



**KONGUNADU ARTS AND SCIENCE COLLEGE
(AUTONOMOUS)**

DEPARTMENT OF CHEMISTRY

ACTIVITIES CONDUCTED

UNDER

DBT STAR COLLEGE SCHEME 2024 - 2025

HANDS ON TRAINING



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. - Enabled the students to create awareness about water pollution among their communities for a healthy environment.
2	Hands on Training on "Chromatographic Techniques and their Applications"	31.01.2025	Dr. T. Suresh Assistant Professor Department 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 Department of Chemistry, Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Amrita Nagar, Coimbatore.	Students: 65 Faculty: 5	- Students came to know about the importance of water quality and causes of pollution. - Students learnt about collection and analysis of water pollutants.

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.
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WORKSHOP ORGANIZED

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, VicePresident – Finance and Administration, 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 Department of Chemistry, North Eastern Hill University, Shillong, Meghalaya, India. • Dr. K. Sundaravel, Assistant Professor, Department 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) and also 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 Department of Chemistry Sri Ramakrishna Mission Vidyalaya 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, Department of Nanoengineering, 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.

INVITED LECTURES

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. Ilango van S A, Former Deputy Director, Vikram Sarabhai Space Center, ISRO, Trivandrum.	150 students	Students gained knowledge in topics such as battery systems, Chemical reactions in Space, Thermal protection systems, and special polymers used in ISRO’s missions.
2.	Guest Lecture on “Future Perspective and Challenges in	31.07.2024	Dr. P. Premasudha, Assistant Professor,	Chemistry: 54 Physics: 29	Students came to know about the applications of various

	Nanoscience and Nanotechnology” (jointly organised with Physics Department)		Department of Nanoscience and Technology, Bharathiar University, Coimbatore.		advanced materials and learnt to apply photocatalytic concepts in their projects.
3.	Invited talk on “Topics of Interest in Inorganic Chemistry Research”	08.08.2024	Dr. V. Madhu, Associate Professor, Department of Applied Chemistry, Karunya Institute of Technology and Sciences, Coimbatore.	Students: 60 Faculty: 5	Students came to know about the different types of inorganic compounds and their applications in various fields like catalysis, energy storage, sensors, etc.
4	Guest Lecture on “Chemistry in Day-to-Day Life”	03.09.24	Dr. P. Thilagavathy, Assistant Professor, Department of Chemistry, Amrita School of Physical Sciences, Amrita Vishwa Vidyapeetham, Amrita Nagar, Coimbatore.	Students: 68 Faculty: 3	Students enhanced their understanding of Chemistry by relating concepts to everyday life experiences.
5	Guest Lecture on “State – of – The– Art: Computer Application for Science Students”	12.12.2024	Er. T. Gopal General Manager, (Retd.,) Bharat Heavy Electricals Ltd., Govt. of India. Vice President, Mascon Global Director, Resurgent Software Technologies Ltd.	41 Students 16 Botany, 16 Bio-Chem	Students gained fundamental knowledge in the usage of programming languages in Data analysis, Industrial collaboration and real-world applications.
6	Invited lecture on “Green Hydrogen Production”	07.01.2025	Dr. Kannan Kandasamy Professor, Department of Chemical	41 Students	Students gained a deeper understanding of green hydrogen as a clean energy solution,

			Engineering, Kongu Engineering College, Erode.		recognizing its growing significance in the industrial sectors.
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EXHIBITION / COMPETITIONS CONDUCTED

S. No.	Name of the event/Activity	Date	Number of Beneficiaries	Outcome
1.	Exhibition on “Exploring Young minds 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.

TRAINING COURSES CONDUCTED

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	08.10.24	Prof. Dr. A. Sangamithra Professor,	Faculty:25	It broke down the traditional mindset that only teachers have the

	on “Reverse Mentoring”		Department of Economics Bharathiar University, Coimbatore.		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 & Fire safety Awareness”	12.02.2025	V. Ranga Raju, Safety Officer, PSG Institutions, Coimbatore.	Lab Technicians: 15 Faculty: 4	The participants learned the importance of biosafety and fire safety and responsibilities in preventing accidents.

OUTREACH / EXTENSION ACTIVITIES

S. No.	Name of the event/Activity	Date	Resource Person	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 Program” 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.
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INDUSTRIAL VISITS

S. No.	Name of the event/Activity	Place of Visit	Date	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 sophisticated 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	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.

		Private Limited, Koppa, Chikkmagalur, Karnataka.			
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. The visit provided real-world examples that included Chemistry in complex engineering and technological systems.