**KONGUNADU ARTS AND SCIENCE COLLEGE**
**(Autonomous)**
**Coimbatore – 641 029**

## Collaborative Research Work Academic Year (2024-2025)

| S. No. | Name of the Faculty | Collaboration with | Name and Place of the Collaborative Institution | Joint Research work/Title of the Research Article Published | Duration |
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| 1. | **C. Ravichandran** Assistant Professor, Department of Mathematics | Kottakkaran Sooppy Nisar, | Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia. | Evaluating the stability and efficacy of fractal-fractional models in reproductive cancer apoptosis with ABT-737 | 4 months, 4 days |
| 2. | **C. Ravichandran** Assistant Professor, Department of Mathematics | Kottakkaran Sooppy Nisar, | Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia. | Fractal–fractional approach to stability in enzyme kinetics:A mathematical model perspective | 3 months, 21 days |
| 3. | **C. Ravichandran** Assistant Professor, Department of Mathematics | Kottakkaran Sooppy Nisar, | Department of Mathematics, College of Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia. | A strong technique for solving the fractional model of multi-dimensional Schnakenberg reaction-diffusion system | 6 months |
| 4. | **C. Ravichandran** Assistant Professor, | Kottakkaran Sooppy Nisar, | Department of Mathematics, College of | Discussions on Sobolev type Neutral Nonlocal | 2 months, 19 days |

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| | **Department of Mathematics** | | Science and Humanities in Alkharj, Prince Sattam Bin Abdulaziz University, Alkharj 11942, Saudi Arabia. | fractional differential equation | |
| 5. | **N. Mohanapriya**<br>Assistant Professor, Department of Mathematics | Dafik, Ika Hesti Agustin | CGANT, University of Jember, Indonesia | • On the local (a, d)-edge antimagic coloring of gear graph and its subdivision.<br>• On Local Antimagic b-Coloring of Graphs: New Notion.<br>• A Study on Geo Chromatic and Total Geo Chromatic number of Caterpillar tree and comb product of tree-like graphs. | 6 Months / Paper |
| 6. | **Dr. G. Dhandapani**<br>Assistant Professor, Department of Botony | Dr. Amit Roy | Group leader \|Forest Molecular Entomology Team<br>Department of Forest Genetics and Physiology<br>Faculty of Forestry and Wood Sciences, Czech University of Life Sciences Prague | RNA Interference | Since 2020 |

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| 7. | **Dr. G. Dhandapani**<br>Assistant Professor,<br>Department of Botony | Dr. Rohini Sreevathsa, Dr. Debasis Pattanayak | National Institute of Plant Biotechnology, PUSA Campus, New Delhi | RNA Interference | Since 2020 |
| 8. | **Dr.C.Shobana**<br>Assistant Professor,<br>Department of Zoology | Dr. Kalaiselvan | Department of Physics, Bharathiar University | Ecotoxicological risk assessment of spent secondary batteries in aquatic environments: A multi biomarker approach using adult and embryo of Zebra fish Danio rerio | 5 years |
| 9. | **Faculty members**<br>Department of Zoology | ZSI | ZSI, Kozhikode | National Seminar in collaboration with ZSI entitled on "The Western Ghats: The Biodiversity Conservation and Management" on 6th and 7th March 2025 and students going for internship at ZSI, Kozhikode, Kerala. | March 2025 and may 2025 |
| 10. | **Dr. M. Santhoshkumar**<br>Assistant Professor<br>Department of Bio-Chemistry(UG) | Dr. Hemamalini M | Mother Teresa Womens University | Multifaceted analysis of a p-Coumaric acid-tryptamine organic salt | 2024y – 2025 March |
| 11 | **A.Nivetha**<br>Assistant Professor<br>Chemistry (PG) | P. Venkatraman, L. M. Aggarwal, S. Choudhary | Banaras Hindu University, Varanasi 221005, India | Nanomaterials | 1 year |
| 12 | **A. Nivetha**<br>Assistant Professor<br>Chemistry (PG) | C. Sakthivel | Shandong University of Technology, Zibo 255000, PR China | Nanomaterials | 1 year |

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| 13 | **A. Nivetha**<br>Assistant Professor<br>Chemistry (PG) | P. Sellan, L. Wei | Southeast University, Nanjing 210096, P.R. China | Nanomaterials | 1 year |
| 14 | **Dr. R.T. Narendhirakannan**<br>Department of Bio-Chemistry (UG) | Dr. Pariyaporn Itsaranuwat | Head of Department of Biotechnology, Faculty of Technology Mahasarakham University, Mahasarakham THAILAND | Phytochemistry | 3 years |
| 15 | **Dr. G. Dhandapani**<br>Assistant Professor,<br>Department of Botony | Dr. Archana Singh | Department of Plant Molecular Biology, University of Delhi, South Campus, New Delhi. | Plant Molecular Biology | From January, 2023 onwards. |
| 16 | **Dr. G. Dhandapani**<br>Assistant Professor,<br>Department of Botony | Dr. Indrakant K. Singh | Molecular Biology Research Lab, Department of Zoology, Deshbandhu College, University of Delhi, Delhi, India | Insect Molecular Biology | From January, 2023 onwards |
| 17 | **Dr.C.Ravichandran**<br>Assistant Professor,<br>Department of Mathematics | Prof.Dr. Mahmoud Abdel-Aty | Deanship of Graduate Studies and Research, Ahlia University, P.O. Box 10878 Manama, Kingdom of Bahrain | A review of fractional-order models for plant epidemiology | 11 months |
| 18 | **Dr.C.Ravichandran**<br>Assistant Professor,<br>Department of Mathematics | Dr. S. Sabarinathan | Department of Mathematics, College of Engineering and Technology, SRM Institute of Science and Technology, Kattankulthur – 603 203, Tamil Nadu, India | Stability, numerical simulations, and applications of Helmholtz-Duffing fractional differential equations | 8 Months |