

Faculty Profile



Dr. SELVA GANAPATHY M, M.Sc., M.Phil., Ph.D.,
Associate Professor - Chemistry

HIGHLIGHTS:

- Number of Journal Publications: 25
- Scopus H-Index: 9
- Project Funding Received: SEED Money; 2
- Patents Published: 07
- Patents Granted: 1

PROFESSIONAL LINKS:

- Scopus ID: 54986299100
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=54986299100>
- Google Scholar ID: <https://scholar.google.co.in/citations?user=Jxgum5YAAAAJ&hl=en>
- ORCID Id: orcid.org/0000-0003-3216-2883
- WoS/Publons ID: ABC-2557-2021
- Vidwan ID: 340936
- LinkedIn: <https://www.linkedin.com/in/dr-selvaganapathy-muthusamy-995a3a61>

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 11 Years
- Industrial Experience: NIL

INTERNATIONAL EXPOSURE: NIL

AREA OF SPECIALIZATION:

- Electro-Analytical Chemistry
- Nanotechnology/Nanobiotechnology
- Environmental & Green Chemistry
- Food Science & Nutrition
- Molecular Biology & Pharmacology
- Materials Science: Biomaterials/Biopolymers/Bio-ceramics

Ph.Ds AWARDED WITH DETAILS: NIL

S:No	Name of Scholar	Title of Thesis	Year of Completion	Full Time / Part Time

Ph.Ds GUIDING: NIL

- **Full Time Scholars:** NIL
- **Part Time Scholars:** NIL

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY:

- SERB-SURE (Budget: Rs. 26,06,000/-) - Under review
- SERB-POWER (Budget: Rs. 28,24,670/-) - Under review
- SERB – CRG (Budget: Rs. 27,42,000/-) - Under review
- DST – FIST Co-PI (Budget: Rs. 1,41,60,000/-) - Under review
- CSIR – ASPIRE (Budget:Rs. 16,70,000/-) - Under review
- VGST – GRE (Budget: Rs. 26,60,000/-) - Under review

Completed Projects

- ✓ SEED Money Rs. 3,00,000/- Sanctioned under **Management Funded Research Major Project** titled, “*Bio functional high-affinity Ligands act as therapeutic substitutes for existing copper chelators with hinged and rigid selenium backbones: A Biochemical Approach*” during the year 2023-24.
- ✓ SEED Money Rs. 2,00,000/- Sanctioned under Management Funded Research Major Project titled, “*Novel water soluble amino acid metal chelates having sulphur as biomodels: Design, synthesis, structural elucidation and biological perspectives*” during the year 2022-23.

PATENTS PUBLISHED/GRANTED:

- Design registration No: 417598-001 was granted on the title of Size adjustable autoclave/Pressure chamber for hydro/Solvo thermal Nanoparticle synthesis, by Pradeep N, Selva Ganapathy M, Kavitha G Singh in the year of 2024.
- Indian Patent Published on 06/10/2023, entitled Nanofiber Reinforced Glass ceramic matrix composites for Advanced applications. Application No. 202341060896.
- Indian Patent Published on 05/05/2023, entitled A Novel IoT based gas chromatography mass spectrometry polymerization device for monitoring and analytical characterization Application No. 202341027985.
- Indian Patent Published on 24/02/2023, entitled Method for preparing a water-permeable mixture by mixing a polyol-based resin and isocyanate-based resin in an aggregate- Application No. 202341008220
- Indian Patent Published on 10/02/2023, entitled A device for collection of the volatile components by using incineration of crude plant materials. Application No. 202341006038.
- German Utility Patent Granted on 25/11/2022, entitled A System for detection of Breast Cancer based on IoT and Machine Learning Algorithms-Application No. 202022105865.2.
- Indian Patent Published on 13/05/2022, entitled Nanocarbon-containing biofertilizer composition and preparation method thereof-Application No. 202241024552.

Book Published

- ❖ Published a Book entitled “Futuristic Trends in Nanomaterials and Nanocomposites Characterization Techniques” by San International Scientific Publications during the year 2024.(ISBN: 978-81-971289-4-3)
- ❖ Published a Book entitled “Principles and techniques of Biochemistry and Molecular Biology”, SIPH publishers (ISBN- 978-93-5757-052-7)
- ❖ Editor for the Book series “Futuristic Trends in Chemical, Material Sciences & Nano Technology Series “ Volume I-III , Iterative International Publishers (IIP), USA & India (E-ISBN: 978-93-5747-885-4)

COURSES CERTIFIED:

- Biological Inorganic Chemistry in Oct-2022 and received Elite-Gold certificate
- Molecular Genetics in July 2023 and received Elite-Gold certificate
- Organometallic Chemistry Oct-2023 and received Elite-Gold certificate

ACHIEVEMENTS AND AWARDS:

- Research Excellence Award from Edwin Group of Journals Sep 2024.
- International Young Scientist Award 2023 from International Institute for Organized Research (I2OR), New Delhi.
- Fellowship for Young Scientist Award from Edwin Group of Journals in Aug/2022
- Elected as one of the Top 20 Expert Faculties in the field of Chemical, Bio-Medical, Marine, Petroleum & Textile Engineering for the year 2021 from The Academic Council of uLektz
- Research Excellence Award from InSc International Publishers 2022.
- Selected as one of the Most Promising Educators in Higher Education across India" for the year 2019 by uLektz Learning Solutions.
- Reviewer for few **Elsevier Journals**
- Reviewer of InSc International Publishers
- Reviewer of International Journal of Research & Scientific Innovation (IJRSI)
- Reviewer of Advances in Science, Technology and Engineering Systems Journal (ASTESJ)
- Reviewer of International Journal of Engineering & Technology
- Reviewer of International Journal of Research and Innovation in Applied Science (IJRIAS)

SPECIAL SESSIONS DELIVERED:

Session Chair/Key Note Speaker:

- Session Chair for the International Conference on “National Conference on Futuristic Trends in Biological Science for Sustainable Development(NCFTBSD2k25) Vivekananda Arts & Science College for Women, Veerachipalayam, Sankagiri, Salem on 19/02/25
- Session chair at the International Conference on Navigating Cross-functional Collaboration for Ecological Security Pattern organized by Mount Carmel College associated with ICSSR held on 16th – 18th January 2025.
- Session chair at the National Conference on “Ecotourism: Harnessing Travel to Discover Nature, Promote Conservation, and Support Sustainable Development” Karnataka Science and Technology Academy (KSTA), Government of Karnataka on 20/02/25
- Moderator for Panel discussion on ‘ Millets the Super Grains for Sustainable future’ Kristu Jayanti College, Autonomous, Bengaluru on 10/01/25.
- Key note speaker - Innovative Millet Foods, Nutrition Products & Technologies for Public Health Care K.S.R College of Arts & Science for Women, Trichengode, Tamilnadu 10th June 2023.
- Session Chair for National Conference on “ Signal Processing, Biomedical, Computing and Networking ” (SPBCN-2K19) ACS College of Engineering held on May 21st, 2019
- Session chair at the National Conference on “Biomedical Signal, Image Processing & Power Engineering” (NCBSIPE-2017) organized by department of Biomedical Engineering & Department of Electrical Engineering on 21 st November 2017.

Invited Talks/Resource Person:

- 10/05/24 - Department of Chemistry, Fundamentals of Academic Writing – Jyothi Nivas College, Bengaluru
- 27/07/23 - Department of Chemistry, How to improve Perception in Research Indian Academy of Sciences, Bengaluru
- 21/02/25 - Exploring FT-IR Spectrometer & UV-Vis. Spectrophotometer, Mount Carmel College, Bengaluru
- 05/08/22 - Department of Chemistry, ACS College of Engineering, Bengaluru
- 10/01/19 - Department of Chemistry, Kristu Jayanti College, Autonomous, Bengaluru
- 07/04/21 – Department of Chemistry, Don Bosco Institute of Technology, Bengaluru
- 07/12/17 – Department of Chemistry, Veltech Dr.RR & Dr.SR University, Chennai
- 08/06/20 – Department of Chemistry, Dr.MGR Educational & Research Institute, Chennai

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:***International Conferences/Seminars:***

- ✓ Participated at the "International Conferences on Millets: Genomic and Biotechnological Approaches: Impact on Health and Nutraceuticals" Garden City University, Bengaluru - 27.03.2024
- ✓ Participated at the International Conference on Navigating Cross-functional Collaboration for Ecological Security Pattern organized by Mount Carmel College associated with ICSSR held on 16th – 18th January 2025.
- ✓ Participated at the ICSSR sponsored International Conference – “Navigating Cross-Functional collaboration for Ecological Security Pattern”, 16th to 18th January 2025
- ✓ Participated the Ecotourism: Harnessing Travel to Discover Nature, Promote Conservation, and Support Sustainable Development hosted by Department of Travel & Tourism in collaboration with Karnataka Science & Technology Academy, 19 – 21 February 2025
- ✓ Participated an “Emerging Trends in Research, Innovation & Entrepreneurship- A Way Forward”, 24th and 25th September 2024 – an International Conference hosted by MCCIE
- ✓ Participated at the 2-day International Conference on Sustainable & Innovative Solutions in Cross Disciplinary Research co-hosted departments of Computer Science, Electronics, Mathematics and Statistics & Analytics, 8th & 9th February 2024
- ✓ Paper presented at International Conference on Nutri-omics in Biotechnological Innovations- ICNBI24 at American College, Madurai, 2024

- ✓ Attended an International Conference titled “Retrofitting Strategies for Sustainable Development Goals A Way Forward” organized by Mount Carmel College, Bengaluru on 17-02-2023
- ✓ Attended an International Conference on Futuristic Computing - Trends & Challenges, organized by Dept of Computer Science, Mount Carmel College, Bengaluru during 3rd & 4th February 2022
- ✓ Presented a paper in the Indo-Norwegian International Online Conference on FARAON-2022 organized by Institute for Energy Technology (IFE), University of Oslo (UiO), Norway and Madurai Kamaraj University (MKU) India, during 02-04 February 2022.
- ✓ Presented a paper in Three Day International E-Conference, organised by Department of Natural Products Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai, Tamil Nadu, India, under the financial support of RUSA-Phase II Scheme, MKU, during 20-22nd January, 2022.
- ✓ Participated in the “International Conference on New Frontier Research in Chemical Sciences – 2021” organized by the Department of Chemistry, Post Graduate Centre, Jyoti Nivas College Autonomous Bengaluru in collaboration with Bengaluru City University and Anthem Bio Sciences from 11th to 13th November 2021.
- ✓ Presented a paper in Indo-Malaysian Two Day International E-Conference jointly organised by School of Chemistry, Madurai Kamaraj University, Madurai, Tamil Nadu, India and BioSES Research Interest Group, Faculty of Science & Marine Environment, Universiti Malaysia Terengganu, Malaysia, partially funded by MKU-RUSA Phase II Scheme, during 16-17th September, 2021.
- ✓ Presented a Paper at the INTERNATIONAL CONFERENCE ON SUSTAINABLE ENGINEERING AND TECHNOLOGY (IconSet 2018) organized by Central Research Lab, ACS College of Engineering, Bengaluru (19th and 20th April 2018)
- ✓ Presented a paper at the International Seminar on CO₂, Respiratory Quotient (RQ) & Biomass Energy organized by Dept.of Biomedical Engineering, ACS COLLEGE OF ENGINEERING Bengaluru on 04th January 2018
- ✓ Presented a paper titled “Impact of metallonucleases on tumor screening: Synthesis, structural elucidation and preclinical implications”, in the INDO-FRENCH SEMINAR ON BIO-INORGANIC APPROACHES TO CURRENT HEALTH PROBLEMS, organized by the Department of Chemistry, Pondicherry University and Indo-French Center for Promotion of Advanced Research, New Delhi held at Department of Chemistry, Pondicherry University, Puducherry, India during 24th - 28th March 2014.
- ✓ Presented a paper titled “Effect of co-ligand on DNA binding, cleavage and anti-biogram activities in mixed-ligand complexes”, in the UGC - DST - CSIR - DRDO - BRNS - ICMR - INSA - TNSCST sponsored INTERNATIONAL CONFERENCE ON BIOLOGICAL INORGANIC CHEMISTRY (ICBIC - 2013), organized by the Department of Chemistry, Periyar University, Periyar Palkalai Nagar, Salem, Tamilnadu, India. 20th – 22nd, February 2013.

National Conferences/Seminars:

- ❖ Participated a National Conference: Demystifying Consumer Behaviour from the Lens of Psychology & Economics, organized by Departments of Economics & Public Policy and Psychology, Mount Carmel College, Bengaluru on 1st March 2024
- ❖ Participated a National Seminar “ Building Tomorrow- Exploring Materials for Future’, organized by Departments of Physics and Nanoscience & Technology Mount Carmel College, Bengaluru on 1st March 2024
- ❖ Participated an ICSSR sponsored National Conference on Technological Interventions in Educational Industry, organized by School of Commerce Mount Carmel College, Bengaluru during 26th & 27th July 2023
- ❖ Participated in the National Conference - Economy @ 75: Roadmap for India at 100 organized by Department of Economics & Public Policy, Mount Carmel College, Bengaluru on 16th February 2023
- ❖ Participated in the Seminar on “Implementation of NEP 2020 in BCU affiliated colleges”, organized by Mount Carmel College in collaboration with Bengaluru City University on 3rd September 2021
- ❖ Participated at the One day National Webinar on Tailor-made Nanomaterials for Applications in Sensors, LEDs, and Water Remediation organized by Department of Mechanical Engineering on Friday, 5th June 2020
- ❖ Presented a paper at the Two Days National Conference on Advancements of Sustainable Materials in Engineering (NCASME-2020) in association with International Journal of Engineering Research & Technology organized by Dept. of Chemistry, ACS College of Engineering on 6th & 7th May 2020.
- ❖ Participated Five days FDP on “Recent Advances and Applications in Chemical Sciences” from 14.08.2023 to 18.08.2023 conducted by Department of Chemistry, Mohamed Sathak A.J. College of Engineering, Ramanathapuram.
- ❖ Presented a paper titled “Sulphurated amino acid based complexes as anticancer agents: Synthesis, Characterization and biological perspectives”, in the NATIONAL CONFERENCE ON “NEW FRONTIERS IN CHEMISTRY-FROM FUNDAMENTALS TO APPLICATIONS” (NFCFA-2015), organized by the Department of Chemistry, Birla Institute of Technology & Science, Pilani, K. K. Birla Goa Campus, Goa, India during 18th - 19th December 2015.
- ❖ Presented a paper titled “DNA targeting metallonucleases: Synthesis, structures and anti-microbial evaluation”, (IIIrd PRIZE) in the NATIONAL CONFERENCE ON RECENT

DEVELOPMENT IN NANO MATERIALS (RDNM - 2013), organized by the Department of Physics and Chemistry, Mohamed Sathak Engineering College, Kilakarai, Tamilnadu, India. April 11, 2013.

- ❖ Participated the One day Faculty Orientation Program on "EFFECTIVE TEACHING" held at Veltech Dr.RR & Dr.SR University Organized by HUMAN RESOURCES DEVELOPMENT CENTRE on 4th April 2017.
- ❖ Participated in the Workshop on "Effective Teaching through Active Learning methods - ETAL'16" held at Veltech Dr. RR & Dr. SR University, Chennai, Tamil Nadu Organized by Internal Quality Assurance Cell (IQAC) on 30th December 2016
- ❖ Participated in the UGC sponsored National Workshop for Research Methodology & Green Technology held at Pondicherry University Organized by University Grants Commission, ACADEMIC STAFF COLLEGE, Pondicherry University (A Central University), Puducherry, India on November 29th - 30th 2013.
- ❖ Participated in the One Day Seminar on Recent Advances in Chemistry organised by the DST – FIST sponsored Department of Chemistry, VHNSN College (Autonomous), Virudhunagar on 8th February, 2013.
- ❖ Participated in the One Day Workshop on " PRINCIPLES AND PRACTICE OF ADVANCED EPR SPECTROSCOPY" held at Karaikudi, Organized by CSIR - Central Electrochemical Research Institute, Karaikudi, Tamilnadu, India on 19th March 2012.
- ❖ Participated and completed One day Training Programme in Instrument maintenance & Repairing under the sponsorship of Instrument Maintenance Facility, UGC New Delhi held on 21st January 2012 at VHNSN College Virudhunagar.
- ❖ Participated in the UGC sponsored National Workshop on "Chemistry - Our Environment, Our Life and Our Future", organized by the Department of Industrial Chemistry, School of Chemical Sciences, Alagappa University, Karaikudi - 630 006, Tamilnadu, India during 22nd - 23rd December 2011.
- ❖ Presented a paper on “Design, characterization, DNA binding and cleavage behavior of tryptophan integrating mixed-ligand complexes”, in the UGC, CSIR, DST and TNSCST sponsored National Seminar on EMERGING TRENDS IN CHEMISTRY (ETC - 4, 2012), held on October 4th - 5th, 2012 organized by the Postgraduate Department of Chemistry, Cardamom Planters' Association College, Bodinayakanur, Theni Dt., Tamilnadu, India.
- ❖ Presented a paper on “Synthesis, spectral characterization and DNA binding behaviour of mixed ligand complexes having tryptophan as primary ligand", in the UGC sponsored National Seminar on RECENT TRENDS IN CHEMISTRY (RTC - 2012), held on March 15 & 16, 2012 organized by the Department of Chemistry, Hajee Karutha Rowther Howdia College, Uthamapalayam, Theni Dt., Tamilnadu, India.

- ❖ Presented a paper titled “Designing, Synthesis of Schiff base metal complexes containing tetradentate amino acid as a minor groove binder”, (BEST PAPER) in the UGC sponsored National Seminar on FUTURISTIC TRENDS IN CHEMISTRY (RTC - 2012), held on 6th February 2012 organized by the Department of Chemistry, Sri Meenakshi Government College for Women, Kalpalam Road, Goripalayam, Madurai - 625 002, Tamilnadu, India.
- ❖ Presented a paper in the UGC Sponsored National Seminar on Emerging Trends in Chemistry (ETC-2011) Organised by the Department of Chemistry, VHNSN College, Virudhunagar on 28th and 29th July, 2011.
- ❖ Presented a paper titled “Design, Synthesis and characterization of biologically active complexes having tetradentate Schiff base ligand: DNA cleavage studies and its antimicrobial evaluation”, in the DST sponsored National Seminar on RECENT TRENDS IN BIO-INORGANIC CHEMISTRY (RTBIC - 2011), held on 17th - 18th February 2011 organized by the DST - FIST Sponsored Department of Chemistry, Virudhunagar Hindu Nadars' Senthikumara Nadar College, Virudhunagar - 626 001, Tamilnadu, India.

PROFESSIONAL MEMBERSHIPS:

- Editorial Board Member of International Research Journal of Innovations in Engineering and Technology (IRJIET)
- Editorial Board Member of International Journal of Applied Agricultural Sciences (IJAAS)
- Editorial Board Member in Edwin Group of Journals from Aug/2022.
- Professional Member of InSc International Publishers
- Member of ACS Community – 32912177
- Member of Research and Scientific Innovation Society
- Fellow Member of Scholars Academic and Scientific Society
- Editorial Board member/Editor of few international and national journals
- Editorial Board Member for Carmelight Journal

OTHER DETAILS (If any):

Youth Red Cross & RRC Co-ordinator in Kodaikanal Institute of Technology, Kodaikanal.