

Faculty Profile



Dr. G. LAVANYA, M.Phil., Ph.D

Assistant Professor
Department of Chemistry

HIGHLIGHTS:

- Number of Journal Publications: 19
- H-Index: 6
- Project Funding Received: NIL
- Patents Published: 01
- Patents Granted: NIL

PROFESSIONAL LINKS:

- Scopus ID: 57211473141
- Scopus Link: <https://www.scopus.com/authid/detail.uri?authorId=57211473141>
- Google Scholar
ID: https://scholar.google.com/citations?view_op=list_works&hl=id&user=wwd849UAAAAJ
- Anna University Faculty ID: 278168
- AICTE Faculty ID: 19486403387
- Anna University Supervisor ID: NIL
- LinkedIn: <https://www.linkedin.com/notifications/?filter=all>

PROFESSIONAL BACKGROUND:

- Teaching Experience till date: 14 years
- Industrial Experience: NIL

INTERNATIONAL EXPOSURE:

- Postdoctoral Researcher,
Department of Chemical Engineering,
Zhejiang University of Technology,
Hangzhou, 310014, China.

AREA OF SPECIALIZATION:

- Synthetic Organic Chemistry
- Medicinal Chemistry

- Catalysis
- Nanotechnology

RESEARCH INTEREST:

- Synthetic Organic Chemistry
- Medicinal Chemistry

Ph.Ds AWARDED WITH DETAILS: NIL

Ph.Ds GUIDING:

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

SPONSORED RESEARCH / FUNDING APPLIED / CONSULTANCY: NIL

PAPER PUBLISHED:

Journal Publications (scopus indexed journal):

1. Sathishkumar, R.; Magesh*, C. J.; Tamilselvan, S.; Lavanya, G.; Venkatapathy, K.; Vimalan, M.; Muthu, S.; Synthesis, crystal structure, spectroscopic and docking studies of mononuclear, mono(bis(2-(4-butylphenyl)imino)methyl)phenoxy)zinc(II)dichloride complex as a promising candidate for α -glucosidase inhibition, *Chemical Data Collections*, **2018**, 17-18, 187-195.
2. Lavanya, G.; Venkatapathy, K.; Magesh* C. J.; Ramanathan, M.; Jayasudha, R.; The first target specific, highly diastereoselective synthesis, design and characterization of pyranoquinolinyl acrylic acid diastereomers as potential α -glucosidase inhibitors, *Bioorganic Chemistry*, **2019**, 84, 125-136.
3. Lavanya, G.; Venkatapathy, K.; Magesh*, C. J.; Perumal, P. T.; Sathishkumar, R.; Amudha, P.; Gayathri, R.; The First Recyclable, Nanocrystalline CdS Thin Film Mediated Eco-benign Synthesis Of Hantzsch 1, 4 Dihydropyridines, 1, 8-Dioxodecahydroacridine and Polyhydroquinolines derivatives, *Applied Organo Metallic Chemistry*, **2019**, 33(9), 5026-5039.
4. Venkatapathy, K.; Magesh*, C. J.; Lavanya, G.; Perumal, P. T.; Sathishkumar, R.; Nanocrystalline CdS thin film as heterogenous, recyclable catalyst for effective synthesis of Dihydropyrimidinones and a new class of carbazolyl dihydropyrimidinones via an improved Biginelli protocol, *New Journal of Chemistry*, **2019**, 43, 10989-11002.
5. Amudha, P.; Lavanya, G.; Venkatapathy, K.; Magesh*, C. J.; Choline Chloride: Zinc Chloride ionic liquid mediated Inverse Electron Demand (IED) Diels-Alder reaction; an eco-benign synthesis of Pyranoquinolines and Furanoquinolines, *Letter in Organic Chemistry*, **2019**, 16, 865-873.
6. Venkatapathy, K.; Lavanya, G.; Magesh*, C. J.; Amudha, P.; Prema, S.; The First Recyclable, Eco-benign Liquid Resin Mediated Synthesis of Hantzsch 1, 4 Dihydropyridines, 1, 8-Dioxodecahydroacridine and polyhydroquinolines derivatives, *International Journal of Research and Analytical Reviews*, **2019**, 74-85.
7. Sathishkumar, R.; Tamilselvan, S.; Magesh, C. J.; Venkatapathy, K.; Vimalan, M.; Lavanya, G.; Synthesis, crystal growth, optical, thermal, mechanical and dielectric properties

- of mono(bis(2-(4-butylphenyl)imino)methyl)phenoxy) zinc(II)dichloride (MBPMP) single crystal as a nonlinear optical (NLO) material, *Journal of Materials Science: Materials in Electronics*, **2019**, 30,17504–17513.
8. Venkatapathy, K.; Magesh, C. J.; Lavanya, G.; Perumal, P. T.; Prema, S; Design, synthesis, spectral and molecular docking studies of Carbazolyl-polyhydroquinolines derivatives as promising antibacterial agents with minimal cytotoxicity towards human mononuclear cells from Peripheral blood (HMNC-PB), *Journal of heterocyclic Chemistry*, **2020**. <https://doi.org/10.1002/jhet.3921>,
 9. Lavanya, G.; Magesh, C. J.; Venkatapathy, K.; First, *insitu* generated Mannitol-Boron or Sorbitol-Boron chelate complex as a novel, recyclable catalyst for the highly efficient synthesis of bis(indolyl)methanes, tris(indolyl)methanes and diindolyl(carbazolyl)methanes, *Chemical Data Collection*,**(2020)**, <https://doi.org/10.1016/j.cdc.2020.100342>.
 10. Sathishkumar, R.; Magesh, C. J.; Tamilselvan, S.; Lavanya, G.; Venkatapathy, K.; Vimalan, M.; Crystal growth, spectroscopic characterization and DFT studies of 4-(E)-1-(4-chlorophenyl)-3-(4-nitrophenyl)prop-2-en-1-one (CPNP) single crystal as a nonlinear optical (NLO) material, *Chemical Data Collections*, 00 **(2020)** 000-000.
 11. Lavanya, G.; Magesh, C.J.; Venkatapathy, K.; Perumal, P.T.; Prema, S; Design, synthesis, spectral characterization and molecular docking studies of novel pyranoquinoliny dihydropyridine carboxylates as potential antibacterial agents including *Vibrio cholerae* with minimal cytotoxicity towards fibroblast cell line (L-929), *Bioorganic Chemistry*, **2020**, Article in press.
 12. Venkatapathy, K.; Magesh*, C. J.; Lavanya, G.; Perumal, P. T.; Synthesis, spectral characterization, molecular docking studies and biological evaluation of pyranoquinoliny acrylic acid diastereomers as antibacterial agents promoted by indium (III)triflate in 1-butyl-3-methylimidazolium tetrafluoroborate ionic liquid, Karuppan Venkatapathy^a, (communicated).
 13. Muthukumar Suganya, A. Usha Raja Nanthini, Aruliah Rajasekar, M. S. Nandini, G. Lavanya, Bader O. Almutairi, Paulraj Arunkumar, Jayaraman Narenkumar, Antihyperlipidemic effect of red fermented rice with *Monascus* sp.in rats model with hematological and histopathological studies, biomass conversion and biorefinary, 2023.
 14. G. Saraswathy, P. N. Sudha, G. Lavanya, T. N. Balaji, K. S. Venkatesh, Bioavailability of heavy metals in soils and their uptake by paddy (*Oryza Sativum*)-An empirical study, Tuijin Jishu/ Journal of propulsion technology, 44(3), 2023, 3644-3652
 15. Rekha , Latha Srinivasan , Pavithra , Gomathi, Sudha, Lavanya, Natarajan Arumugam , Almansour Abdulrahman, Mahalingam Sakkarapalayam, Vidhya, Biosorption efficacy studies of *Sargassum wightii* and its biochar on the removal of chromium from aqueous solution, Journal of the Taiwan Institute of Chemical Engineers, 2023, 105241.
 16. K. Sharmila, Latha Srinivasan, K. Vijayalakshmi, Matar Alshalwi, Khalid M. Alotaibi, P. N. Sudha , P. Supriya Prasad, S. Sugashini, G. Lavanya, M. Deepa, Evaluation of efficacy of chitosan oligosaccharide-salicylaldehyde Schiff base to extract copper(II) and chromium(VI) from synthetic wastewater, Biomass Conversion and Biorefinery, 2024, DOI: <https://doi.org/10.1007/s13399-024-05522-4>.
 17. K. Sangeetha, Mohammed F. Albeshr, K. Shoba , G. Lavanya, P. Supriya Prasad , P. N. Sudha, Evaluation of cytocompatibility and cell proliferation of electrospun chitosan/polyvinyl alcohol/montmorillonite clay scaffold with 1929 cell lines in skin

regeneration activity and *in silico* molecular docking studies, International Journal of Biological Macromolecules 268 (2024) 131762.

18. S. Narmatha, A. Shanmugapriya, G. Lavanya, K. Sudhakar, Z. Ansar Ali, A. Rekha, P.N. Sudha, Microwave-Assisted Green Synthesis Of Mno₂ Nanoparticles Using Aqueous Leaf Extract Of Solanum Nigrum And Its Anti-Microbial And Antibiofilm Applications, Afr. J. Biomed. Res., 27(3S) (2024), 888-896.
19. Badusha Mohamad Ali, Lavanya G; Sasikala M; Iynoon Jariya S.A; Kalpana V; Padmanaban Annamalai, Recent Advances in Multi-Component Hantzsch Pyridine Synthesis with Nanomaterial Catalysts, Chemistry Select, 9, e202403664 (1 of 23), 2024.

PATENTS PUBLISHED/GRANTED:

- LIPID NANOPARTICLES FOR DELIVERY OF NUCLEIC ACIDS AND ITS PERFORMANCE ANALYSIS.

COURSES CERTIFIED:

- Professional Development Programme on 'Implementation of NEP2020 for University and College Teachers.
- Industrial Inorganic Chemistry (NPTEL).
- International Engineering Educators Certification Program (IUCEE).

ACHIEVEMENTS AND AWARDS:

- Best performer of the faculty for every year (2006-2012) at Shri Sitheeswarar Polytechnic College, Arcot.
- I given 100% results in this academic year (2013-2014) at Ramana Maharishi College of Engineering, Thumbai, Cheyyar.

SPECIAL SESSIONS DELIVERED: NIL

CONFERENCES/SEMINARS/WORKSHOPS ATTENDED:

- Five days Virtual research development programme on AI Integrated Research organized by research & development cell, Fatima college, Madhurai on Dec 9.12.24-13.12.24.
- Webinar on professional ethics organized by Rajeev Gandhi college of management studies, on 10th April.
- Iucee International Engineering Educator Certification Program, Fall 2023, July23-Dec23.
- International Workshop on "Mendeley and Zotero: Reference Tool, organized by Manuscriptpedia, Kanyakumari, on 29th and 30th, September, 2023 through online pedagogy.
- "Building your personal brand as an entrepreneur" by Ms. Vrinda Gupta - Josh Talk Speaker, Soft Skill Coach, Public Speaker & Content Creator, on Aug 29, 2023, at GIBS school, bengaluru.
- "Use of AI/ML in real World" organised by CSE department of Dr. B. C. Roy Polytechnic on 28 Aug, 2023.
- Advances and Applications in Chemical Sciences" from 14.08.2023 to 18.08.2023
- conducted by Department of Chemistry, Mohammed Sathak A. J. College of engineering.
- "RECENT RESEARCH DEVELOPMENTS IN CHEMISTRY" organized by the Department of Chemistry from 24.07.2023 to 29.07.2023, Eshwari Engineering College.

- Eight Days Faculty Development Programme on Cyber Security & Hacking held from 16 June 2023 to 24 June 2023 organized by the Department of Computer Science & Applications (B.Sc CS), Faculty of Science and Humanities, , SRM Institute of Science and Technology, Ramapuram, Chennai – 600089.
- One week FDP on Research methodology by kamala Nehru college, Nagpur, 24th-29th june 2023.
- Green & sustainable energy for the future, Department of chemistry, SEC, 25th june 2023
- National Level Virtual Workshop On Self Care For Educators, SRM college, Ramapuram, 6th july 2023.
- Supercharge your research papers: conference & journal writing with CHAT GPT & AI Toolbox organised by LMS solution on 29 july, 2023.
- National Webinar on Family finance management treating family finance as a business, GIBS, Dec 16, 2022.
- National Webinar on Personal branding & impression Management, GIBS, Dec 9, 2022
- International webinar on Polluted Land, Waste Management & Sustainability/Resiliency, Dec 1, 2022, University of Illinois Chicago, USA.
- National level webinarMDP on Is Moonlighting the new walking, GIBS, Nov 30, 2022.
- National level Workshop on Research Ethics and Identifying Predatory and Cloned Journals in Publications, IIMC, HYD, Nov 25, 2022.
- National level Seminar on Quality Management in technical institutions, Vidya jyothi institute of technology, Nov 19, 2022.
- FDP on Impressive Social Etiquette, IIMC, Osmania University, Nov 11, 2022.
- National Webinar on practical approach to risk management for today's entrepreneurs, GIBS, Nov 10, 2022.
- THE CHALLENGES AND OPPORTUNITIES FOR WOMEN IN SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (STEM)" conducted by K. S. School of Engineering and Management from 17th to 21st October 2022 in hybrid mode.
- IP Awareness/Training program, Intellectual Property Office, India, Oct 21, 2022.
- National level FDP on NEP, Commerce and Science College, Maharashtra, Oct 17-18, 2022.
- FDP on The Challenges And Opportunities For Women In Science, Technology, Engineering & Mathematics (Stem), K.S. School of Engineering & Management, Oct 17-21, 2022.
- National Webinar on Recent trends in Smart Grid, P.S.N. College of Engineering & Technology, Oct 15, 2022.
- National webinar, IRE TALKS on INNOVATION, GIBS, Sep 20,2022.
- One week FDP on Futuristic research scope in civil engineering, CK college of engg & technology, Aug 23-27, 2022.
- National level Seminar on Overview of IPR & patent filing procedures, Aug 27, 2022, SEC.
- National level Webinar on Importance of Assessment and Accreditation under NEP 2020, St. Joseph's College for Women, Alappuzha, Kerala, Aug 20, 2022.
- One day FDP on Faculty Development Programme on Embedding Research Article Writing Skills, SA Engg. College, Aug 5, 2022.
- National level Webinar on cognition & learning, Mandsaur University, Aug 2, 2022.
- One Week Workshop on Materials and Manufacturing: Insights to Modern Technologies (MMIMT-2022), BIT, Sindri, Aug 1-5, 2022.

- One Week FDP on Emerging Trends in Applied Chemistry, EASWARI ENGINEERING COLLEGE, July 25-30, 2022.
- Webinar on ideathon 2.0, Career College, June 30, 2022.
- One Week FDP on Modern strategies in physics research, SGT University, June 28-July 2, 2022.
- One Week FDP on ICT Tools for effective Teaching Learning, Kamala Nehru College, May 23-28, 2022.
- One day National webinar on XRD analysis of nanomaterials, SRR Government arts and science college, May 24, 2022.
- One Week FDP on Research Methodology, Kamala Nehru College, May 2-7, 2022.
- Five days FDP on Scientific tools for start-ups, University of Madras, March 8-12, 2022.
- National level Workshop on Redefining business innovation etho's of management, Global institute of business studies, Mar 5, 2022.
- International FDP on advanced research methodology, Kamala Nehru Mahavidyalaya, Feb 16, 2022.
- One day FDP on How to write research proposal, Guru Nanak college, Feb 08, 2022.
- Two days FDP on Chemical Education, Kamala Nehru Mahavidyalaya, Feb 4 & 5, 2022.
- FDP (Radiation effects on polymers and advances in organic optoelectronic devices, Vaagdevi College of Engineering, Feb 2 & 3, 2022.
- International Conference on "Emerging Trends in Chemical Sciences" (ICETCS-2019) conducted by Department of Chemistry, Arulmigu Palaniandavar Arts College for Women (Autonomous) palani held on 06-09-2019 and Presented a paper entitled, "Nanocrystalline CdS thin film as heterogenous, recyclable catalyst for effective synthesis of Dihydropyrimidinones and a new class of carbazolyl dihydropyrimidinones via an improved Biginelli protocol".
- Attended a national level conference on Recent Trends in Chemical Sciences (RTCS-2016) conducted by PG & Research Department of Chemistry, Arignar Anna Govt Arts & Science College, Cheyyar on 07-10-2016.
- Attended a National Conference on Recent Advancements in Materials Science (NCRAMS – 2017)" conducted by PG & Research Department of chemistry, Arignar Anna Govt Arts & Science College, T.V. Malai Dist on 25th& 26th July – 2017.
- Presented a paper entitled, "First, insitu generated Mannitol-Boron or Sorbitol-Boron chelatecomplex as a novel, recyclable catalyst for the highly efficient synthesis of bis(indolyl)methanes, tris(indolyl) methanes and diindolyl(carbazolyl)methanes" in the "National level Conference on Innovative Research in Materials Science" conducted by Sri Akilandeswari womens college, Wandiwash on 05-10-2017.
- Recent Advances In Chemical sciences (RACS-2018) conducted by PG & Research Department of chemistry, Arignar Anna Govt Arts & Science College, Cheyyar on 05th & 06th September-2018 and Presented a paper entitled, "Hantzsch 1,4-dihydropyridines, 1,8-dioxodecahydroacridine and polyhydroquinolines derivatives".

PROFESSIONAL MEMBERSHIPS:

- INTERNATIONAL ASSOCIATION OF ENGINEERS (IAENG)

OTHER DETAILS (If any): NIL