* -continuous in hereditary generalized topological spaces, Asian-European Journal of Mathematics, <https://doi.org/10.1142/S1793557123501498> 2023. Scopus Indexed.
- ❖ R Girimurugan, KM Arunraja, A Shanmugam, S Saranya, **M Vigneshwaran**, The effects of nano-alumina particles on the enrichment of tensile, flexural and impact properties of carbon fiber-reinforced epoxy composites, Materials Today: Proceedings, 2023. Scopus Indexed.
- ❖ Suja Thangaraj, **M Vigneshwaran**, M Muthuraj, R Shenbagaraj, R Girimurugan, Distinctive study on banana/sisal fiber hybrid composites filled with nano marble dust particles, Materials Today: Proceedings, 2023, Scopus Indexed.
- ❖ R Girimurugan, B Babu, R Saravanan, **M Vigneshwaran**, S Mehanathan, Effect of kapok seed powder on mechanical and water intake properties of untreated kenaf fiber composites, Materials Today: Proceedings, 2023, Scopus Indexed.
- ❖ T Deepa, **M Venkatachalam**, Ismail Naci Cangul, On r-dynamic chromatic number of some brick product graphs $C(2n, 1, p)$, Asian-European Journal of Mathematics, Volume 15, Issue 06, 2250102, 2022, Scopus Indexed.
- ❖ G. Nandini, **M. Venkatachalam**, Vernold Vivin.J, Dafik, On r-Dynamic Coloring of n-Sunlet Graph Families, Proceedings of the Jangjeon Mathematical Society, 26(1), 23-42, 2023. Scopus Indexed.

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- ❖ Raúl M. Falcón, **M. Venkatachalam**, S. Gowri, G. Nandini, The r -dynamic edge coloring of a closed helm graph, *Revista de la Unión Matemática Argentina*, 2023.
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- ❖ V.Vijayaraj, **C Ravichandran**, Panumart Sawangtong, Kottakkaran Sooppy Nisar, Existence results of Atangana-Baleanu fractional integro-differential inclusions of Sobolev type, *Alexandria Engineering Journal*, 66(2023), 249-255. Indexed in Scopus, SCIE.
- ❖ M Sivashankar, S Sabarinathan, Kottakkaran Sooppy Nisar, **C Ravichandran**, BV Senthil Kumar, Some properties and stability of Helmholtz model involved with nonlinear fractional difference equations and its relevance with quadcopter, *Chaos, Solitons & Fractals*, 168, 2023, 113161. Indexed in Scopus, SCI.
- ❖ Ika Hesti Agustin, M Imam Utoyo, Dafik, **N Mohanapriya**, Slamin, The Reflexive Vertex Strength on Cycle and Generalized Friendship Graph, *Asian-European Journal of Mathematics*, <https://doi.org/10.1142/S1793557123501371>, 2023. Indexed in Scopus
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- ❖ Xiaoli Qiang, Saber Omid, **P. Sathishmohan**, K. Lavanya, and K. Rajalakshmi, The Separation Properties of Binary Topological Spaces, *Advances in Mathematical Physics* Volume 2023, Article ID 4384483, 7 pages <https://doi.org/10.1155/2023/4384483>. Indexed in Scopus.
- ❖ **E Prakash**, P Sathishmohan, KS Viplavanjali, K Rajalakshmi, On KS_{gs} (KS_{sg})-Irresolute Functions in Kasaj Topological Spaces, *Mathematical Statistician and Engineering Applications*, Volume 71, Issue 4, 3572-3581, 2022. Indexed in Scopus.
- ❖ **P Sathishmohan**, M Sindhu, K Lavanya, K Rajalakshmi, On KS_{gp} (KS_{gsp})-Irresolute Functions in Kasaj Topological Spaces, *Mathematical Statistician and Engineering Applications*, 71, Issue 4, 3525-3533, 2022. Indexed in Scopus.
- ❖ **SPR Priyalatha**, Wadei Al-omeri, S. Vanitha, On nano soft ideal topological space, *AIP Conference Proceedings*, 2718, 1, 2023- Scopus indexed.

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- ❖ E Thilakraj, K Kaliraj, C Ravichandran, M Manjula published a paper entitled “**New Investigation on controllability of sobolev-type Volterra-Fredholm integro-differential equation with non-local condition**”, in the journal Results in Control and Optimization, Vol:15 (2024) 100418 with the **acknowledgement of DBT fund of grant no HRD-1101/30/2021-HRD-DBT**
- ❖ K Damodharan, M Vigneshwaran, published a paper entitled “**N-Closure and N-Interior in Neutrosophic Topological Spaces**”, in the journal Neutrosophic Sets and Systems, Vol:66 No:1 (2024) 07.
- ❖ T Nandhini, M Vigneshwaran, “**On $\alpha g^{\#}\psi\mu^*$ -closed sets and $\alpha g^{\#}\psi\mu^*$ -continuous in hereditary generalized topological spaces**”, Asian-European Journal of Mathematics, Vol:16 No:8 (2023) 2350149.
- ❖ H. Agustin, A Irin Feno, K Abirami, M Venkatachalam, Dafik, N. Mohanapriya, published a paper entitled “**On r-dynamic Coloring of Ladder Graph and Tadpole Graph Using m-shadow Operation**”, in the journal Contemporary Mathematics, Vol:5 No:1 (2024) 827-843.
- ❖ Raúl M Falcón, M Venkatachalam, S Julie Margaret, published a paper entitled “**Solving the b-coloring problem for subdivision-edge neighborhood coronas**”, in the journal Discrete Mathematics, Algorithms and Applications, Vol:16 No:2 (2024) 2350009.
- ❖ A Irin Feno, M Venkatachalam, Laxmi Rathour, İsmail Cangül, K Abirami, published a paper entitled “**On r-dynamic k-coloring of ladder graph families**”, in the journal Discrete Mathematics, Algorithms and Applications, 2024.
- ❖ Dafik, K Rajalakshmi, M Venkatachalam, S. Lavanya, I. H. Agustin, published a paper entitled “**An encryption method for optimizing replical's in cloud computing platform using packing coloring**”, in the journal Proceedings of the Jangjeon Mathematical Society, Vol:27 No:1 (2024) 17-28.
- ❖ Raúl Manuel Falcón Ganformina, Mathiyazhagan Venkatachalam, Sathasivam Gowri, Gnanasekaran Nandini, published a paper entitled “**The r-dynamic edge coloring of a closed helm graph**”, in the journal Revista de la Unión Matemática Argentina, Vol:65 No:2 (2023) 331-346.
- ❖ C Anusha, C Ravichandran, Kottakkaran Sooppy Nisar, Suliman Alsaheed, Shankar Rao Munjam, published a paper entitled “**Periodic Boundary Value problem for the Dynamical system with neutral integro-differential equation on time scales**”, in the journal Partial Differential Equations in Applied Mathematics, Vol:10 (2024) 100691.
- ❖ Arunachalam Selvam, Sriramulu Sabarinathan, Kottakkaran Sooppy Nisar, Chokkalingam Ravichandran, Beri Venkatachalapathy Senthil Kumar, published a paper entitled “**Results on Ulam-type stability of linear differential equation with integral transform**”, in the journal Mathematical Methods in the Applied Sciences, Vol:47 No:4 (2024) 2311-2323.
- ❖ K Munusamy, C Ravichandran, Kottakkaran Sooppy Nisar, Shankar Rao Munjam, published a paper entitled “**Investigation on continuous dependence and regularity solutions of functional integrodifferential equation**”, in the journal Results in Control and Optimization, Vol:14 (2024) 100376.
- ❖ V Vijayakumar, Chokkalingam Ravichandran, Kottakkaran Sooppy Nisar, Kishor D Kucche, published a paper entitled “**New discussion on approximate controllability results for fractional Sobolev type Volterra-Fredholm integrodifferential systems of order $1 < r < 2$** ”, in the journal Numerical Methods for Partial Differential Equations, Vol:40 No:2 (2024) e22772.

- ❖ Kottakkaran Sooppy Nisar, K Jothimani, **C Ravichandran**, published a paper entitled “**Optimal and total controllability approach of non-instantaneous Hilfer fractional derivative with integral boundary condition**”, in the journal Plos one, Vol:19 No:2 (2024) e0297478.
- ❖ M Sivashankar, S Sabarinathan, Kottakkaran Sooppy Nisar, **C Ravichandran**, BV Senthil Kumar, published a paper entitled “**Stability, numerical simulations, and applications of Helmholtz-Duffing fractional differential equations**”, in the journal Chaos, Solitons & Fractals: X, Vol:12 (2024) 100106.
- ❖ Kottakkaran S Nisar, Veliappan Vijayaraj, Shyni U Kumaran, **Chokkalingam Ravichandran**, Poh Soon JosephNg, M Abdel-Aty, published a paper entitled “**Existence Results on Mittag-Leffler Kernel of Fractional Integro-Differential Inclusion Problem Under Boundary Conditions**”, in the journal Progress in Fractional Differentiation & Applications, Vol:10 No:1 (2024) 149-160.
- ❖ Ahmed Morsy, C Anusha, Kottakkaran Sooppy Nisar, **C Ravichandran**, published a paper entitled “**Results on generalized neutral fractional impulsive dynamic equation over time scales using nonlocal initial condition**”, in the journal AIMS Mathematics, Vol:9 No:4 (2024) 8292-8310.
- ❖ Kottakkaran Sooppy Nisar K. Kaliraj, U.Aswini, **C. Ravichandran**, K. Logeswari, published a paper entitled “**An investigation of Fractional Mixed Functional Integro-Differential Equations with Impulsive Conditions**”, in the journal Discontinuity, Nonlinearity, and Complexity, Vol:13 No:1 (2024) 189-202.
- ❖ Kottakkaran Sooppy Nisar, C Anusha, **C Ravichandran**, published a paper entitled “**A non-linear fractional neutral dynamic equations: existence and stability results on time scales**”, in the journal AIMS Mathematics, Vol:9 No:1 (2024) 1911-1925.
- ❖ V Vijayaraj, **C Ravichandran**, Kottakkaran Sooppy Nisar, N Valliammal, K Logeswari, Wedad Albalawi, A Abdel-Aty, published a paper entitled “**An outlook on the controllability of non-instantaneous impulsive neutral fractional nonlocal systems via Atangana–Baleanu–Caputo derivative**”, in the journal Arab Journal of Basic and Applied Sciences, Vol:30 No:1 (2023) 440-451.
- ❖ Kottakkaran Sooppy Nisar, R Jagatheeshwari, **C Ravichandran**, P Veeresha, published a paper entitled “**An effective analytical method for fractional Brusselator reaction-diffusion system**”, in the journal Mathematical Methods in the Applied Sciences, Vol:46 No:18 (2023) 18749-18758.
- ❖ K Jothimani, N Valliammal, S Alsaed, Kottakkaran S Nisar, **C Ravichandran**, published a paper entitled “**Controllability Results of Hilfer Fractional Derivative Through Integral Contractors**”, in the journal Qualitative Theory of Dynamical Systems, Vol: 22 No:4 (2023) 137.
- ❖ Kottakkaran Sooppy Nisar, R Jagatheeshwari, **C Ravichandran**, P Veeresha, published a paper entitled “**High performance computational method for fractional model of solid tumour invasion**”, in the journal Ain Shams Engineering Journal, Vol:14 No:12 (2023) 102226.
- ❖ Kottakkaran Sooppy Nisar, K Logeswari, **C Ravichandran**, S Sabarinathan, published a paper entitled “**A new frame of fractional neutral ABC-derivative with IBC and mixed delay**”, in the journal Chaos, Solitons & Fractals, Vol:175 No:2 (2023) 114050.
- ❖ **C Ravichandran**, K Logeswari, Aziz Khan, Thabet Abdeljawad, JF Gómez-Aguilar, published a paper entitled “**An epidemiological model for computer virus with Atangana–Baleanu fractional derivative**”, in the journal Results in Physics, Vol:51 (2023) 106601.

- ❖ K Kalaiselvi, **N Mohanapriya**, V Aparna, published a paper entitled “**r--Dynamic chromatic number of subdivision-edge neighborhood corona of certain graph families**”, in the journal Discrete Mathematics, Algorithms and Applications, Vol:16 No:03 (2024) 2350026.
- ❖ Raúl M Falcón, Venkatachalam Aparna, **Nagaraj Mohanapriya**, published a paper entitled “**Optimal secret share distribution in degree-splitting communication networks**”, in the journal Networks & Heterogeneous Media, Vol:18 No:4 (2023) 1713–1746.

2024-2025

- ❖ K. Tharani and **V. Kokilavani** published a paper entitled “**On Neutrosophic Crisp $g\#a$ Closed Set Operators**”, in the journal Neutrosophic Sets and Systems, Vol: 73, 1 (2024).
- ❖ Nisar Kottakkaran Sooppy, Farman Muhammad, Abdel-Aty Mahmoud and **Ravichandran Chokkalingam**, published a paper entitled “**A review of fractional- order models for plant epidemiology**” in the journal Progress in Fractional Differentiation and Applications, Vol 10(03) (2024) 489 – 521.
- ❖ M Sivashankar, S Sabarinathan, Kottakkaran Sooppy Nisar, **C Ravichandran**, BV Senthil Kumar published a paper entitled “**Stability, numerical simulations, and applications of Helmholtz-Duffing fractional differential equations**”, in the journal Chaos, Solitons & Fractals: X ,Vol: 12 (2024) 100106.
- ❖ E Thilakraj, K Kaliraj, **C Ravichandran**, M Manjula published a paper entitled “**New investigation on controllability of sobolev-type Volterra-Fredholm functional integro-differential equation with non-local condition**”, in the journal Results in Control and Optimization, Vol: 15 (2024) 100418.
- ❖ Chandran Anusha, **Chokkalingam Ravichandran**, Kottakkaran Sooppy Nisar, Suliman Alsaeed, Shankar Rao Munjam published a paper entitled “**Periodic Boundary Value problem for the Dynamical system with neutral integro-differential equation on time scales**”, in the journal Partial Differential Equations in Applied Mathematics, Vol: 10 (2024) 100691.
- ❖ KottakkaranSooppy Nisar, Kalimuthu Kaliraj,Mohan Manjula, **Chokkalingam Ravichandran**, Suliman Alsaeed and Shankar Rao Munjam published a paper entitled “**Existence of a mild solution for a fractional impulsive differential equation of the Sobolev type including deviating argument**”, in the journal Results in Control and Optimization, Vol: 16 (2024) 100451.
- ❖ Sooppy Nisar Kottakkaran, Sivashankar M, Sabarinathan S, **Ravichandran C** and Sivaramakrishnan V published a paper entitled “**Evaluating the stability and efficacy of fractal-fractional models in reproductive cancer apoptosis with ABT-737**”, in the journal of Inequalities and Applications, Vol: 2025 (2025) 10.
- ❖ R. Jagatheeshwari, **C. Ravichandran**, P. Veeresha and Kottakkaran Sooppy Nisar, published a paper entitled “**A strong technique for solving the fractional model of multi-dimensional Schnakenberg reaction-diffusion system**”, in the journal Modern Physics Letters B, (2025) 2550095.
- ❖ E. Thilakraj, K. Kaliraj, C. Ravichandran and M. Manjula, published a paper entitled “**New Results on Controllability Analysis for Sobolev-Type Volterra-Fredholm Functional Integro-Differential Equation in Banach Space**”, in the journal Results in Control and Optimization, Vol: 15 (2024) 100418.
- ❖ A. Irin Feno, **M. Venkatachalam**, Laxmi Rathour, I. N. Cangul, and K. Abirami, published a paper entitled “**On r-dynamic k-coloring of ladder graph families**”, in the journal Discrete Mathematics, Algorithms and Applications, Vol. 17(03) (2025) 2450035.

- ❖ Ika Hesti Agustin, Dafik Dafik, Ika Nur Maylisa, **M Venkatachalam**, K Abirami and **N Mohanapriya**, published a paper entitled **“On Local Antimagic b-Coloring of Graphs: New Notion”**, in the journal Discrete Mathematics, Algorithms and Applications, Vol. 13(04) (2025) 1544 - 1556.
- ❖ B. J. Septory, L. Susilowati, D. Dafik and **M. Venkatachalam**, published a paper entitled **“On the study of rainbow antimagic connection number of comb product of tree and complete bipartite graph”**, in the journal Discrete Mathematics, Algorithms and Applications, Vol. 16(07) (2024) 2350098.
- ❖ **M. Venkatachalam**, K. Praveena, D. Dafik and Cangul Ismail Naci, published a paper entitled **“Iterated Modified Tabu Search based Equitable Coloring for Scheduling Cricket World Cup Tournament”**, in the journal El-Cezeri Journal of Science and Engineering, Vol. 11(02) (2024) 131 - 141.
- ❖ Falcon, Raul M, **Venkatachalam M.**, and Margaret S. Julie, published a paper entitled **“Determining the b-chromatic number of subdivision-vertex neighbourhood coronas”**, in the journal El-Cezeri Journal of Science and Engineering, Vol. 32(02) (2024) 53 - 84.
- ❖ S. Sabarinathan, M. Sivashankar, Kottakkaran Sooppy Nisar, **C. Ravichandran**, and Anas Ratib Alsoud, published a paper entitled **“Fractal–fractional approach to stability in enzyme kinetics: A mathematical model perspective”**, in the journal Partial Differential Equations in Applied Mathematics, Vol: 13 (2025) 101028.
- ❖ Nisar Kottakkaran Sooppy, Hamsavarthini G., **Ravichandran C.**, and Kumaran Shyni Unni, published a paper entitled **“Analyzing predator-prey dynamics in the context of global warming using fractional integro differential equations”** in the Journal of Mathematics and Computer Science, Vol: 39(02) (2025) 249 - 262.
- ❖ K. Kaliraj, M. Manjula, E. Thilakraj, **C. Ravichandran**, Kottakkaran Sooppy Nisar, Yousef A. Baker El-Ebiary and Ahmad O. Hourani, published a paper entitled **“Discussions on Sobolev type Neutral Nonlocal fractional differential equation”**, in the journal Partial Differential Equations in Applied Mathematics, Vol 13 (2025) 101018.
- ❖ **P. Sathishmohan**, G. Poongothai, K. Rajalakshmi and S. Stanley Roshan, published a paper entitled **“More on micro semi – pre-operators in micro topological spaces”**, in the journal Mathematical Models in Engineering, Vol 11(01) (2025).
- ❖ **Sathishmohan P.**, Roshan S. Stanley, Rajalakshmi K., Brindha S. and Poongothai G., published a paper entitled **“On Micro Pre Operators in Micro Topological Spaces”**, in the journal European Journal of Pure and Applied Mathematics, Vol 17(04) (2024) 3156- 3166.
- ❖ Karthika R., and **Mohanapriya N.**, published a paper entitled **“Dissimilarity between Dominator and Total Dominator Coloring of Certain Graphs”**. Discrete Mathematics and Mathematical Modelling in the Digital Era. ICDMMMDE 2023. Springer Proceedings in Mathematics & Statistics, Vol: 458 (2024) 241 - 255, Springer, Singapore.

9.10 Training Received by Faculty/ List of Activities Undertaken by Faculties

a) i) Training Received by Faculty

2022-2023

- ❖ 10 Faculties participated in an In-Service Training Programme in Mathematical Sciences at Government Arts College, Coimbatore organized by TANSCH, Chennai from 05.05.2022 to 06.05.2022.
- ❖ Dr. C. Ravichandran, Dr. L. Vidhyarani, and Dr. N. Mohanapriya attended UGC Sponsored Online Refresher Course in Mathematics & Statistics conducted by UGC – Human Resource Development Centre, Bharathiar University, Coimbatore on 20.07.2022 to 02.08.2022.

- ❖ Dr. V. Kokilavani and Dr. D. Vijayalakshmi attended Faculty Development Programme on **Hands on Python** on 15.11.2022 organized by the Department of Physics at Kongunadu Arts and Science College.
- ❖ 11 Faculties of Mathematics attended the Seven Days Faculty Development Programme on **Impact of Industry 4.0 on 21st Century Higher Education** from 01.03.2023 and 08.03.2023 organized by the Internal Quality Assurance Cell (IQAC) and Curriculum Development Cell (CDC), Kongunadu Arts and Science College (Autonomous).
- ❖ Dr. V. Kokilavani and Dr. D. Vijayalakshmi attended Faculty Development Programme organized by the Department of Chemistry at Kongunadu Arts and Science College on 14.03.2023.
- ❖ Dr.N. Mohanapriya & Dr. M. Vivek prabu attended “A Two days FDP on Python with Data Science” was organized by the Department of Computer Science at Kongunadu Arts and Science College from 13.02.23 to 14.02.23.

2023-2024

- ❖ Dr. N. Mohanapriya has participated in the “**One Week International Faculty Development Programme on Mathematics in Real, Applied and Computational Domain**” organized by the Department of Mathematics, School of Science and Humanities, Sathyabama Institute of Science and Technology, Chennai from 03.07.2023 – 08.07.2023.
- ❖ Dr. C. Ravichandran, Dr. N. Mohanapriya, and L. Vidharani has participated in the “**UGC Sponsored Refresher course in Mathematics and Computational Science**” conducted by the Department of Mathematics, School of Mathematical Sciences, KBC North Maharashtra University, Jalgaon from 25.10.2023 – 07.11.2023.
- ❖ Dr. D. Vijayalakshmi and Dr. M. Vigneswaran has participated in the “**UGC Sponsored Refresher course in Mathematics and Statistics**” conducted by UGC – Human Resource Development Centre, Bharathiar University held on 17.08.2023 – 30.08.2023.
- ❖ Dr. M. Venkatachalam and Dr. M. Vivekprabu has completed “**Online 8th Refresher course in Mathematics**” organized by UGC – Malaviya Mission Teacher Training Centre, Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur held on 08.12.2023 – 21. 12. 2023.
- ❖ Dr. D. Vijayalakshmi, Dr. P. Sathishmohan and Dr. E. Prakash has participated in the “**Five-Day International Virtual Faculty Development Programme on Mathematics and its Application**” organized by the Department of Mathematics (PG), PSGR Krishnammal College for Women, Coimbatore from 11.03.2024 – 15.03.2024.
- ❖ Dr. E. Prakash and Dr. P. Sathishmohan has participated in the “**Two-week Refresher Course in Mathematics**” conducted by Teacher Learning Centre, Ramanujam College, University of Delhi held on 31.03.2024 – 13.04.2024.
- ❖ Dr. D. Vijayalakshmi has participated in Faculty Training Programme on “**Teaching Pedagogy and Skills**” organized by Department of Chemistry, Kongunadu Arts and Science College under DBT Star college Scheme on 25.03.2024.
- ❖ Dr. D. Vijayalakshmi has participated in **Faculty Development programme on “Computational Mathematics using Python and Scilab”** organized by Department of Computer Science, Kongunadu Arts and Science College under DBT Star college Scheme on 12.01.2024.
- ❖ Dr. D. Vijayalakshmi has participated in **Faculty Development Programme on “Interdisciplinary approaches of Machine Learning”** organized by Department of Physics, Kongunadu Arts and Science College under DBT Star college Scheme on 21.10.2023.

- ❖ Dr. D. Vijayalakshmi has participated in **Faculty Training Programme on “Correlation of classical dynamics with quantum mechanics”** organized by Department of Physics, Kongunadu Arts and Science College under DBT Star college Scheme on 27.03.2024.

2024-2025

- ❖ Dr. M. Vigneshwaran has participated in the **“FDP on Classroom Psychology and Psychological for effective teaching and learning”** Kongunadu Arts and Science College, Coimbatore, 12.09.2024.
- ❖ Dr. D. Vijayalakshmi, Dr. P. Sathishmohan and Dr. E. Prakash has attended **“Five-day Virtual FDP on Research Methodology”** organized by VLB Janakiammal College of Arts and Science from 01.10.2024 to 05.10.2024.
- ❖ Dr. S.P.R. Priyalatha has participated in **Refresher Course in Mathematics** organized by Gandhigram Rural Institute, held from 17.10.2024-30.10.2024.
- ❖ Dr. P. Sathishmohan and Dr. E. Prakash has participated in **“Five-day National Level Online FDP on Beyond Boundaries: Driving Innovation in Research”** organized by Auxilium College (Autonomous), Vellore in Collaboration with North East Institute of Social Sciences & Research, Nagaland, from 26.12.2024-30.12.2024.
- ❖ Dr. P. Sathishmohan has participated in the **“Webinar series on Fuzzy logic for beginners”** organized by IIT Kottayam from 02.06.2024 – 05.06.2024.
- ❖ Dr. M. Vivek Prabhu has participated in the **“Summer school on mathematical foundation for data science and machine learning (MFDSML – 2024)”** organized by the Department of Mathematics IIIT NR, Raipur, Chhattisgarh from 06.06.2024 – 09.06.2024.
- ❖ Dr. N. Mohanapriya has participated in **“One-day National workshop on Graph theory in memory of Prof. E. Sampathkumar”** organized by Sridharacharya Academy of Mathematical Science (SAAMA), West Bengal, held on 22.09.2024.
- ❖ Dr. N. Mohanapriya and Dr. L. Vidharani has attended in two days national level virtual workshop on **“Analysing & visualizing data with Microsoft power BI”** organized by St. Paul’s college of Arts & Science for Women, Coimbatore from 19.10.2024 & 20.10.2024.
- ❖ Dr. C. Ravichandran has participated in the One-day International Workshop on **“Mathematical Foundations of AI and Electronics in Modern Communication Systems”** organized by the Department of Mathematics and Information Technology, Thiagarajar College of Engineering, Madurai held on 10.01.2025.
- ❖ Dr. D. Vijayalakshmi, Dr. L. Vidharani and Dr. N. Mohanapriya has attended in National- Level Online Workshop on Mastering **“Graph Theory and Linear Algebra with Sagemath”** organized by Infinity Research & Development Institute & Indian Mathematics Professors Association from 03.02.2025-07.02.2025.

2025-2026

- ❖ Dr. M. Venkatachalam and Dr. C. Ravichandran has attended **“UGC- Sponsored Online Subject Refresher Course in Mathematics”** organized by UGC- Malaviya Mission Teacher Training Centre at the Gandhigram Rural Institute-DTBU from 01.08.2025 to 14.08.2025.
- ❖ Dr. L. Vidharani and Dr. N. Mohanapriya has attended **“Refresher Course in Mathematics & Statistics (Offline)”** organized by UGC- Malaviya Mission Teacher Training Centre at the Bharathiar University from 10.09.2025 to 23.09.2025.

ii) Conference/ Seminars / Workshops Attended

2022-2023

- ❖ Dr. N. Mohanapriya attended **Virtual National Vedic Mathematics Conference**, organized on 25.09.2022 to 27.09.2022 by MathsNMe Institute.
- ❖ Dr. M. Vigneshwaran, Dr. M. Venkatachalam, Dr. N. Mohanapriya and Dr. M. Vivek Prabu attended National Conference on **Science and Technology for Sustainable Development with Women Empowerment**, organized by Indian Science Congress Association, Nagpur, Maharashtra on 03.01.2023 to 07-01.2023.
- ❖ Dr. D. Vijayalakshmi attended and acted as session chair **International Conference on Recent Developments in Computational and Biological Sciences** at Sri Ramakrishna College of Arts and Science for Women, Coimbatore on 10.03.2023.

2023-2024

- ❖ Dr. N. Mohanapriya has participated in the **“5-Day National Workshop on Applied Mathematics and Computing”** organized by the Department of Engineering Mathematics and Computing, Madhav Institute of Technology and Science, Gwalior, Madhya Pradesh from 12.07.2023 – 16.07.2023.
- ❖ Dr. N. Mohanapriya has participated in the two-day **“Online Workshop on AI Tools for Effective Research”** organized by the Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore held from 15.07.2023 – 16.07.2023.
- ❖ Dr. C. Ravichandran presented a paper entitled **“Optimal and total controllability access of non-instantaneous Hilfer fractional derivative with integral boundary condition”** at the DST SERB Sponsored International Conference on Mathematical Modelling and Emerging Trends in Computing held on 23.06.2023 – 25.06.2023 at School of Technology, Woxsen University, Hyderabad.
- ❖ Dr. D. Vijayalakshmi participated in the **“Webinar on: Applications of Differential Equations”** organized by KPR Institute of Engineering and Technology held on 28.10.2023.
- ❖ Dr. N. Mohanapriya has participated in the **“2nd International Conference on Neural Networks and Machine Learning”** conducted by the University of Jember, Indonesia from 07.11.2023 – 08.11.2023.
- ❖ Dr. M. Vivek Prabu has virtually participated in **“9th Mexican Workshop on Applied Geometry and Topology”** organized by CIMAT held on 10.11.2023, 13.11.2023 – 15.11.2023.
- ❖ Dr. E. Prakash attended the **“Two-Day International Conference on Analysis and Applied Mathematics”**, organized by J. J. College of Arts and Science (Autonomous), Pudukkottai held on 01.02.2024 and 02.02.2024.
- ❖ Dr. P. Sathishmohan attended the **“Two-Day International Conference on Analysis and Applied Mathematics”**, organized by J. J. College of Arts and Science (Autonomous), Pudukkottai held on 01.02.2024 and 02.02.2024.
- ❖ Dr. S. P. R. Priyalatha attended the **“International Conference on Mathematical Modelling, Simulation, and Nonlinear Dynamics”**, organized by Bharathiar University, held on 15.02.2024 and 16.02.2024.
- ❖ Dr. D. Vijayalakshmi participated in the **“National Conference on Mathematical Modelling and Computation (NCMMC 2024)”** organized by PSGR Krishnammal College for Women held on 14.03.2024 and 15.03.2024.
- ❖ Dr. M. Vivek Prabu has participated in **“A Five Days Online Hands-on Workshop to Mastering Python Programming with Mathematics”** organized by Indian Mathematics Professors Association and Infinity Research & Development Institute, Coimbatore held on 01.05.2024 - 05.05.2024.

2024-2025

- ❖ Dr. M. Vigneshwaran, Dr. M. Venkatachalam, Dr. S.P.R. Priyalatha and Dr. N. Mohanapriya has participated in the **“Two-day National seminar on Envisioning New Bharat: Educational Reforms and Indigenous Systems”** organized in Hotel Vivanta, Coimbatore from 08.06.2024-09.06.2024.
- ❖ Dr. C. Ravichandran has actively participated in the **“International Seminar on New Frontiers in Applied Mathematical Sciences”** organized by the Department of Mathematics and Statistics, Providence Women’s College (Autonomous), Kozhikode, Kerala in 07.08.2024.
- ❖ **11 Faculty members of Department of Mathematics participated** in the second International conference on Socio Economic impacts of Pollution in Water Bodies and Remedial Measures on 6th and 7th January 2025 at Kongunadu Arts and Science College, Coimbatore.

b) List of Projects Undertaken by Students

2022-2023

- ❖ Anushuruthi S. and a group of 3 students completed a project on **Rocket Launch Trajectory Analysis using Mathematics (Interdisciplinary)**
- ❖ Aishwarya S. and a group of 3 students completed a project on **A Study of Nanotechnology in Mathematics and its Applications in Mathematics (Interdisciplinary)**
- ❖ Jacqueline S. and a group of 3 students completed a project on **Applications of Differential Equation and Fourier Transform in Neuroscience (Interdisciplinary)**
- ❖ Sowmya M. and a group of 4 students completed a project on **Impact of Online Education on the students of Higher Education. (Interdisciplinary)**
- ❖ Sajina Parveen K. and a group of 4 students completed a project on **Integrating Design Thinking and Mathematics. (Interdisciplinary)**
- ❖ Abiraami V. and a group of 4 students completed a project on **Mathematical Modelling on Plant Virus using Differential Equations. (Interdisciplinary)**
- ❖ Sarvesh G. and a group of 4 students completed a project on **Statistics in Data Science. (Interdisciplinary).**
- ❖ Tamil Ilakkiya K. and a group of 3 students completed a project on **A Study on various packages in Python Programming to solve Mathematical Problems (Interdisciplinary).**
- ❖ Keerthi Krishna K. and a group of 3 students completed a project **on A Study on some applications of Golden Ratio.**
- ❖ Lekha Shree V. and a group of 3 students completed a project on **An algorithmic approach on Cryptosystem using Fibonacci number and Lucas number.**
- ❖ Sushma G. H. and a group of 3 students completed a project on **Visualisation of Earthquake Date using MATLAB (Interdisciplinary).**
- ❖ Sabari K. and a group of 3 students completed a project on **An Empirical Analysis of Dr. Reddy’s Share Price using various Indicators (Interdisciplinary).**
- ❖ Kabilan K. completed a project on **A Study on Wave Propagation in Nanoparticles. (Interdepartmental Project with Physics).**

- ❖ Saranya Priya A. and Sushma G. H. developed a project entitled **Earthquake Alarm (Interdepartmental Project with Computer Science)**.
- ❖ Ajay.C.S, Arun Joseph, Sarvesh G. and Selladurai S developed a project entitled **Home Safety Automation Using IoT (Interdepartmental Project with Computer Science and Physics)**.

2023-2024

- ❖ S. Swathi and M. Saranya Devi completed a project on a **“Smoke Detector using Arduino Sensor (UNO)” (Interdisciplinary)**.
- ❖ A. Arul, M. Durairaj, and S. Santhoshini completed a project on the **“Analysis of Epidemic using SIR Model” (Interdisciplinary)**.
- ❖ R. Sanmathi, M. Sruthi and M. Divya completed a project on **“Image transformation and enhancement using MATLAB” (Interdisciplinary)**.
- ❖ R. Vishnu, P. Sowndarya, and K. Jayasurya completed a project on **“Application of prime numbers in Cryptography using MATLAB” (Interdisciplinary)**.
- ❖ S. Vishnu Priya, V. Deepa, and C. Sabitha completed a project on **“Data Analytics on Indian agriculture using R-Programming” (Interdisciplinary)**.
- ❖ V. M. Sasthasai, R. Yogapriya, and M. Abishek completed a project on **“Water Pollution analysis through MATLAB” (Interdisciplinary)**.
- ❖ P. Keerthana, G. Sujitha and S. Keerthana completed a project on the **“Computation of Golden Ratio using MATLAB” (Interdisciplinary)**.
- ❖ R. Srimathi, R. Brindha and S. Thirisha completed a project on **“A Study on tomato price prediction against rainfall status using Machine learning techniques” (Interdisciplinary)**.
- ❖ Y. Swetha, S. Sivadarshini, and M. Saranya Devi completed a project on **“Exploring statistics in Banking Sector” (Interdisciplinary)**.
- ❖ S. Dharshini, K. Subasri, and U. Gokila completed a project on **“Visual cryptography using MATLAB” (Interdisciplinary)**.
- ❖ B. Keerthana, S. Arthi, S. Swathi and B. Balaji completed a project on **“Statistical Analysis using Python” (Interdepartmental Project with Computer Science)**.
- ❖ R. Mathavan, S. Harini, S. Sakthi Packia Rathna, and S. Lishanthini completed a project on **“A Study on Some Molecular Descriptors using Chemical Graph Theory” (Interdepartmental Project with Chemistry)**.

2024-2025

- ❖ Shalini L, Priyadarshini K and Keerthi A of III B. Sc Mathematics completed a project on **“A Study on Automatic Vehicle Reversing Sensor System with Ultrasonic Technology” (Interdisciplinary)**.
- ❖ Priyadarshini K, Sandhiya P and Girija D of III B. Sc Mathematics completed a project on **“A Study on Applications of Operations Research.” (Interdisciplinary)**.
- ❖ Srivarshini S completed a project on **“Credit card fraud detection using streamlit” (Interdisciplinary)**.
- ❖ Nisha AS, Shyamala S and Karthikeyan M of III B. Sc Mathematics completed a project on **“A Study on Indian Knowledge System in Modern Education” (Interdisciplinary)**.
- ❖ Thanya Shri BS, Smrutilipi Jena and Vaideeswari S H of III B. Sc Mathematics completed a project on **“A Study on Various Methods to find Eigenvalues and Eigenvectors using MATLAB” (Interdisciplinary)**.

- ❖ Jaculine merry P, Ganthi G and Gokulakannan M of III B. Sc Mathematics completed a project on **“A Study on Some Applications in Mathematical Modelling” (Interdisciplinary)**.
- ❖ Thakshinya Shri S, Karthikeyan S and Arockiya Reshma R of III B. Sc Mathematics completed a project on **“Mathematical tools in Cryptography using MATLAB” (Interdisciplinary)**.
- ❖ Tamilselvan C, Hariprasath P and Abinaya Sri B of III B. Sc Mathematics completed a project on **“A Study on Applications of Differential Equations using Python Programming” (Interdisciplinary)**.
- ❖ Rakshna N, Katharine merry P and Danya K of III B. Sc Mathematics completed a project on **“Mathmetical Modeling in Music using Matlab” (Interdisciplinary)**.
- ❖ Santhiya B, Dharani K K and Vaitheeswari D of III B.Sc. Mathematics completed a project on **“Vedic Mathematics: An Introduction and Analysis - Multidimensional Approach” (Interdisciplinary)**.

Innovative Math Models designed and developed by the students

- ❖ Induja AM, Karthika G, Subha Harini S, Mahalakshmi S and Kiruthika D of I BSc Mathematics designed a model **“Golden Ratio”**.
- ❖ Santhosh A, Janarthan S and Santhoshkumar J of I BSc Mathematics designed a model **“Hypercube Visualization”**.
- ❖ Mathumitha K, Sathya K, Gnamini S and Suji N of I BSc Mathematics designed a Model **“Applications of Trigonometry”**.
- ❖ Dhanalakshmi M, Dhanalakshmi K, Devadharshini K and Vennila K of I BSc Mathematics designed a Model **“Algebra Working Model”**.
- ❖ Gayathri S, Shwetha D, Sivaranjani A and Nagalakshmi P of I BSc Mathematics designed a model **“Types of Graphs”**.
- ❖ Prathiksha M, Arthi N, Pavithra VS and Visakan R of II BSc Mathematics designed a model **“Presentation of 3D Figures by 2D Shapes”**.
- ❖ Ramalakshmi S, Raaghav M, Muthumari S and Pavithra M of II BSc Mathematics designed a model **“Trigonometry (Solid of Revolution)”**.
- ❖ Sowndarya R, Sharmila R, Eshasagar S and Divin Kumar K of II BSc Mathematics designed a model **“Golden Ratio in Nature”**.
- ❖ Ridhanya SK, Kaviya S, Sathya G and Rakshana K of II BSc Mathematics designed a model Visualization of **“Types of Angles”**.
- ❖ Sruthi Sree N, Boomidharhsini P, Priyanka Teres D and Nazarin A of II BSc Mathematics designed a model **“Pythagoras Theorem-Angle of Elevation and Depression”**.
- ❖ Hariprasath P of III BSc Mathematics designed a model **“Trigonometry and Its Applications”**.
- ❖ Smrutilipi Jenoo and Gokulakannan M of III BSc Mathematics designed a model **“Conic Sections and Ellipse”**.
- ❖ Danya K of III BSc Mathematics designed a model **“Mathematical Park”**.

9.11 List of Exhibitions/ Seminars/ Training Courses Conducted

a) Conference/ Seminars / Workshops Organized

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Capacity Building Workshop on “Quantitative Aptitude and Logical Reasoning”	07.11.2022	Dr. R. Sakthi Parthiban, M.Sc., (Agri), Ph.D., Founder & Director Mr. Subash Chandrabose, Senior Faculty, Banking Exams & Placement Trainer, Dheeran IAS Academy	409 students	Students enhanced their logical and critical thinking skills for competitive exams.
2.	Visualizing Biopic of Eminent Scholars	02.01.2023 to 06.01.2023	Demonstration given by faculty members	116 students	Students understood the efforts and hard work put forth by the scholars behind their achievements.
3.	Workshop on “Vedic Mathematics for Speedy Calculations”	12.01.2023	Dr. S.P.R. Priyalatha Dr. P. Sathishmohan Dr. N. Mohanapriya Assistant Professor, KASC.	65 participants from other colleges	Exploring Vedic sutras enhanced students’ mental ability and calculation speed.
4.	6 th International Conference on “Current Scenario in Pure and Applied Mathematics”	27.01.2023 & 28.01.2023	Dr. Dafik, Professor of Mathematics, Chairman, , University of Jember, Indonesia Prof. Dr. Raúl M. Falcón, Professor of Mathematics, University of Seville, Spain	Participants - 81	Participants learned recent mathematical research trends to improve their UG project work.
5.	Inauguration of Math Model Lab and Demonstration of Mathematical Models	11.01.2023	Inauguration: Dr. C. A. Vasuki, Secretary and Director of Kongunadu Arts and Science College & Demonstration of Mathematical Models by Faculty members	120 students, 11 faculties and 2 visitors from UK	It helps the students to build interest and confidence in learning and doing mathematics in effective way and to relate the ideas with mathematical concepts.
6.	Seminar on “Skill Development for Budding Entrepreneur”	22.02.2023	Dr. K. Prabhakaran, Director- Edify Edtech, Empanelled Resource Person of SEBI, NCDEX	Maths - 81 Faculty – 4 Total - 85	Aid the students to attain the knowledge in finance and various skills to become an entrepreneur.

2023-2024

S. No.	Name of the Event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	International Seminar on “Differential System and its Applications ”	05.12.2023	Dr. Md. Golam Hafez, Professor of Mathematics, Chittagong University of Engineering and Technology, Bangladesh.	62 Students	Participants gained basic knowledge about linear and non-linear equations, the Stability of the system and applications of Mathematical modeling in various biological domains.

			Dr. R. Sakthivel Professor of Applied Maths, Bharathiar University, Coimbatore		
2.	Capacity Building Programme “An Inter disciplinary Approach for Non- Mathematics Students”.	11.12.2023	Dr. M. Thiruchelvi Department of Mathematics, Sankara College of Science and Commerce, Coimbatore. Dr. M. Parimala Department of Mathematics, Bannari Amman Institute of Technology, Erode.	69 Students	- Students were taught to overcome math anxiety and to develop a mathematical mindset to take up higher education in science courses. - They were advised to develop competencies in different skills of mathematical thinking that enhances problem solving skills and Brainstorming activity.
3.	National Mathematics Day Celebrations	22.12.2023	Dr. K. Balachandran Professor & Head (Retd.), Department of Mathematics, Bharathiar University, Coimbatore.	101 Students	Students learnt about the contributions of Srinivasa Ramanujan in the field of Mathematics which instilled interest toward the subject among the students.
4.	7 th International Conference on “Current Scenario in Pure and Applied Mathematics ”	30.01.2024 31.01.2024	Dr.Dafik Professor of Mathematics, Chairman, Combinatorics, University of Jember, Indonesia. Prof. Dr. Ismail Naci Cangul Department of Mathematics, Bursa Uludag University, Turkey	63 participants	The participants enriched their knowledge and learned to exchange research ideas involving theoretical and applied developments in thrust areas of Mathematics. Also, ICCSPAM-2024 served as a platform for UG students to showcase their research outcomes and facilitate the exchange of insights into Mathematical analysis and Applications.
5.	National level Seminar on “Vedic Mathematics ”	26.03.2024	Dr.Shiram Chauthaiwale All India Convener, Department of Vedic Mathematics, Shiksha Sanskriti Uthn Nyas, New Delhi.	92 participants	The students were taught to do speedy mathematical calculations which improve their critical and logical thinking that helps them to face various competitive exams.

2024-2025

S. No.	Name of the Event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Awareness Programme on “Intellectual Property Rights”	16.08.2024	Dr. Parimelazhagan Thangaraj, Professor and Head of Botany, Bharathiar University, oimbatore.	Maths: 35 Computer: 5	Awareness Programme on Intellectual Property Rights provided students with valuable insights about IPR.
2.	One day Seminar on “Modern Algebra: Its Essence and Impact on Real - Life Problems”	04.10.2024	- Dr. K. Kanagarajan, Assistant Professor and Head of Mathematics, S RM V College of Arts and Science, Coimbatore. - Dr. P. Veeramani, Professor (Retd.,) of Mathematics, IIT Madras, Chennai.	Students: 64	Students gained a deeper insight into the relevance of algebra in various real-world scenarios.
3.	One day Workshop on “SPSS”	16.12.2024	Dr. D. Sasikala, Assistant Professor in Mathematics, PSGR Krishnammal College for Women, Coimbatore.	Maths: 54 Chem: 5 CS:5	Students developed their skills on Data handling through the SPSS software.
4.	One day workshop on “Vedic Mathematics for Science Students”	23.01.2025	- Dr. N. Mohanapriya, - Dr. A. Amuthalakshmi, - Dr. P. Sathishmohan, Assistant Professors of Mathematics, Kongunadu Arts and Science College, Coimbatore.	Maths: 18 Physics: 23 Botany: 03 Biochem: 06 Zoology: 08 CS: 08	Students significantly improved their mental math speed and problem-solving efficiency.
5.	8 th International Conference on Current Scenario in Pure and Applied Mathematics (ICCSPAM - 2025)	17.02.2025 & 18.02.2025	- Prof. Dr. Ismail Naci Cangul, Professor of Mathematics, Uludag University, Turkey. - Prof. Dr. Raúl M. Falcón, Associate Professor Mathematics, University of Seville, Spain. - Prof. Dr. Dafik, Professor, Dean of FKIP University of Jember, Indonesia.	Participants: 102	Exchange the views on the recent development of different topics of Mathematics and also to bring together the leading experts from different countries and also from different parts of our country and other countries.
6.	A Seminar on “Differential Equations and its Applications”	21.02.2025	Dr. K. Kaliraj Assistant professor, Ramanujam Institute for Advanced Study in Mathematics, University of Madras, Chepauk Campus, Chennai.	Students: 35	The seminar provided insights into the theory and solutions of Differential Equations by highlighting its applications in real-world problems across Physics, Engineering and Biology.

2025-2026

S. No.	Name of the Event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	A Seminar on "The Math Behind Daily Activities"	27.06. 2025	Dr. I. Rajasekaran Assistant Professor of Mathematics Thirunelveli Dakshina Mara Nadar Sangam College, Thirunelveli	51 Students	The students can able to understand the concepts of mathematics behind daily activities.
2.	A Seminar on "Applications of Graph theory in medical field"	01.07. 2025	Dr. G. Mahadevan, Professor & Head of Mathematics, The Gandhigram Rural Institute, Dindigal	42 Students	The students can able to know real life applications using graph theory
3.	A Seminar on "A Fun with Numbers"	26.08. 2025	Dr. M. Thiruchelvi, Associate Professor & Head of Mathematics, Sankara College of Science and Commerce, Coimbatore.	62 students	The students can able to know about the applications of numbers in nature.
4.	A One Day National Seminar on Innovative Project Ideas in Interdisciplinary Mathematical Modeling using Artificial Intelligence	29.08. 2025	Dr. M. Kirankumar Assistant Professor of Mathematics, Vidyavardhaka College of Engineering, Mysuru - 570 002 Dr. M. Raju Associate Professor of Mathematics, Department of Science and Humanities Jansons Institute of Technology, Coimbatore	61 Students	The seminar successfully created a vibrant platform for idea exchange, networking, and collaboration. It reinforced the importance of AI-enhanced mathematical modeling in tackling complex scientific and industrial challenges.
5.	SPSS Tools: A Gateway to Data Science	10.09. 2025	Dr. V. Kaviyarasu, Associate Professor of Statistics Bharathiar University Coimbatore.	40 Students	Equips participants with practical skills in data analysis, statistical techniques, and interpretation using SPSS software.
6.	Visualizing Data: Exploring Power BI for Data Analytics	12.09. 2025	Dr. V. Radhamani Assistant Professor of Mathematics, JKK Nataraja College of Arts and Science Namakkal	36 Students	Gained foundational knowledge of Power BI and its applications in various domains with Enhanced understanding of data-driven decision-making through visual analytics

b) Exhibition / Competitions Organized

2022-2023

S. No.	Name of the Event/Activity	Date	Number of Beneficiaries	Outcome
1	Inter- Departmental Competition National Mathematics Day Celebrations – 2022	09.02.2023	116 other department students	Students showcased their creative ability by shaping their ideas into models, posters and drawings which helped them to understand the practical applications of the mathematical concepts.

2	Inter Collegiate Competition MATH GALOPER 2023	24.03.2023	Other Colleges 44 Students	To provide social integration into the college environment. Competitions like Mr. & Ms. Mathematics, Posterolic, Math Exemplar, Manculator, Mental Hack, Math Visualization and Master Mind were conducted.
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2023-2024

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1.	Math Model Exhibition – School Students Visit	05.10.2023	35 School Students	The students of grade IX – XII from various schools visited the Mathematical model displayed in the department of Mathematics and explored the innovations.
2.	National Mathematics Day Celebrations Inter-Departmental Competitions	09.01.2024	55 Students	Participants got a platform to exhibit their skills and enhance their subject knowledge in mathematics.
3.	National Mathematics Day Celebrations Inter-School Competitions	10.01.2024	Around 600 students	School students were able to showcase their mathematical abilities, learn and explore interesting math games.

2024-2025

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1.	Inter School Mathematics Competitions.	08.10.2024	School Students: 601	Memorizing techniques were taught for the school students which helped them to ease the process of learning Mathematical formulae which creates interest towards the subject.
2.	Online quiz for school students	22.12.2024 - 31.12.2024	School Students: 1889	An online quiz helps assess school students' learning outcomes by testing their understanding and retention of concepts.
3.	Inter-school chess competitions chess carnival 2k25	09.01.2025	Students: 103	Decision making through logical thinking and the skill set to solve the problems were attained by the students
4.	MathExperia 2K25 Inter-Departmental Competitions	19.02.2025	Students: 120	Event provided a vibrant platform for students to demonstrate their mathematical abilities. A range of engaging activities encouraged teamwork, logic, and creativity.

2025-2026

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1.	National Statistics Day Celebration- Online Quiz Competition for School Students	26.05.2025- 04.07.2025	456 Students	Students of Grade XI-XII took this online quiz and recollected the fundamental concepts in Statistics.

2.	Math Model Lab Visit for B.V Raju College Students	12.07.2025	35 Students	The Math Model Lab visit provided B.V. Raju College students with hands-on exposure to mathematical modeling and simulation techniques.
3.	Intra-Departmental Competitions	11.09.2025	61 Students	Participants took part in various competitions which helped them to upgrade their knowledge and improve their numerical and logical reasoning abilities.

c) Training Courses Conducted

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1	In Service Training Programme for School Teachers' on "3Ws of Teaching"	04.03.2023	S. Jayashree, Project Director School of Science, KG College of Arts and Science, Coimbatore	School Teachers – 10 Research Scholars-14	The participants can able to understand the method and practice of teaching as per current trends.
2	One Day Faculty Development Programme on "OBE Implementation and ICT tools for Effective Teaching"	27.03.2023	Dr. N. Ponpandian, Professor and Head Nanoscience and Technology, Bharathiar University, Coimbatore, Dr. T. Devi, Professor and Head, Department of Computer Applications, Bharathiar University, Coimbatore Dr. S. Sankarakumar, Assistant Professor in English, Department of Applied Science, PSG College of Technology, Coimbatore.	51 faculties participated across all the institutions	Three sessions were conducted focusing on various key aspects of OBE 3 including sessions on CO-PO Attainment, ICT & Interactive teaching Practices.

2023-2024

S. No.	Name of the event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	FDP on "Teaching Pedagogy"	21.10.2023	Dr. M. Balasubramanian Assistant Professor Department of Education	36 Faculties from various Colleges.	Participants were able to enhance the skills/ techniques involved in using ICT class room teaching.

			Bharathiar University, Coimbatore. Dr. B. Selvaraj Controller of Examinations, Government Arts College, Coimbatore.		
2.	FDP on Computational Mathematics using Python and SCILAB (Organized along with Department of Computer Science)	12.01.20 24	Dr. V. Parthiban Assistant professor, School of Advanced Sciences, Vellore Institute of Technology, Chennai Campus. Dr. T. Senthil Kumar Associate Professor, School of Computer, Amirtha Vishwa Vidhyapeetham, Coimbatore.	44 faculty	The faculty were trained on the concepts of Mathematics which can be employed effectively by using Python and SCILAB.
3.	Teacher Induction Programme (Organized along with Department of Computer Science)	13.02.20 24	Mr. N. Tamilselvan Assistant Headmaster & P.G. Assistant in Maths, Government Higher Secondary School, Coimbatore. Dr. A. Chandran Former Head Master, CSI Boys Higher Secondary School, Erode. Former Dean(S&H), RVS Technical Campus, Coimbatore.	20 teachers from various Schools and colleges	School Teachers interacted with the Resource persons and learnt the art of effective classroom teaching.
4.	Summer Training Programme on “Pure and Applied Mathematics”	18.03.20 24 to 22.03.20 24	Prof. Dr. K. N. Ragavan The Institute of Mathematical Sciences, Chennai. Prof. Dr. M. Sampath Periyar University, Salem. Prof. Dr. M. Ganesh Kumar AmirtaVishwa Vidyapeetham, Coimbatore. Prof. Dr. K. Kaliraj Ramanujan Institute for Advanced Study	KASC Students: 65 Other college: 11 Faculty : 11	This training programme will help the students to equip themselves with mathematical techniques, Analytical, logical, and computational skills in various areas of Mathematical domains. This in turn encourages the students to pursue higher education in this subject.

			in Mathematics, Chennai.		
			Prof. Dr. G. Nagamani The Gandhigram Rural Institute, Dindugul.		

2024-2025

S. No.	Name of the event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Five Days Virtual Faculty Development Programme on “Recent Frontiers in Pure and Applied Mathematics”	11.11.2024 to 15.11.2024	• Dr. G. Nagamani, The Gandhigram Rural Institute- Dindigul • Dr. V. Parthiban, Associate Professor at Vellore Institute of Technology, Chennai. • Dr. K. Palpandi, Assistant Professor, National Institute of Technology, Calicut. • Prof. Dr. R. Roopkumar, Professor, Central University of Tamilnadu • Dr. P. Veerasha, Assistant Professor, Department of Mathematics, Christ (Deemed to be University), Bangalore.	618 Participants	• Enriching the knowledge in various fields of mathematics and its application towards real- world problems. • It also served as a discussion forum to explore the basic dimensions of Mathematical research.

2.	Five-day Winter Training Programme on Pure and Applied Mathematics	27.01.2025 to 31.01.2025	• Dr. P. Veeramani, Retired Professor Indian Institute of Technology Madras, Chennai • Dr. M. Marudai, Honorary Professor, Bharathidasan University, Thiruchirappalli. • Dr. G. Nagamani, Associate Professor, Gandhigram Rural Institute, Dindigul. • Dr. K. Balachandran, Mentor Professor, Bharathiar University, Coimbatore. • Dr. R. Gnana Prakasam, Lecture , Tamil Nadu Polytechnic College Madurai (Expert in CSIR-NET).	Maths: 29 Other College Students: 9 Faculty: 11	• Students and Faculty enabled a deeper understanding of theoretical and practical knowledge towards Mathematical concepts. • The programme Kindled the students mind to know more about innovative applications in various Mathematical fields.
3.	Two-day Faculty Training Programme on “LaTeX Quality Documentation- Easy with PC”	13.02.2025 To 14.02.2025	Dr. J Vernold Vivin Assistant Professor of Mathematics, Anna University Regional Campus, Coimbatore.	46 Faculty	Enhance participants skills in creating high- quality academic and technical documents using LaTeX.

9.12 Details of Books & Journals Subscribed from DBT Grant

2022-2023

S.No.	Bill No.	Date	Company Name	Author	Title	Qty	Amount
1	Cbetbh2223-Sinv04077	27.3.23	Orient Black Swan	Moll	Numbers & Functions	1	900
2	Cbetbh2223-Sinv04077	27.3.23	Orient Black Swan	Peled	Geometric Approximation Algorithms	1	922.5
3	Cbetbh2223-Sinv04077	27.3.23	Orient Black Swan	Prasolov	Elements Of Combinational And Differential Topology	1	877.5
4	Cbetbh2223-	27.3.23	Orient	Williams	Introduction To	1	555

	Sinv04077		Blackswan		Mathematics Of Finance		
5	Cbetbh2223-Sinv04077	27.3.23	Orient Blackswan	Morgan	Real Analysis And Applications	1	750
6	Cbetbh2223-Sinv04077	27.3.23	Cambridge	John James	Spectrograph Design Fundamentals	1	7423.47
7	Cbetbh2223-Sinv04077	27.3.23	Cambridge	Freeman	An Elementary Treatise On Actuarial Mathematics	1	2890.77
8	Cbetbh2223-Sinv04077	27.3.23	Mhe	Rudin	Real Complex Analysis	1	1348.5
9	Cbetbh2223-Sinv04077	27.3.23	Mhe	Peebles	Problems And Solutions In Probability, Random Variables And Random Signal Principles	1	371.25
10	Cbetbh2223-Sinv04077	27.3.23	Ane Books	Towers	Guide To Linear Algebra	1	624.42
11	Cbetbh2223-Sinv04077	27.3.23	S. Chand-Vikas	Khanna	Mathematics For Iit - Jee (Main & Advanced) Vol - 2	1	2157.6
12	Cbetbh2223-Sinv04077	27.3.23	S. Chand	Khanna	Mathematics For Iit-Jee(Main-Advan)Vol-1	1	2157.6
13	Cbetbh2223-Sinv04077	27.3.23	S. Chand	Khurana	Maths 30 Days Wonder 3 rd Edition	1	798.4
14	Cbetbh2223-Sinv04077	27.3.23	S. Chand	Krishna Gandhi Iyengar	Laplace Transforms, Numerical Methods & Complex Variables	1	1200
15	Cbetbh2223-Sinv04077	27.3.23	Mhegen	Arun Sharma	How To Prepare For Data Interpretation For Cat 7/Ed	1	596.25
16	Cbetbh2223-Sinv04077	27.3.23	Unique Pub	Singh	M.Sc Mathematics Entrance Examination	1	652.5
17	Cbetbh2223-Sinv04077	27.3.23	Sarat - Routledge	I Dondjio , W Krasser	Mathematics For Finance Business And Economics	1	1121.25
18	Cbetbh2223-Sinv04077	27.3.23	Sarat - Routledge	M V Blerkom	Measurement And Statistics For Teachers	1	1421.25
19	Cbetbh2223-Sinv04077	27.3.23	Pearson	Adams	Introduction To Topology : Pure & Applied	1	682.5
20	Cbetbh2223-Sinv04077	27.3.23	Mhegen	Arun Sharma	How To Prepare For Logical Reasoning For 6/Ed	1	596.25
21	Cbetbh2223-Sinv04077	27.3.23	Pearson 35	Bharadwaj	Jee Main Maths 1	1	412.5
22	Cbetbh2223-Sinv04077	27.3.23	Pearson 35	Bharadwaj	Jee Main Maths Vol 2	1	375

23	Cbetbh2223-Sinv04077	27.3.23	Mhegen	Arun Sharma	How To Prepare For Verbal Ability And Read-10th Ed	1	723.75
24	Cbetbh2223-Sinv04077	27.3.23	Pearson	Prasad	3d Geometry For The Jee (Mains And Advanced)	1	449.25
25	Cbetbh2223-Sinv04077	27.3.23	Springer Euro	Carmona	Numerical Methods In Finance	1	9711.81
26	Cbetbh2223-Sinv04077	27.3.23	Springer Euro	Frederic Bourgeois	Contact And Symplectic Topology	1	6589.94
27	Cbetbh2223-Sinv04077	27.3.23	Wiley	Artin	Geometric Algebra	1	746.25
28	Cbetbh2223-Sinv04077	27.3.23	Margham Pub	Vittal	Algebra Analytical Geometry & Trigonometry	1	340
29	Cbetbh2223-Sinv04077	27.3.23	S. Chand-Vikas	Zameeruddin	Modern Algebra 9ed	1	424
30	Cbetbh2223-Sinv04077	27.3.23	Commonwealth	Chaurasya	Set Theory	1	896.25
31	Cbetbh2223-Sinv04077	27.3.23	Commonwealth	Pavan Kumar	History Of Mathematics	1	896.25
32	Cbetbh2223-Sinv04077	27.3.23	Springer	Kandel	Applications Graph Theory	1	10405.56
33	Cbetbh2223-Sinv04077	27.3.23	Springer	Song	Correlated Data Analysis	1	5615.91
34	Cbetbh2223-Sinv04077	27.3.23	S. Chand	Ranganatham	Fourier Series And Integral Transforms	1	400
35	Cbetbh2223-Sinv04077	27.3.23	Narosa	Sahai	Linear Algebra,2/Ed	1	232.5
36	Cbetbh2223-Sinv04077	27.3.23	Narosa	Kumar	Group Theory An Expedition With Sage Math	1	299.25
37	Cbetbh2223-Sinv04077	27.3.23	Commonwealth	Dubey	Differential Calculas	1	896.25
38	Cbetbh2223-Sinv04077	27.3.23	Commonwealth	Akhilesh Pawar	Elementary Algebra	1	896.25
39	Cbetbh2223-Sinv04077	27.3.23	Campus Books	Vaibhav Agarwal	Matrices	1	971.25
40	Cbetbh2223-Sinv04077	27.3.23	Narosa	Ponnusamy	Foundations Of Complex Analysis 2ed	1	407.25
41	Cbetbh2223-Sinv04077	27.3.23	Narosa	Sharma	Partial Differential Equations For Engineers & Scientists	1	600
42	Cbetbh2223-Sinv04077	27.3.23	Narosa	Frleigh	A First Course In Abstract Algebra 3ed	1	652.5
43	Cbetbh2223-Sinv04077	27.3.23	Narosa	Harary	Graph Theory	1	448.5
44	Cbetbh2223-Sinv04077	27.3.23	Narosa	S Ponnusamy	Foundations Of Functional Analysis	1	690
45	Cbetbh2223-Sinv04126	29.3.23	Pearson	Royden	Real Analysis	1	465
46	Cbetbh2223-Sinv04126	29.3.23	Sarat - Routledge	H Heap , P Shaun , Y Varoufakis	Game Theory 2 Ed	1	1496.25

47	Cbetbh2223-Sinv04126	29.3.23	Pearson	George Klir Bo Yuan	Fuzzy Sets And Fuzzy Logic Theory And Application	1	1117.5
48	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Raisinghania	Dynamics	1	792
49	Cbetbh2223-Sinv04126	29.3.23	Mhe	Rudin	Real Complex Analysis	1	1348.5
50	Cbetbh2223-Sinv04126	29.3.23	Narosa	Ponnusamy	Foundations Of Complex Analysis 2ed	1	431.25
51	Cbetbh2223-Sinv04126	29.3.23	Yes Dee	Arumugam	Modern Analysis	1	525
52	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Mittal	Integral Calculus	1	720
53	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Narayan	Analytical Solid Geometry	1	600
54	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Shanthi Narayanan	A Text Book Of Vector Calculas	1	480
55	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Shanti	A Course Of Mathematical Analysis	1	632
56	Cbetbh2223-Sinv04126	29.3.23	Crc-Shri Adhya	Kumar	Basic Course In Real Analysis	1	521.25
57	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Duraipandian	Vector Analysis	1	320
58	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Mittal	A Tb Of Matrices	1	496
59	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Duraipandian	Complex Analysis	1	168
60	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Raisinghania	Real Analysis	1	240
61	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Gupta	Problems In Operation Research (Principles & Soulutions)	1	648
62	Cbetbh2223-Sinv04126	29.3.23	Pearson	Robert Hogg	Probability And Statistical Inference	1	596.25
63	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Shanti Narayan Mittal	Vector Algebra	1	188
64	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Dass	Differential Equations	1	288
65	Cbetbh2223-Sinv04126	29.3.23	S. Chand-Vikas	Zameeruddin	Modern Algebra 9ed	1	424
66	Cbetbh2223-Sinv04126	29.3.23	S. Chand-Vikas	Malik	Basic Number Theory	1	276
67	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Kandasamy	Numerical Methods	1	380
68	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Duraipandian	Mechanics	1	356
69	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Krishna Gandhi	Probability And Statistics	1	319.2
70	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Narayan Mittal	Differential Calculus	1	424
71	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Raisinghania	Ordinary And Partial Differential	1	1240

					Equations		
72	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Mittal	Theory Of Functions Of A Complex Variable	1	760
73	Cbetbh2223-Sinv04126	29.3.23	Yes Dee	Veerarajan	Fundamentals Of Mathematical Statistics	1	892.5
74	Cbetbh2223-Sinv04126	29.3.23	Narosa	Nambudiripad	Latex For Beginners	1	307.5
75	Cbetbh2223-Sinv04126	29.3.23	Scitech	Arumugam	Modern Algebra	1	585
76	Cbetbh2223-Sinv04126	29.3.23	New Age	Jain	Numerical Methods For Scientific And Engg 8/Ed	1	524.25
77	Cbetbh2223-Sinv04126	29.3.23	Pearson	Mathews Fink	Numerical Methods Using Matlab	1	600
78	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Sundareshan	An Introduction To Business Mathematics	1	600
79	Cbetbh2223-Sinv04126	29.3.23	Orient Black Swan	Greene	Function Theory Of One Complex Variable	1	1102.5
80	Cbetbh2223-Sinv04126	29.3.23	Cambridge	Leveque	Finite Volume Methods For Hyperbolic Problems	1	746.25
81	Cbetbh2223-Sinv04126	29.3.23	Pearson	David Hill	Elementary Linear Algebra With Application	1	1147.5
82	Cbetbh2223-Sinv04126	29.3.23	Mhe	Lipschutz Lipson	Schaums Easy Outline Of Linear Algebra	1	300
83	Cbetbh2223-Sinv04126	29.3.23	Yes Dee	Ranganath	Operations Research	1	371.25
84	Cbetbh2223-Sinv04126	29.3.23	Yes Dee	Arumugam	Analytical Geometry	1	787.5
85	Cbetbh2223-Sinv04126	29.3.23	Yes Dee	Moorthy	Advanced Mathematical Methods	1	663.75
86	Cbetbh2223-Sinv04126	29.3.23	Yes Dee	Arumugam	Sequences And Series	1	393.75
87	Cbetbh2223-Sinv04126	29.3.23	Sarat - Routledge	R W Hamming	The Art Of Probability	1	1496.25
88	Cbetbh2223-Sinv04126	29.3.23	Pearson	Ram	Numeric Methods	1	476.25
89	Cbetbh2223-Sinv04126	29.3.23	Pearson	Ralph Grimaldi	Discrete And Combinatorial Mathematics	1	750
90	Cbetbh2223-Sinv04126	29.3.23	Pearson	Johnsonbaugh	Discrete Mathematics, 7e	1	719.25
91	Cbetbh2223-Sinv04126	29.3.23	Books & Allied	Mollah	Introduction To Numerical Analysis (Pass)	1	337.5
92	Cbetbh2223-Sinv04126	29.3.23	Books & Allied	Das	Algebra	1	153.75
93	Cbetbh2223-Sinv04126	29.3.23	Books & Allied	Mukherjee	Advanced Linear Programming And	1	416.25

					Game Theory		
94	Cbetbh2223-Sinv04126	29.3.23	Books & Allied	Sen	Discrete Mathematics	1	266.25
95	Cbetbh2223-Sinv04126	29.3.23	Commonwealth	Pavan Kumar	History Of Mathematics	1	896.25
96	Cbetbh2223-Sinv04126	29.3.23	Commonwealth	Akhilesh Pawar	Applied Algebra	1	746.25
97	Cbetbh2223-Sinv04126	29.3.23	Campus Books	John Russel	Dictionary Of Mathematics	1	896.25
98	Cbetbh2223-Sinv04126	29.3.23	Commonwealth	Shailendra Jain	Basic Mathematics	1	746.25
99	Cbetbh2223-Sinv04126	29.3.23	Cambridge	Strang Gilbert	Differential Equations And Linear Algebra	1	3438.6
100	Cbetbh2223-Sinv04126	29.3.23	Aitbs	Hall Knight	Higher Algebra	1	198.75
101	Cbetbh2223-Sinv04126	29.3.23	Aitbs	Maron	Problems In Calculus Of One Variable	1	217.5
102	Cbetbh2223-Sinv04126	29.3.23	Aitbs	Hall	A School Geometry Part - I-Vi	1	240
103	Cbetbh2223-Sinv04126	29.3.23	Mhe	Chapra	Numerical Methods For Engineers	1	806.25
104	Cbetbh2223-Sinv04126	29.3.23	Cengage	Strang	Linear Algebra And Its Applications-4th Edtion	1	975
105	Cbetbh2223-Sinv04126	29.3.23	Cengage	Hair	Multivariate Data Analysis	1	656.25
106	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Raisinghania	Real Analysis	1	480
107	Cbetbh2223-Sinv04126	29.3.23	Sultan Chand	Gupta	Wonderland Of Numbers	1	680
108	Cbetbh2223-Sinv04126	29.3.23	Sultan Chand	Gupta	An Introduction To Matrices	1	106.25
109	Cbetbh2223-Sinv04126	29.3.23	Pearson	Robert Hogg	Introduction To Mathematical Statistics	1	1732.5
110	Cbetbh2223-Sinv04126	29.3.23	Cengage	Gallian	Contemporary Abstract Algebra	1	543.75
111	Cbetbh2223-Sinv04126	29.3.23	Pearson	Miller	Mathematical Statistics	1	866.25
112	Cbetbh2223-Sinv04126	29.3.23	Pearson	Richard A Johnson	Miller & Freunds Probability & Statistics	1	600
113	Cbetbh2223-Sinv04126	29.3.23	S. Chand	Aggarwal	Quick Arithmetic 7ed	1	396
114	Cbetbh2223-Sinv04126	29.3.23	S. Chand30	Aggarwal	Objective Arithmetics	1	460
115	Cbetbh2223-Sinv04126	29.3.23	Pearson	Gerald	Applied Numerical Analysis 7ed	1	742.5
116	Cbetbh2223-Sinv04126	29.3.23	Pearson	Bajpai	Business Statistics 3ed	1	701.25
117	Cbetbh2223-Sinv04126	29.3.23	Narosa	Somasundaram	A First Course In Functional Analysis	1	337.5

118	Cbetbh2223-Sinv04126	29.3.23	Pearson	Das	Numerical Methods 5ed	1	359.25
119	Cbetbh2223-Sinv04126	29.3.23	Unique Publications	Singh	Handbook Mathematics 41.4	1	161.25
Total						119	1,20,001

2023-2024

S. No.	Bill No.	Date	Company name	Publishers	Author	Title	Qty	Amount
1	12307	16.03.2024	Shanti Books	Crc Press Inc.	George F. Simmons	Differential Equations with Applications and Historical Notes	1	1100.75
2	12307	16.03.2024	Shanti Books	Tata Mcgraw Hill Publishing Co.Ltd.	Walter J. Meyer	Concepts of Mathematical Modeling	1	1976.91
3	12307	16.03.2024	Shanti Books	Dover Publications	Edward A. Bender	An Introduction to Mathematical Modeling	1	1243.36
4	12307	16.03.2024	Shanti Books	Springer-Verlag	Sarge Lang	Introduction to Linear Algebra	1	4185.05
5	12307	16.03.2024	Shanti Books	Springer-Verlag	Theodore. Gamelin	Complex Analysis	1	4487.26
6	12307	16.03.2024	Shanti Books	Springer-Verlag	Sunil Jacob John	Soft Sets: Theory and Applications	1	7479.25
7	12307	16.03.2024	Shanti Books	Birkhauser Boston	Tyn Myint U, Lokenath Debnath,	Linear Partial Differential Equations for Scientists and Engineers	1	9723.26
8	12307	16.03.2024	Shanti Books	Springer-Verlag	Ethan D Bloch	The Real Numbers and Real Analysis	1	4262.86
9	12307	16.03.2024	Shanti Books	Springer-Verlag	M. Braun	Differential Equations and Their Applications	1	5609.25
10	12307	16.03.2024	Shanti Books	Wave Books	William Snow Burnside Arthur William Panton	The Theory of Equations	1	396
11	12307	16.03.2024	Shanti Books	A John Wiley & Sons	J. L. Meriam, L. G. Kraige, J. N. Bolton	Engineering Mechanics Statics, Volume-1	1	798.15
12	12307	16.03.2024	Shanti Books	A John Wiley & Sons	J. L. Meriam, L. G. Kraige, J. N. Bolton	Engineering Mechanics, Dynamics, Volume-II	1	798.15

13	12307	16.03.2024	Shanti Books	Wiley India (P). Ltd	William E. Boyce, Richard C. Diprima, Douglas B. Meade	Boyce Elementary Differential Equations and Boundary Value Problems	1	849.15
14	12380	26.03.2024	Shanti Books	Pearson India Education Service Pvt. Ltd.,	Irwin Miller, Marylees Miller,	John E. Freunds Mathematical Statistics with Applications	1	1049.75
15	12380	26.03.2024	Shanti Books	Pearson India Education Service Pvt. Ltd.,	Stephen H. Friedberg, Arnold J. Insel, Lawrence E. Spence	Linear Algebra	1	505.75
16	12380	26.03.2024	Shanti Books	National Academic Press	W. S Burnstine, A. W. Panton	Theory of Equations	2	792
18	12380	26.03.2024	Shanti Books	Dover	Edward A. Bender	An Introduction to Mathematical Modelling	1	1243.37
19	12380	26.03.2024	Shanti Books	Dover	Walter J. Meyer	Concepts of Mathematical Modeling	1	1976.92
20	12380	26.03.2024	Shanti Books	Dover	C. V. Durell, A. Robson	Advanced Trigonometry	1	1463.43
TOTAL							20	49940

2024-2025

S. No.	Bill No.	Date	Company name	Publishers	Author	Title	Qty	Amount
1.	1572 B	19.03.2025	Shanti Books	Chapman & Hall/CRC Chapman	STEVEN G. KTANTZ	Essentials Of Topology With Applications	1	2970.75
2.	1572 B	19.03.2025	Shanti Books	S Chand Publishing	Dr. M. D. Raisinghanian	Advanced Differential Equations	6	4565.50
3.	1572 B	19.03.2025	Shanti Books	New Age International Private Limited	Savita Arora and S. C. Malik	Mathematical Analysis	5	3187.50
4.	1572 B	19.03.2025	Shanti Books	Prentice Hall India	Kenneth Hoffman	Linear Algebra	5	2252.50
5.	1572 B	19.03.2025	Shanti Books	Sultan Chand & Sons	K. Swarup, P. K. Gupta and M. Mohan	Operation Research	4	2862.00
6.	1572 B	19.03.2025	Shanti Books	O'Reilly Media	George Mount	Modern Data Analytics in Excel	6	7140.00
7.	1572 B	19.03.2025	Shanti Books	Vikas Publishing House	Vijay K Khanna, S. K. Bhamabri	A Course in Abstract Algebra	1	590.75
TOTAL							28	23,568

9.13 Outreach / Extension Activities

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Awareness Programme on Familiarization of Science Education of School Education	10.02.2023	Dr. S. Paulsamy, Department of Botany, KASC	116 school students & 4 school teachers	Aid the school students to attain the knowledge in science subject through various lab tour.
2.	One Day Programme on “Stress Management”	08.03.2023	Mr. R. Sivakumar, Yoga Therapist, Girinath Yoga Centre, Coimbatore & Mr. S. Jeladharan, Counsellor-Trainer, Centre for Yogic Studies, PSGR Krishnammal College for Women	Non Teaching Faculties – 24 Teaching Faculties - 46	Participants can able to enhance their skill/techniques to manage their stress effectively in their working environment.
3.	Visit to Vanavasi Seva Kendra, Vadavalli, Coimbatore	11.03.2023	10 Students along with 3 faculties	Tribal Students - 20 UG Students - 10	Tribal Community children residing in Vanavasi Seva Kendra utilized the guidance of our faculty members and students and improve their speedy calculations.
4	Youth Awakening Day celebration “Role of Youth to make Bharatha a Viswaguru”	17.10.2022	Shri. Ram Gopalarathinam Motivational speaker	93 students form all departments and 11 faculty members	Participants can able to understand “How to enlighten their life instead of enjoyment”.

2023-2024

S. No.	Name of the event/ Activity	Date	Number of Beneficiaries	Outcome
1.	Awareness Programme on Mathematics & Applications of Math Model for School Students	07-07-2023	42 School Students	The students at the school found engaging applications and concepts of mathematics in everyday life through innovative models and diagrams, igniting their curiosity and enthusiasm for learning the subject.
2.	Outreach Activity- School Visit- Books Distribution	02.09.2023	50 School Students	Book distribution to schools can contribute significantly to educational outcomes by enriching learning experiences, fostering academic achievement, and empowering students to reach their full potential.
3.	Youth Awakening Day 2023	16.10.2023	65 Students from various departments	The students learnt about the life of Dr. A. P. J. Abdul Kalam who serves to be a perfect example of how a human should develop into an individual and then into an influential leader.
4.	Activity Based Learning for Basic Maths	02.03.2024	175 School students	School students actively participated in the activities and learned the concepts in Mathematics with more interest.

5.	Mathematics Formula Book – ISBN	27.03.2024 30.03.2024	400 School students	The students of Mathematics department prepared a Formula Book which would serve as a reference source for the students to face their higher secondary examination with good confidence.
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2024-2025

S. No.	Name of the event/ Activity	Date	Number of Beneficiaries	Outcome
1	Awareness Programme on “Pitching Idea for Staggering Genius” for Science Students	15.07.2024	Students: 76	Students gained valuable insights into idea validation, entrepreneurial thinking which enhanced their confidence to pitch creative concepts in future platforms.
2	An Awareness Programme on “Thoughts on Stress Management and Happiness”	28.10.2024.	Non-teaching Staffs: 20	The awareness programme provided valuable insights on effective stress management techniques and improve emotional well- being, and maintain a positive work-life balance.
3	Activity based learning (Yuva public school)	24.12.2024	School Students: 135	Our UG students exhibited their teaching skills and helped the school students to learn mathematics in easy, fun-filled ways and created interest towards the subject.

9.15 Invited Lectures

2022-2023

S. No.	Name of the Event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Lecture on “Basic Mathematics and Statistics for Non-Mathematics Students”	19.10. 2022	Dr. C. Nagamani, Assistant Professor of Mathematics, Gandhigram Rural Institute, Dindigul & Dr. M. M. Akbar Ali, Assistant Professor, Government Arts and Science College for Women, Coimbatore	236 other Major students	The programme aids the participants to improve the logical, Numerical and analytical skills and helps them to apply mathematics to solve the day to day problems.
2.	Enrichment Programme DBT Star College Scheme	08.11. 2022	Dr. R. Rajendran, Former Principal, Associate Professor of Microbiology, PSG College of Arts and Science, Coimbatore	All participatory department students	Students can able to know about salient features and benefits of the DBT Star College Scheme
3.	Guest Lecture on “Application of Mathematical Models in Scientific Methodologies”	18.02. 2023	Dr. M. Dwarakanath, Expert Member, R & D, Ministry of Environment, Government of India	50 Students	The students can able to understand the applications of mathematics in various fields science.
4.	Lecture Series on “Algebra and Analysis”	25.02. 2023	Dr. R. Rakkiyappan, Assistant Professor of Mathematics, Bharathiar University, Coimbatore	62 Students	The students learned about the Characteristics of finite groups in algebra.

5.	Lecture Series on “Algebra and Analysis”	10.03.2023	Dr. G. Nagamani, Assistant Professor of Mathematics, Gandhigram Rural Institute , Dindigul	88 Students	The students gained the Knowledge about Applications of Limits and Continuity in analysis.
6.	Lecture Series on “Algebra and Analysis”	30.03.2023	Dr. R. Rajkumar, Assistant Professor of Mathematics, Gandhigram Rural Institute , Dindigul	50 Students	The students learned about cosets and normal subgroups of groups in algebra.

2023-2024

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Guest lecture on “Career Opportunities in Abroad”	07.08.2023	Mr. Bagavathiannan Palanisamy Software Deliver Manager DZS GmbH, Hannover, Germany	79 Students	Participants can able to identify various opportunities to pursue higher education in various science related courses abroad.
2.	Guest Lecture on “Applications of Mathematics in Image Processing”	30.8.2023	Dr. Suresh Rasappan Professor, Mathematics section, Department of Information Technology, University of Technology and Applied Sciences- IBRI Sultanate of Oman.	73 Students	The students learnt about image processing, Importing and Exporting images, and texture in MATLAB which are widely used in their project works.
3.	Lecture Series on Algebra & Analysis I	20.9.2023	Dr. M. Sambath Assistant Professor of Mathematics, Periyar University, Salem.	49 Students	The students studied the basic concepts of complex analysis and various techniques to solve mathematical problems.
4.	Guest Lecture on “Students Project Ideas- Interdisciplinary Approach”	21.09.2023	Dr. D. Sasikala Assistant Professor, Department of Mathematics, PSGR Krishnammal College for Women, Coimbatore	69 Students	The students were able to identify the problem, approach and analyze the problem and to learn the inter-disciplinary applications of the problem in various fields.
5.	A Lecture on “Design Thinking”	22.09.2023	Mr. M. Vivek Kumar Department of ECE, Sri Eshwar College of Engg, Coimbatore.	59 Students	To aid design teams to create feasible and user focused solution to complex problems in design.
6.	A Guest Lecture on “Stress Management”	18.10.2023	Thiru. Sivakumar Yoga Therapist, Girinath Yoga Centre, Coimbatore.	Supportive Staff: 26	Participants were able to enhance their techniques to manage the stress effectively in their environment.
7.	Lecture Series on Algebra and Analysis –II	29.01.2024	Dr. R. Rakkiyappan Assistant Professor of Mathematics, Bharathiar University Coimbatore -46	67 Students	Students were able to grasp the fundamental knowledge of Algebra and Analysis forms the basic Foundations.

8.	Lecture Series on Algebra and Analysis –III	13.03.2024	Dr. Gopikrishnan Chirappurathu Remesan Assistant Professor of Mathematics, Indian Institute of Technology, Palakkad.	55 Students	The UG students learnt the basic concepts of Linear Algebra that will help them to build a strong foundation on the subject.
9.	Lecture Series on Algebra and Analysis –IV	15.03.2024	Dr. K. Palpandi Assistant Professor of Mathematics, National Institute of Technology Calicut, Calicut - 673 601	60 Students	The B.Sc. Mathematics students studied the important concepts of Algebra through examples and problems.

2024-2025

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	A Guest Lecture on Navigating Complexity: “Interdisciplinary Learning for Non-Mathematics Students”	02.08.2024	Dr. D. Gunasekaran, Assistant Professor, Department of Mathematics, PSG College of Arts & Science, Coimbatore.	B. Com A&F: 35 BBA CA: 40 B. Com PA: 04 Botany: 05 Chemistry: 12 Physics: 10 Computer: 20 Computer Tech: 20 B. Com IT: 10	Developed the ability to think critically and innovatively by applying interdisciplinary approaches to complex problems.
2.	Lecture Series on Algebra & Analysis – I	30.08.2024	Dr. M. Sambath, Assistant Professor of Mathematics, Periyar University, Salem	Students: 45 Faculty:5	Students understood the basic concepts of Algebra and applications in the field of Differential Equations.
3.	A Guest Lecture on “Student Project Ideas- Interdisciplinary Approach”	23.09.2024	Dr. P. Jayaraman, Assistant Professor, Department of Applied Mathematics, Bharathiar University, Coimbatore.	Maths: 23 Physics: 06 Computer: 07 Chemistry: 01 Biochem: 02	Students gained insight into generating innovative project ideas through interdisciplinary approach.
4.	Lecture Series on Algebra & Analysis- II: Fractal Analysis and Its Applications	23.09.2024	Dr. R. Uthayakumar, Professor & Head, Department of Mathematics, The Gandhigram Rural Institute Dindigul	32 Students Faculty:5	Students acquired foundational knowledge of Fractal Analysis and understood the real- world applications.

5.	Lecture Series on Algebra & Analysis – III	20.02.2025	Dr. S. Raja, Assistant Professor of Mathematics, Amrita Vishwa Vidyapeetham, Nagercoil Campus.	Students: 42 Faculty:5	Advanced concepts of Algebra and analysis which fostered critical thinking and problem-solving and applications.
6.	National day celebration: A Lecture on “Technological Inventions by Indian scientists- An inspiration for future innovators”	24.02.2025	Mr. K. Leninbarathi, Science Communicator, Regional Science Centre, Coimbatore.	Students: 40	It inspired students to explore innovation and research contribute to the nation's technological growth.
7.	Lecture Series on Algebra & Analysis – IV	03.03.2025	Dr. Shangerganesh Lingeswaran, Assistant Professor of Mathematics, Department of Applied Sciences, National Institute of Technology, Goa.	Students: 56 Faculty:5	Students deepened their understanding of advanced topics in Algebra and Analysis

2025-2026

S. No.	Name of the event/Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Guest Lecture on Demystifying Data Analysis Using AI	08.09.2025	Dr.M.Vijayakumar Assistant Professor Department of Mathematics Sri Ramakrishna Institute of Technology, Coimbatore	41 Students	The lecture enabled students to understand the fundamentals of data analysis and how AI can simplify complex datasets. Participants gained insights into using AI tools to perform efficient data analysis and draw meaningful interpretations.
2.	A Guest Lecture on Basic Concepts in Mathematical Analysis	15.09.2025	Dr. I. Nandha Gopal Associate Professor of Mathematics Sri Ramakrishna Mission Vidyalaya College Of Arts And Science, Coimbatore- 641 020	30 Students	Students gained a clearer understanding of core concepts in mathematical analysis. • The lecture sparked interest in pursuing further studies in real analysis and related fields. • Participants were able to connect abstract mathematical ideas with practical examples. • The session fostered academic curiosity and encouraged interactive learning.
3.	A Guest Lecture on Understanding the Formation and Solutions of Differential Equations	19.09.2025	Dr. V. Rajendran Guest Lecturer Department of Mathematics Puratchi Thalaivi Amma Government Arts and Science College, Tirupur	31 Students	• Students gained a clear understanding of the formation and classification of differential equations. • Participants were able to apply appropriate methods to solve first-order and higher-order equations

4.	Guest Lecture on An Introduction to System of Differential Equations	02.07.2025	Dr. K.Kaliraj Assistant Professor of Mathematics, University of Madras, Chennai	54 Students	Students learnt software tools like MATLAB or Mathematica that are commonly used to solve and analyze differential equations.
5.	A Lecture on Stress Indices of Graphs and its Applications	11.07.2025	Dr. P.Siva Kota Reddy Professor & Head, Department of Mathematics, JSS Science and Technology University, Mysore, Karnataka	37 Students	The lecture Enhanced deep understanding of graph theoretic stress indices and their relevance across domains and increased the curiosity and research orientation among students.
6.	Lecture on Algebra	09.09.2025	Dr. M. M. Akbar Ali, Assistant Professor of Mathematics, Government Arts and Science College for Women, Puliyakulam, Coimbatore-641 045	53 Students	Students gained clarity on foundational topics such as groups, rings, and fields. The lecture enhanced participants confidence in approaching abstract algebra problem.
7.	Indian knowledge tradition: A Journey through ancient science and philosophy	22.08.2025	Dr. M. Santhoshkumar, Assistant professor, Department of Bio-chemistry, Kongunadu Arts and Science College (Autonomous), Coimbatore.	37 Students	This programme helped the students ingaining, exposure to ancient Indian contributions in mathematics, astronomy, medicine, and philosophy and enhanced their understanding of how tradition and science coexisted.

Details of Recurring Expenditure DBT Grant

Department wise

DEPARTMENT OF PHYSICS

S. No.	Particulars	Amount (Rs.) 2022-2023	Amount (Rs.) 2023-2024	Amount (Rs.) 2024-2025
1	Internship, Staff & Students Activities	22176	27,032	28,775
2	Training Programme	27635	44,655	38,945
3	Industrial Visit	28034	18,450	49,586
4	Conference/ Seminars / Workshops/Guest lectures	25935	43,439	64,998
5	FDP's	18080	9,525	11,330
6	Interdepartmental/ Intercollegiate Competition/ Exhibition	22649	14,440	14,517
7	Projects	37657	60,501	49,114
8	Consumables	50662	49,993	19,224
9	Books and Journals	60000	24,912	19,989
10	Lab Manuals	1565	1,429	1,554
11	Outreach Programme and Mentor Meetings	5607	5,624	1,968
TOTAL		Rs. 3,00,000	Rs.3,00,000	Rs. 3,00,000

DEPARTMENT OF CHEMISTRY

S. No.	Particulars	Amount (Rs.) 2022-2023	Amount (Rs.) 2023-2024	Amount (Rs.) 2024-2025
1	Internship, Staff & Students Activities	7740	26727	18,336
2	FTP and FDP	12564	12,600	9,853
3	Training Programme	30786	36,845	38,704
4	Industrial Visit	28966	18,500	43,594
5	Conference/ Seminars / Workshops/Guest lectures	22169	65,000	69,931
7	Inter departmental/ Intercollegiate Competition/ Exhibition	4800	4,677	2,650
9	Outreach activities	12440	4131	6,916
10	Projects	30829	38,419	31,727
11	Consumables (Chemicals)	89206	59,425	60,099
12	Books & Journals	60,500	33,676	18,190
TOTAL		3,00,000	3,00,000	3,00,000

DEPARTMENT OF COMPUTER SCIENCE

S. No.	Particulars	Amount (Rs.) 2022-2023	Amount (Rs.) 2023-2024	Amount (Rs.) 2024-2025
1	Internship, Staff & Students Activities	6550	16,697	12,550
2	Training Programme	18609	3,580	34,009
3	Industrial Visit	32497	54,106	60,511
4	Conference/ Seminars / Workshops/Guest lectures	51257	85,066	48,673
5	FDP's	20241	19,293	29,309
6	Interdepartmental/ Intercollegiate Competition/ Exhibition/Outreach	36646	10,304	13,992
7	Projects	9862	30,617	37,464
8	Consumables	29038	35,337	28,727
9	Books	95000	45,000	30,065
10	Lab Manuals	300	-	4,730
Total		3,00,000	3,00,000	Rs. 3,00,030

DEPARTMENT OF MATHEMATICS

S. No.	Particulars	Amount (Rs.) 2022-2023	Amount (Rs.) 2023-2024	Amount (Rs.) 2024-2025
1	Internship, Staff & Students Activities	5760	15,440	19,377
2	Training Programme	17158	68,188	67,948
3	Industrial Visit	38031	48,285	59,950
4	Conference/ Seminars / Workshops/Guest lectures	75923	46,687	66,195
5	FDP's	17241	14,739	17,500
6	Interdepartmental/ Intercollegiate Competition/ Exhibition	20534	26,198	23,555
7	Projects	2621	9,788	15,119
8	Consumables	2150	5,000	6,788
9	Books	120000	49,940	23,568
10	Lab Manual/Formula Book	582	15735	-
Total		Rs. 3,00,000	Rs. 3,00,000/-	Rs. 3,00,000


Course Coordinator

Dr. D. VIJAYALAKSHMI M.Sc., M.Phil., Ph.D., PGDCA
Assistant Professor in Mathematics
Co-ordinator, DBT STAR COLLEGE SCHEME
Kongunadu Arts and Science College (Autonomous)
Coimbatore - 641 029, TN.


Head of the Institution

Principal
Kongunadu Arts & Science College
Coimbatore - 641029

ANNEXURE – I

**Details of Asset Acquired and request letter for
the retention of procured equipment**

ASSET ACQUIRED CERTIFICATE

Assets acquired wholly substantially out of Government Grants Register to be maintained by grantee Institution

Name of the Sanctioning Authority : **Department of Biotechnology
Government of India, New Delhi.**

1. Sl.No. : —
2. Name of Grantee Institution : **Kongunadu Arts and Science College
(Autonomous), Coimbatore, Tamilnadu, India**
3. No.& Date of Sanction order : **HRD-11011/30/2021-HRD-DBT Dated 23.03.2022**
4. Amount of the Sanctioned grant : **Rs.40.00 lakhs(Rupees Forty lakhs only)**
5. Brief purpose of the Grant : **Strengthening of Undergraduate level Science
Education and Training to encourage more
Students to take up higher education in Science**
6. Whether any condition regarding the
right of ownership of Govt. in the
property or other assets acquired out
of the grant was incorporated in the
grant -in-aid sanction order :
7. Particulars of assets actually credited or acquired


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Mrs. P. DEIVANAYAGI
Accounts Officer
DBT - STAR COLLEGE SCHEME
Kongunadu Arts and Science College
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COIMBATORE-641 029.

Name of the Department: Physics

S No	Name of the Equipment	Unit Cost	Number of Units	Actual Cost (factual figure, not in lakh)	Date of Placing Order	Date of Receiving Equipment	Remark/Payment Voucher No. with Date (Copy of Payment Voucher may please be enclosed)
1.	Sonometer-Nos Make : Besto Model 1108	1980.00	4	7920.00	08.06.2022	22.07.2022	Cheque No. 114271 dated 19.12.2022 Amount: Rs. 9,99,992/-
2.	Meter Bridge. Nos Make : Besto Model 963	2145.00	4	8580.00			
3.	Carey Foster Bridge 4 Gaps "Pico" Make	2420.00	4	9680.00			
4.	Potentiometer 10 Wiremake : Besto Model : 932	2255.00	4	9020.00			
5.	Spectrometer make : Weswox Model : HI603	12650.00	6	75900.00			
6.	Ballistic Galvanometer Make : Osaw	16500.00	2	33000.00			
7.	Microprocessor Kit Make : Vi Micro	7689.00	10	76890.00			
8.	Lechlanche Cell (Electronic) Make : Pico	1155.00	4	4620.00			
9.	Daniel Cell (Electronic) Make : Pico	1155.00	4	4620.00			
10.	Power Supply 2v , 1 Amps "Pico" Make	1650.00	9	14850.00			
11.	Power Supply 6V, 1 Amps "Pico" Make	1650.00	8	13200.00			
12.	Power Supply 9-0-9 V, 1 Amps "Pico" Make	2310.00	6	13860.00			
13.	Power Supply 12-0-12 V, 1 Amps "Pico" Make	2310.00	6	13860.00			
14.	Resistance Box 4 Dial " Pico" Make	2970.00	5	14850.00			
15.	Resistance Box 2 Dial "Pico" Make	1815.00	5	9075.00			
16.	Condenser Box 4 Dial "Pico" Make	4950.00	5	24750.00			
17.	Condenser Box 2 Dial "Pico" Make	2640.00	5	13200.00			

CDs. D. Vidyalakshmi

g. Deivanay



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18.	Rheostat 50 Ohms Make : Esal	1265.00	6	7590.00
19.	Rheostat 400 Ohms Make : Esal	1375.00	6	8250.00
20.	Bread Board with 5v Supply Make : Pico	2310.00	6	13860.00
21.	Bread Board with 9v Supply Make : Pico	2310.00	6	13860.00
22.	Sodium Vapour Lamp, Box And Transformer Make : Phillips	4675.00	6	28050.00
23.	Mercury Vapour Lamp, Box And Transformer Make : Vapolite	2310.00	6	13860.00
24.	Electronic Balance Wensar 3kg	4950.00	1	4950.00
25.	Electronic Balance Make : Wensar 1 kg	4950.00	1	4950.00
26.	Travelling Microscope Make : Weswox Model : H17	11550.00	1	11550.00
27.	Reading Telescope "Besto" Make (1542)	3960.00	2	7920.00
28.	Electrical Reading Lens make : Modi	1955.00	10	19550.00
29.	Rigidity Modulus Apparatus "Besto" Make	9350.00	4	37400.00
30.	Laser Diffraction Experiment He-Ne Laser "Besto" (1650 B)	37950.00	2	75900.00
31.	Laser Diffraction Experiment Mount for Besto He-Ne Laser "Besto" (1654)	10395.00	2	20790.00
32.	Laser Diffraction Experiment Optical Bench for Besto He- Ne Laser "Besto" (1656)	25520.00	2	51040.00
33.	Laser Diffraction Experiment Screen "Besto" Make (1658)	528.00	2	1056.00

Dr. D. V. Jayalakshmi

P. Srinivasan

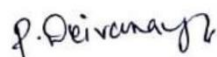
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34.	Polarimeter "Advance" Make Model Pa:2	32000.00	2	64000.00			
Total GST18% Net Total(A)				732451 131841 864292			
35.	Planck's constant by Photoelectric "Besto" make(2017) Accessories: green filter -1 no., blue filter -1 no., red filter -1 no., patch chords- 3 nos., incadescent lamp-1	27200.00	1	27200.00	02.06.2023	06.06.2023	Cheque No. 114271 dated 19.12.2022 Amount: Rs. 9,99,992/-*
36.	Vibration magnetometer "Besto" make(1069) Accessories: stabilized power supply -2 nos., rehostat-2 nos., ammeter 0-2 amps-2 nos., connecting leads-8 nos., magnetic field apparatus-2 nos., stewart&gee apparatus -1 no., tangent galvanometer-1 no.,	21180.00	1	21180.00			
37.	Post office box "Besto" make(905)	9120.00	2	18240.00			
Total				66620			
GST (18%)				11991.60			
Special Discount				1965			
NetTotal(B)				76647			
Grand Total A+B (864292+76647)				9,40,939/-			

*The deviation from the total amount to the cheque amount Rs.59053/- is refunded to Bharatkosh on 14.06.2023.


(Dr. Vijayalakshmi)

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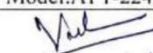
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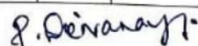
Name of the Department: Chemistry

S. No.	Name of Equipment	Unit Cost	No. of Units	Actual Cost in Rs (factual figure, not in lakh)	Date of Placing Order	Date of Receiving Equipment	Remark/ Payment Voucher No. with Date (Copy of Payment Voucher may please be enclosed)
1	Digital Melting Point Apparatus "Equiptronics"	44000	3	132000	28.06.2022	22.08.2022	Cheque no.-114260 dated 26.08.2022
2	Khan Shaker "Kemi" Make -9 Flasks Of 250ml (Reciprocating Type)	28800	3	86400			
3	Digital PH Meter "Ei" Make With Combined Electrode	3840	7	26880			
4	Lactometer "Benny" Make ISS Marked	150	6	900			
5	Auto Digital TDS Meter "Labtronics" Make-	4600	12	55200			
6	Microwave Oven "LG" Make 24 Lit Capacity	6500	6	39000			
7	Magnetic Stirrer 1 lit Capacity With Hot Plate Model: Imlh "Remi" Make	6300	7	44100			
8	All Glass Double Distillation Unit "Bhanu" Make Model : Es-2000/Ddq With Auto Cut Off	28000	1	28000			
9	Dispenser Bottle Top research model - Borosil	13000	2	26000			
10	Digital Potentiometer "Pico" Make Model: DP002	4200	12	50400			
11	a. Digital Conductivity Meter "EI" Make Model: Alpha 03	4400	12	52800			
	b. Conductivity Cell -Elico	1850	5	9250			
12	Digital Calorimeter "EI" Make Model: Alpha 03	4100	3	12300			
13	a. Revolutionary Laboratory Centrifuge- "Remi" Make Model R8C-	23000	1	23000			
	b. 8x15 Angle Head With Pp Tubes	3200	2	6400			
14	Electronic Top Loading Balance "Shimadzu" Japan Make Model: BL-220H	24000	1	24000			
15	Electronic Analytical Balance "Shimadzu" Japan Make Model: ATY-224R	62000	1	62000			



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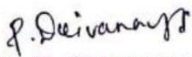

(C.D. Vijayalakshmi)


P. Deivanayagi

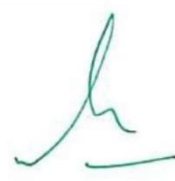
16	Molecular Model Set Make Poly Lab Senior	2100	2	4200			
Total				682830			
GST (18%)				122909			
Net Total (A)				805739			
17	Water Bath thermostatically controlled- Rashmi	6800	6	40800	28.06.2022	22.08.2022	Cheque no.-114261 dated 26.08.2022
18	Heating Mantle with energy regulator - Rashmi	1750	5	8750			
19	a. Calomel Electrode - Elico	1800	4	7200			
	b. Platinum Electrode - Elico	3200	4	12800			
Total				69550			
GST (18%)				12519			
Net Total (B)				82069			
20	Rota vapour with pump	94900	1	94900	22.08.2022	1.09.2022	Cheque no.-114262 dated 26.08.2022
Total				94900			
GST (18%)				17082			
Net Total (C)				111982			
Grand Total A+B+C (805739+82069+111982)				Rs.9,99,790/-			


(Dr. Vijayalakshmi)

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KONGUNADU ARTS & SCIENCE COLLEGE
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Name of the Department: Computer Science

S. No.	Name of the Equipment	Unit Cost	Number of Units	Actual Cost (factual figure, not in lakh)	Date of Placing Order	Date of Receiving Equipment	Remark/Payment Voucher No. with Date(Copy of Payment Voucher may please be enclosed)
1.	Arduino Uno R3 Arduino Board	900	44 Nos	39600	22.06.22	18.07.22	Cheque No:114253 dt:18/07/22
	Node MCU with WiFi Module Bluetooth Receiver and Camera	500	44 Nos	22000			
	Basic Sensors Device	190	44 Nos	8360			
	GSM Module (Global System for Mobile Communications)	812	22 Nos	17864			
	Total GST18% Net Total(A)			87824 15808 103632			
2..	Dell Desktop 5000MT Intel 12 th Generation Core i5-12500 Windows 10/Linux Chipset Motherboard 16GB DDR4 non ECC Memory 1TB Hard Disk Drive Dell 20 Wide Screen Monitor - E2020H	51000	13	663000	22.06.22	02.08.22	Cheque No:114256 dt:02/08/22
Total GST(18%) Net Total (B)				663000 119340 782340			
3.	Projector: BenQ Projector EH600	88281.25	1	88281.25	18.08.2022	22.08.2022	Cheque No:114257 dt:22/08/22
Total GST(28%) Net Total (C)				88281.25 24718.75 1,13000.00			
Grand Total A+B+C (103632+782340+113000)				9,98,972/-			

(D. Vijayalakshmi)

P. Deivanayagi

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KONUNADU ARTS & SCIENCE COLLEGE
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Name of the Department: Mathematics

S. No.	Name of Equipment	Unit Cost	Number of Units	Actual Cost (factual figure, not in lakh)	Date of Placing Order	Date of Receiving Equipment	Remark/Payment Voucher No. with Date(Copy of Payment Voucher may please be enclosed)
1.	Desktop – 8 Qty H P Micro Tower 208C16 Intel Core i5 10400 Processor AUTB	41508	8	332064	22.06.2022	30.06.2022	Indian Overseas Bank Cheque no "114251" Date: 08.07.2022
				Total GST (18%) Net Total(A)			
				332064 59771 391836			
2.	MATLAB Latest Version	19000	10	190000	22.06.2022	14.07.2022	Indian Overseas Bank Cheque no "114252" Date: 15.07.2022
	MATLAB – Symbolic Math Tool Box	15000	1	15000			
	MATLAB – Statistics and Machine Learning Toolbox	15000	1	15000			
				Total GST (18%) Net Total(B)			
				220000 39600 259600			
3.	Transfer of Momentum	21186.44	1	21186.44	22.06.2022	22.08.2022	Indian Overseas Bank Cheque no "114258" Date: 22.08.2022
	Finite Solution	14406.77	1	14406.77			
	Infinite Solution	14406.77	1	14406.77			
	Unique Solution	13559.32	1	13559.32			
	Pythagoras Theorem Model	16949.15	1	16949.15			
				Total GST (18%) Net Total(C)			
				80508.45 14491.55 95000			
4.	(i) Globus CIRB80 Interactive Board	22450	3	67350	22.06.2022	06.07.2022	Indian Overseas Bank Cheque no "114259" Date: 25.08.2022
	(ii) Optoma Projector W319ST	34000	3	102000			
	(iii) Fingers Multimedia Speaker 2.1	2597	3	7791			
	(iv) Wall Mount	2130	3	6390			

(D. V. Jayalakshmi)

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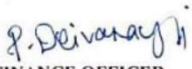
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Projector Stand 2.5 to 4.5 Feet						
(v) VGA Cable 10 Mtrs	1265	3	3795			
(vi) HDMI Cable 10 Mtrs-NT	2070	3	6210			
(vii) Power Cord 10 Mtrs	550	3	1650			
(viii) Installation Charges	1500	3	4500			
Total			199686			
GST (28% for (i) and (ii))			47418			
GST(18% from (iii) to (viii))			5460			
Total GST			52878			
Net Total(D)			252564			
Grand Total A+B+C+D (391836+259600+95000+252564)			9,98,999/-			

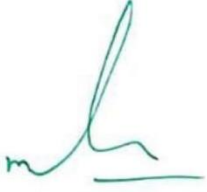
- 8 Value of the Assets as on : Rs 39,38,701
- 9 Purpose for which utilized at present : For conducting regular practicals and to carry out student projects and to give training to school students, nearby colleges and awareness to the society.
- 10 Encumbered or not : No
- 11 Reasons, if encumbered : _____
- 12 Disposed of or not : No
- 13 Reason and authority, if any for disposal: _____
- 14 Amount released on disposal : Nil
- 15 Remarks : _____


PROJECT INVESTIGATOR

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FINANCE OFFICER
Mrs. P. DEIVANAYAKI
Accounts Officer

DBT - STAR COLLEGE SCHEME
Kongunadu Arts and Science College
Coimbatore - 641 029, TN


HEAD OF THE INSTITUTE
Dr. M. LEKESHMANASWAMY
MSc, MPhil, PhD, BEd, FSISC, FISEC,
Principal
Kongunadu Arts and Science College
(Autonomous)
Coimbatore - 641 029, TN.



KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

Re-accredited by NAAC with A+ Grade (4th Cycle)

College of Excellence (Status Awarded by UGC)

Affiliated to Bharathiar University

GNANAMBIKAI MILLS (POST), COIMBATORE - 641029, TAMIL NADU, INDIA.

Dr. V. SANGEETHA M.Sc., Ph.D.,
PRINCIPAL

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REQUEST LETTER FOR THE RETENTION OF PROCURED EQUIPMENT

The Participatory departments (**Department of Physics, Chemistry, Computer Science and Mathematics**) with the financial assistance under the DBT Star College Scheme upgraded laboratory infrastructure with a total worth of asset for **Rs. 39,38,701** (Rupees Thirty nine lakhs and thirty eight thousand and seven hundred and one) under non-recurring grant of DBT Star College Scheme.

With the assets acquired under this scheme the following are the overall development and academic performance of the Participatory Departments and the Institution as a whole.

- ❖ Laboratory Infrastructure in all the four participatory departments were upgraded with the help of New and Additional Equipment/ High Configuration Computers / Softwares/ IoT Devices/ Models purchased under the Star College Scheme and this paved the way for the creation of additional Infrastructure development of the Departments and the College at large.
- ❖ The procurement of new and additional equipment and instruments has upgraded existing teaching-learning resources. This enhancement improved the **student-to-instrument ratio** allowing students to engage in more subject specific experiments individually. The students were able to learn new techniques more effectively and creatively extending existing practicals which amplifies a vibe towards the subjects and **enhanced the Practical /Technical Skills in handling instruments**.
- ❖ Additionally, acquisition of the softwares under the DBT Star College Scheme and the establishment of the **well-equipped laboratories** has significantly boosted students' computational and practical capabilities through hands-on projects and practical applications which improves the

of the project for future research and academics studies and placement.

- ❖ The Establishment of a Department library funded by Star College Scheme provided the students and faculty with immediate access to wide range of books/journals thus leading to better daily academic performances.

Our institution Kongunadu Arts and Science College(Autonomous), Coimbatore submit the deep sense of gratitude for the financial and academic assistance provided through this initiative has played a transformative role in shaping the educational landscape of our College at large and profound request to the Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India and Dr. Garima Gupta, Scientist 'F' and Programme Head, DBT to **permit our institution to retain the asset acquired** by the participatory departments with generous financial support under the **DBT Star College Scheme** after the successful completion of the project (23.03.2022 to 22.09.2025) , in order to excel and empower both students and faculty in their academic pursuits for future research and academics.


PRINCIPAL
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KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

DBT STAR COLLEGE SCHEME

DETAILS OF ADVISORY COMMITTEE MEMBERS

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DBT REPRESENTATIVES

- **Dr. Garima Gupta**, Scientist - 'F',
Programme Head,
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- Dr. K. Chandra Prakash M.Sc., Ph. D, Assistant Professor of Chemistry
- Dr. S.P.R. Priyalatha M.Sc., M.Phil., Ph. D, Assistant Professor of Mathematics
- Dr. S. Selvi M.Sc., Ph. D, Assistant Professor of Physics

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Course Coordinator

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Head of the Institution

Principal
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