Dr. (Mrs). M. Jannathul Firdhouse Assistant Professor Department of Chemistry Hajee Karutha Rowther Howdia College Uthamapalayam - 625533 Theni District, Tamil Nadu, India

Mobile: 91-8610498971

E-mail: kfirdhouse@gmail.com

https://scholar.google.co.in/citations?user=H8h4sr8AAAAJ&hl=en

https://vidwan.inflibnet.ac.in/profile/314764



Academic Profile

Educational Qualifications	Institution	Comment/ Percentage/Grade	Year of completion
Ph.D. Chemistry	Avinashilingam University for Women, Coimbatore	March, 2016	
M.Phil. Chemistry	PSGR Krishnammal College for Women, (Bharathiar University), Coimbatore	Thesis- Highly Commended	August, 2011
M.Sc. Chemistry	Avinashilingam University	86%	May, 2010
B.Ed. Home Science / Physical Science	for Women, Coimbatore	80%	May, 2005
B.Sc. FSMD / Chemistry		FSMD - 80% Chemistry - 87%	May, 2004
Higher Secondary	Sri Avinashilingam Higher	81%	March, 2001
S.S.L.C	Secondary School for Girls, Coimbatore	85%	April, 1999

Achievements/Awards

- M. Jannathul Firdhouse, **International Researcher Award 2023**, 12th International Conference on Interdisciplinary Research for Sustainable Development 2023 (vIRSD 2023) organized by Green ThinkerZ, India & International Institute of organized Research (I2OR), India; in association with Jamia Hamdard, New Delhi, India; Centre for Modern Construction, Western Sydney University, Australia and Sustainable Cosmos on 25th December 2023.
- **Pre-Eminent Researcher Award-2019** for remarkable contribution in the field of Chemistry at 4th International Convention on Interdisciplinary Research for Sustainable Development held at Confederation of Indian Industry (CII), Chandigarh, India, 10

- January 2020 in association with Centre for Smart Modern Construction, Western Sydney University, Australia.
- **Best Researcher Award-2018** for outstanding best practices in the field of Education in Faculty Awards 2018, by DK International Research Foundation, held on 30th December 2018, Perambalur, Tamil Nadu.
- **Best Women Researcher Award-2017** for outstanding contribution in the field of Chemistry in India by PEARL Foundation Educational Excellence Awards to Higher Education in India 2017, Madurai.
- **Best Young Researcher Award 2015** for outstanding contribution to research by GRABS Educational and Charitable Trust, Chennai.
- Second Prize in Oral Presentation in the event of Resonance '2010 at Gandhigram Rural Institute, Gandhigram in 2010.
- Third Prize in Science Model in the event of Science Day competition 2009 at Avinashilingam University for Women, Coimbatore in 2009.
- Second proficiency in Chemistry Post Graduation in 2010.

Academic / Administrative Responsibilities

- Coordinator Criterion VII NAAC from August 2020 to till now.
- NSS Programme Officer from June 2025 till now
- Member Research Advisory Committee
- Consultant UV Visible Spectrophotometer
- Coordinator Science Communication Club from June 2018 2021.
- Member of Part-V Activities Committee from June 2019 2021
- Member of Women's Forum from March 2018 March 2021.

Invited talks / Guest lectures / Resource person / External Examiner

- 1. Member of the Board of Examiner to adjudicate the Ph.D. thesis at Bharathiar University, Coimbatore, India.
- 2. External Examiner to conduct Ph.D. Viva-Voce Examination at PSGR Krishnammal College for Women, Coimbatore-641 004.
- 3. External Examiner to conduct Practical Examination at Jayaraj Annapackiam College for Women, Periyakulam.

- 4. Resource person for Student Development Programme on Digital Learning, E-resources and Tools and delivered a lecture on the topic "Scientific Paper Writing for Newbies Tools and Techniques" on 09.03.2022 at Hajee Karutha Rowther Howdia College (Autonomous), Uthamapalayam.
- 5. Delivered a lecture on the topic "Career after Graduation & Einstein's Photoelectric effect" in Albert Einstein Birthday Celebration (22.03.2021), conducted by Department of Chemistry, at Nadar Saraswathi College of Arts and Science, Theni.
- 6. Delivered a lecture on the topic "Analytical Techniques General Perspectives" in Skill Mastery Workshop conducted by Department of Chemistry, at Nallamuthu Gounder Mahalingam College, Pollachi.

Thesis Titles

- > **Ph.D Chemistry:** Biofabrication of Metal Nanoparticles and Graphene Pharmacological, Biological and Environmental Applications.
- M.Phil. Chemistry: Spiropyrazolines as Corrosion inhibitor for Mild steel in acidic media
 Experimental & Theoretical Investigations.
- > M.Sc. Chemistry: A Salutary face of Lawesson's Reagent in the Synthesis of Thiocarbonyl Compounds.

Teaching Experience

- ◆ Assistant Professor (Aided) Department of Chemistry Hajee Karutha Rowther Howdia
 College, Uthamapalayam, Theni 22nd January 2018 to till now.
- ◆ Assistant Professor (Self-finance) Department of Chemistry Lady Doak College,
 Madurai 22nd June 2017 to 20th January 2018.
- ◆ Part-time Lecturer (Self-finance) Department of Chemistry Lady Doak College,
 Madurai 21st November 2016 3rd May 2017.

Research Experience

- ➤ Senior Research Fellow in Maulana Azad National Fellowship for Minority students for the year 2011-2012, from March 2014 August 2016.
- ➤ Junior Research Fellow in Maulana Azad National Fellowship for Minority students for the year 2011-2012, from February 2012 2014.

Area of Specialization

- Nanochemistry
 - o Synthesis of metallic and non-metallic nanoparticles
 - o Characterization techniques (UV, SEM, TEM, DLS)
- Organic Chemistry
 - o Synthesis of organic compounds
 - o Spectroscopy (UV, IR, NMR)
 - o Chromatography (TLC, CC, GC-MS)
- Phytochemistry
 - o Extraction techniques
 - o Secondary metabolites isolation and screening
- Pharmaceutical Chemistry
 - o In vitro and In vivo studies
 - o In silico studies (Computer Aided Drug Design)
- Environmental Chemistry
 - Fabrication of adsorbents
 - o Treatment of effluent
- Corrosion Science
 - o Synthesis of inhibitors
 - o Electrochemical studies
 - o Quantum chemical studies

Software Exposure

- Proficient in using 'C' and Visual basic.
- Comfortable in using Microsoft Office with Access, Corel draw, ISIS draw, ACD/ChemSketch, Marvin Sketch, NMR shiftdb.
- Comfortable in using CADD software's like Discovery studio, Schrodinger Maestro, Material studio, Hex, AutoDock, Spartan and Gaussian.
- I am skillful in learning new cross-functional skills on a need to know basis.

Experience in Instruments

- UV- Visible Spectrophotometer
- Fourier Transform Infra Red Spectrometer
- Gas Chromatography- Mass Spectrometer
- Thermal Gravimetric Analyzer
- Atomic Absorption Spectrometer
- Scanning Electron Microscopy
- Transmission Electron Microscopy
- Particle size analyzer
- Raman spectral analyzer
- Optical Profilometer
- Biospec Nano
- Nano-Spray Dryer
- Ultrasonic Homogenizer

Reviewer

- □ Scientific Reports
- □ Arabian Journal of Chemistry (Elsevier)
- □ Journal of Environmental Chemical Engineering (Elsevier)
- ☐ Journal of Adhesion Science and Technology (Taylor and Francis)
- □ RSC Advances

Citations

• Google Scholar citations: 1273 (June 2025)

h-index : 18i10-index : 26

Research Publications in International Journals: 44

 M. Jannathul Firdhouse, P. Lalitha, P. Arulpriya, Pitchaimani Veerakumar, G. Arivalagan, K. Shahul Hameed, S. Sivakumar, Green synthesis of ultrafine gold nanoparticles from sweet flag (Acorus calamus) for effective anti-leukemic, anti-urolithiatic and in silico docking studies, *Journal of Molecular Liquids*, 408 (2024) 125329. Impact Factor: 5.3, Elsevier. https://doi.org/10.1016/j.molliq.2024.125329

- Pitchaimani Veerakumar, Arumugam Sangili, Shen-Ming Chen, Raju Suresh Kumar, G. Arivalagan, M. Jannathul Firdhouse, K. Shahul Hameed, S. Sivakumar, Photocatalytic degradation of phenolic pollutants over palladium-tungsten trioxide nanocomposite, Chemical Engineering Journal, 489 (2024) 151127. https://doi.org/10.1016/j.cej.2024.151127 IF- 13.3
- 3. R. Menaka, V. Nijarubini, K. Sakthivel, P. Kavitha, M. Jannathul Firdhouse, Electrochemical investigation and surface interaction of thiophene based Chitosan Schiff base on mild steel surface in 1 M HCl, Materials Today: Proceedings, 2024, https://doi.org/10.1016/j.matpr.2024.03.007 Cite score- 4.9
- 4. **M. Jannathul Firdhouse**, Experimental and theoretical investigation of spiro heterocyclic compound as potential inhibitor for mild steel in acid media, **Materials Today: Proceedings**, 2023 https://doi.org/10.1016/j.matpr.2023.12.016 Cite score- 4.9
- Jannathul Firdhouse M., Lalitha P, Biogenic green synthesis of gold nanoparticles and their applications – A review of promising properties, Inorganic Chemistry Communications, Vol. 143, September 2022, 109800. Impact factor: 3.428, Elsevier. Indexed in Scopus & Web of Science.
- 6. Jannathul Firdhouse M, K. Shahul Hameed, S. Sivakumar, Synthesis, antibacterial activity and adsorption studies of Bentonite-iron nanoparticles in the removal of methyl blue dye, Indian Journal of Chemical Technology, Vol. 29, July 2022, pp. 412-420. Impact Factor: 0.76 (JCR 2021). Indexed in Scopus & Web of Science.
- 7. Jannathul Firdhouse M., Lalitha P, 2020, Facile synthesis of anisotropic gold nanoparticles and its synergistic effect on Breast cancer cell lines, **IET Nanobiotechnology**, 10pp. DOI: 10.1049/iet-nbt.2019.0279. **Impact factor: 2.3**
- 8. **Jannathul Firdhouse**, **M.** and Lalitha, P., 2016, Biogenic silver nanoparticles Synthesis, characterization and its potential against cancer inducing bacteria, *Journal of Molecular Liquids*, 222, 1041-1050. **Impact Factor: 6.63**, **Elsevier**.
- 9. **Jannathul Firdhouse, M.** and Lalitha, P., 2014, Biocidal potential of biosynthesized silver nanoparticles against fungal threats, *Journal of Nanostructures in Chemistry*, 5: 25-33, **Springer** Publication. **Impact Factor: 10.1**

- Jannathul Firdhouse, M., Lalitha, P., 2013, Biosynthesis of silver nanoparticles using the extract of *Alternanthera sessilis*—antiproliferative effect against prostate cancer cells, *Cancer Nanotechnology*, 4:137–143, Springer Publication. Impact Factor: 7.917
- 11. **Jannathul Firdhouse, M.** and Lalitha, P., 2016, Cytotoxicity of Spherical Gold nanoparticles synthesized using aqueous extracts of Aerial roots of *Rhaphidophora aurea* (Linden ex Andre) intertwined over *Lawsonia inermis* and *Areca catechu* on MCF-7 cell line, *IET Nanobiotechnology*, DOI:10.1049/iet-nbt.2016.0076, **Impact Factor: 2.3**
- 12. **Jannathul Firdhouse**, M. and Lalitha, P., 2013, Fabrication of Antimicrobial Perspiration Pads and Cotton Cloth Using *Amaranthus dubius* Mediated Silver Nanoparticles, *Journal of Chemistry*, Volume 2013, Article ID 741743, 5 pages, Hindawi Publishing Corporation **Impact Factor: 3.2**.
- 13. **Jannathul Firdhouse, M.** and Nalini, D., 2013, Corrosion inhibition of mild steel in acidic media by 5'-phenyl-2',4'-dihydrospiro[indole-3,3'-pyrazol]-2(1H)-one, *Journal of Chemistry*, volume 2013, DOI: 10/1155/2013/835365. **IF- 3.2,** Indexed in Scopus.
- 14. **Jannathul Firdhouse**, M., Lalitha, P. and Shubashini K.S., 2014, An undemanding method of synthesis of gold nanoparticles using *Pisonia grandis* (R. Br.), *Digest Journal of Nanomaterials and Biostructures*, 9(1): 385 393, Impact Factor: 1.12.
- 15. **Jannathul Firdhouse, M.** and Lalitha, P., 2016, Flower-shaped gold nanoparticles synthesized using *Kedrostis foetidissima* and their antiproliferative activity against bone cancer cell lines, *International Journal of Industrial Chemistry*, DOI 10.1007/s40090-016-0098-4, **Springer**.
- Jannathul Firdhouse, M. and Lalitha, P., 2016, Nanosilver-decorated nanographene and their adsorption performance in waste water treatment, *Bioresources and Bioprocessing*, 3(2): 1-15, Springer Publication. Impact Factor: 4.983
- 17. Jannathul Firdhouse, M. and Lalitha, P., 2015, Apoptotic efficacy of biogenic silver nanoparticles on human breast cancer MCF-7 cell lines, *Progress in Biomaterials*, 4: 113–121. Springer publication. Impact Factor: 4.878
- 18. **Jannathul Firdhouse, M.** and Lalitha, P., 2014, Phyto-reduction of graphene oxide using the aqueous extract of *Eichhornia crassipes* (Mart.) Solms, *International Nano Letters*, 4: 103-108, **Springer** Publication. **Impact Factor: 3.7**
- 19. Jannathul Firdhouse M., Lalitha P, 2018, Synthesis of Few-Layer Graphene using plant

- extracts and analysis of its applications in Food industry, Asian Journal of Multidimensional Research, 7(5), 226-234. Impact Factor: 5.443. Dec 2018.
- 20. Jannathul Firdhouse M. and Lalitha P., 2018, A Review on pharmacological importance of leafy greens-mediated silver nanoparticles, World Journal of Pharmacy and Pharmaceutical Sciences, 7(5), 242-249. **Impact Factor: 7.42.**
- 21. Amutha, M. Lalitha, P. and Jannathul Firdhouse, M., 2017, *Insilico* structure based drug designing of lead compounds for lung cancer, *World Journal of Pharmacy and Pharmaceutical Sciences*, 6(8), 1306-1316. Impact Factor: 7.42.
- 22. Jannathul Firdhouse M. and Lalitha P., 2018, Formulations of sunscreen lotions using *Acorus calamus* and zinc oxide nanoparticles and their *in vitro* evaluation of sun protection factor (SPF), World Journal of Pharmaceutical Research, 7(9), 510-515. **Impact Factor: 8.07.**
- 23. **Jannathul Firdhouse**, **M.** and Lalitha, P., 2014, Cell viability studies of cubic gold nanoparticles synthesized using the extract of *Alternanthera sessilis*, *World Journal of Pharmaceutical Research*, 3(2): 2868-2879, **Impact Factor: 6.8**.
- 24. **Jannathul Firdhouse**, **M.** and Lalitha, P., 2012, Phyto-assisted synthesis and characterization of silver nanoparticles from *Amaranthus dubius*, *International Journal of Applied biology and Pharmaceutical Technology*, 3(4): 96-101, **Impact Factor: 1.26**.
- 25. **Jannathul Firdhouse**, **M.** and Lalitha, P., 2015, Biogenic synthesis of zinc oxide nanoparticles, *International Journal of Extensive Research*, 2: 12-20, **Impact Factor: 2.6**.
- 26. **Jannathul Firdhouse**, **M.** and Lalitha, P., 2014, Competence of different methods in the biosynthesis of silver nanoparticles, *Journal of Chemical and Pharmaceutical Research*, 6(6): 1089-1093, **SJR (Elsevier) Impact Factor: 0.75**.
- Jannathul Firdhouse, M. and Lalitha, P., 2014, Biosynthesis of Cubic Gold nanoparticles, International Journal of Scientific & Engineering Research, 5(1): 1832-1837, Impact Factor:
 3.8, Indexed in Thomson Reuters, Google Scholar.
- 28. **Jannathul Firdhouse**, **M.** and Lalitha, P., 2016, Assessment of α-amylase inhibitory action of some edible plant sources, *Innovare Journal of Science*, 4(3): 1-7.
- 29. **Jannathul Firdhouse, M.,** Lalitha, P. and Aneesa, E.H., 2016, Facile fabrication of gold nanoparticles using *Glinus lotoides* extract, *International Journal of Applied Sciences and Innovation*, (1): 24-33.

- 30. Geethanjali, A., Lalitha, P. and **Jannathul Firdhouse**, **M.**, 2016, Analysis of Curcumin Content of Turmeric Samples from various States of India, *International Journal of Pharma and Chemical Research*, 2(1): 55-62.
- 31. Jayapriya, E., Lalitha P. and **Jannathul Firdhouse**, **M.**, 2016, Isatin-Mediated Synthesis and Characterization of Silver Nanoparticles, *International Journal of Pharma and Chemical Research*, 2(1): 46-54.
- 32. **Jannathul Firdhouse**, **M.** and Lalitha, P., 2015, Analysis of the optical properties of silver nanoparticles synthesized using Amaranthus extracts, *International Journal of Drug Delivery and Nanotechnology*, 1(1): 61-64.
- 33. **Jannathul Firdhouse, M.** and Lalitha, P., 2015, Biosynthesis of Silver Nanoparticles and Its Applications, *Journal of Nanotechnology*, Volume 2015, Article ID 829526, 18 pages. Indexed in Scopus, CAS, Google scholar. **Impact factor: 4.2**
- 34. **Jannathul Firdhouse, M.** and Lalitha, P., 2015, Binding properties of biosynthesized gold nanoparticles with calf-thymus DNA *in vitro*, *International Journal of Biological Chemistry*, 9(4): 188-197, Indexed in Scopus.
- 35. **Jannathul Firdhouse, M.** and Lalitha, P., 2015, Maestro 9.4 as a Tool in the Structure Based Screening of Glycoalkaloids and Related Compounds, Targeting Aldose Reductase, *Trends in Bioinformatics*, DOI: 10.3923/tb.2015, Indexed in Scopus.
- 36. **Jannathul Firdhouse, M.** and Lalitha, P., 2013, Eco-friendly synthesis of graphene using the aqueous extract of *Amaranthus dubius, Carbon Science and Technology*, 5(2): 253–259, Indexed in Scopus, Google Scholar.
- 37. **Jannathul Firdhouse, M.** and Lalitha, P., 2013, Phyto-Mediated Synthesis of Gold Nanoparticles using the aqueous Extract of *Eichhornia Crassipes* (Mart.) Solms, *BioMedRx-Journal of Pharmacy Research*, 1(5): 558-562, Indexed in Scopus, Web of Science.
- 38. Amutha, M., **Jannathul Firdhouse, M.** and Lalitha, P., 2014, Biosynthesis of Silver Nanoparticles Using *Kedrostis foetidissima (Jacq.) Cogn.*, *Journal of Nanotechnology*, Volume 2014, Article ID 860875, 5 pages, Hindawi Publishing Corporation, Indexed in Scopus. **Impact factor: 4.2**
- 39. **Jannathul Firdhouse, M.** and Lalitha, P., 2013, Green synthesis of silver nanoparticles using the aqueous extract of *Portulaca oleracae* (L.), *Asian Journal of Pharmaceutical and Clinical Research*, 6(1): 92-94, **Impact Factor: 0.74**, Indexed in Scopus, Google Scholar.

- 40. **Jannathul Firdhouse, M.** and Lalitha, P., 2013, Biomimetic synthesis of silver nanoparticles using aqueous extract of Am*aranthus polygonoides, International Journal of Pharma and Bio Sciences*, 4(1): 588-595, **Impact Factor: 5.12**, **Citations- 3**, Indexed in Elsevier, Scopus.
- 41. **Jannathul Firdhouse**, **M.**, Lalitha, P. and Shubashini K.S., 2012, Novel synthesis of silver nanoparticles using leaf ethanol extract of *Pisonia grandis* (R. Br), *Der Pharma Chemica*, 4(6): 2320-2326, **Impact Factor: 0.3**, Indexed in Scopus.
- 42. M. Jannathul Firdhouse and A.M. Rashida Banu, 2021, A Review on phytochemicals, pharmacological and biological activities of *Helicteres Isora*, The International journal of analytical and experimental modal analysis, 13(6): 249-257.
- 43. M. Jannathul Firdhouse and M. Fathima Parveen, 2021, Effect of alkali-catalyst in the production of biodiesel using locally sourced palm oil and analysis of physical parameters, High Technology Letters, 27(12), 634-642.
- 44. M. Jannathul Firdhouse and M. Fathima Parveen, 2021, A mini review on Functionalized Polyethylene and its applications, GIS Science, 8(11), 148-157.

Book Published: 7

- Jannathul Firdhouse M. and Lalitha P., 2018, Applications of reduced graphene oxide synthesized using green plant extracts, ISBN: 978-3-330-08955-6, Lambert Academic Publishing, London, N2 9ED, United Kingdom.
- M. Jannathul Firdhouse and P. Lalitha, Fundamentals of Nanochemistry, Textbook for UG & PG Students, Lambert Academic Publishing, London, N2 9ED, United Kingdom, ISBN: 978-620-5-52899-0. Published on: 2023-01-19.
- M. Jannathul Firdhouse, R. Menaka and P. Kavitha, Swelling Behaviour of Chitosan Based Hydrogels: Effect of Crosslinkers, Lambert Academic Publishing, London, N2 9ED, United Kingdom, ISBN:978-620-6-14390-1. Published on: 2023-02-14.
- M. Jannathul Firdhouse, Medical Laboratory Techniques and Clinical Biochemistry, Lambert Academic Publishing, London, N2 9ED, United Kingdom, 2023, ISBN: 978-620-6-14754-1.
- M. Jannathul Firdhouse, Biomolecules and Drugs, LAP Lambert Academic Publishing, London, United Kingdom, ISBN:978-620-6-78918-5.

- M. Jannathul Firdhouse, Forensic Chemistry, LAP Lambert Academic Publishing, London, United Kingdom, ISBN: 978-3-659-87384-3.
- M. Jannathul Firdhouse, Instrumental Method of Chemical Analysis, LAP Lambert Academic Publishing, London, United Kingdom, ISBN: 978-3-330-03067-1
- M. Jannathul Firdhouse, Editor ID: IIPER1676279208, Book Series ID: IIPV3EBS06_G37, Book Name: Futuristic Trends in Chemical Material Sciences & Nano Technology, Iterative International Publishers, Karnataka, India.

Book Chapters: 6

- 1. **M. Jannathul Firdhouse,** Polyshaped Gold nanoparticles synthesized using Amaranthus polygonoides and its anticancer activity against Human Breast cancer cell line" in the International Conference on Advances in Smart Materials (ICAMs-2024) Conference Proceedings, ISBN: 978-93-92560-81-1.
- 2. **Jannathul Firdhouse**, **M.** and Lalitha, P., Biotemplated synthesis of multiple shapes of gold nanoparticles" in the Proceedings of the international Conference on Recent Advances in Materials for Energy and Environmental Remediation (RAMEER-2018), pp. 47, ISBN: 978-93-81723-86-9.
- 3. **Jannathul Firdhouse, M.** and Lalitha, P., "Biosynthesis of Silver Nanoparticles using the Extract of *Alternanthera sessilis*" in *Nano Biomaterials*, 2012, pp.209-214, ISBN: 978-93-82563-37-2, Editors: K.E. Geckler, V. Rajendran and P. Prabhu, *Bloomsbury Publishing India pvt ltd*.
- 4. **Jannathul Firdhouse, M.** and Lalitha, P., "Cytotoxicity of Spherical Gold nanoparticles synthesized using aqueous extract of Aerial roots of *Rhaphidophora aurea* (Linden ex Andre) intertwined over *Areca catechu* on MCF-7 cell lines", in *Bio-Nanomaterials for Biomedical Technology*, 2015, pp.85-88, ISBN: 978-93-85436-92-5, Editors: K.E. Geckler, V. Rajendran and P. Prabhu, *Bloomsbury Publishing India pvt ltd*.
- Lalitha, P. and Jannathul Firdhouse, M., "In silico analysis of anti-inflammatory activity of selected organic compounds against COX-2 inhibitor, Proceedings of ICMR Sponsored National Conference on Challenging Issues and Technological Approaches in Medicine (CITAM 2016), 2016, pp.109-113, ISBN: 81-8446-755-9.
- 6. Jannathul Firdhouse, M. and Lalitha, P., "Facile synthesis of Zinc oxide nanoparticles using Water hyacinth extract and its antiproliferative activity against Breast cancer cell lines" in

- ACT and RSC Sponsored on A treatise on recent advances in Bio-inorganic and Medicinal Chemistry, 2017, pp.185-187, ISBN: 978-93-81723-63-0.
- 7. Jannathul Firdhouse, M. and Menaka, R., Experimental and theoretical of Spiro heterocyclic compounds as potential inhibitor for mild steel in acid medium" in Indo-South Korea-Thailand International e-Conference on Nanoscience and Nanotechnology for Energy, Environment and Biomedical Applications INEEBA-2022 Conference Proceedings, ISBN: 978-93-5768-301-2, page no.84.

Orientation Programme attended

➤ Orientation Programme conducted by UGC-Human Resource Development Centre, Bharathidasan University, Triuchirappalli from 12.11.2019 to 02.12.2019.

Refresher Programme attended

➤ Refresher Programme conducted by UGC-Human Resource Development Centre, Bharathiar University, Coimbatore from 10.11.2021 to 23.11.2021.

Papers Presented in International Conferences: 15

- "Biosynthesis of Silver Nanoparticles using the Extract of *Alternanthera sessilis*", International Symposium on Macro- and Supramolecular Architectures and Materials: Nanosystems and Applications, November 21- 25th, 2012.
- "Antibacterial activity of synthesized silver nanoparticles using *Amaranthus dubius*", International conference on Nanoscience and Nanotechnology-(ICONN-2013), March 18 20th, 2013.
- **"Optical properties of biosynthesized silver nanoparticles"**, Advanced Materials for the Emerging Technologies-(CAMET-2013), July 10-11th, 2013.
- "Induction of Apoptosis of Human Breast Cancer Cells MCF-7 with Silver nanoparticles biosynthesized using Alternanthera sessilis", International Conference on Nanomaterials for Frontier Applications and Indo-Norwegian Workshop on Advanced Materials for Solar Cell Applications, July 10-12th, 2013.
- "Maestro 9.4 as a tool in the structure based screening of glycoalkaloids and related compounds, targeting Aldose reductase", Recent Advances in Computational drug design (RACDD-2013), September 16-17th, 2013.
- "Competence of different methods in the biosynthesis of silver nanoparticles" International Conference on Nano Materials: Science, Technology and Applications (ICNM-13), December 4-6th, 2013.

- "Anti-proliferative effect of aqueous extract of *Alternanthera sessilis* (L.) R.Br against Human Breast Cancer Cells MCF 7", International Conference on "Chemistry Frontiers & Challenges, February 5-7th, 2014.
- "NMR Shift database 2 as a tool for prediction of structure of compounds", Spectroscopy Solutions Webinar titled 'Spectroscopy Solutions 2014 eConference, May 29th, 2014.
- "Cytotoxicity of Spherical Gold nanoparticles synthesized using aqueous extract of Aerial roots of *Rhaphidophora aurea* (Linden ex Andre) intertwined over *Areca catechu* on MCF-7 cell lines", International Conference on Nanomaterials and Nanotechnology, December 7-10th, 2015.
- "In vitro Anticancer potential of biogenically synthesized blue nanogold particles" International Conference on Translational Cancer Research (ICTCR-2015), December 14-16th, 2015.
- "Fabrication of gold nanoparticles using e-wastes- An impending challenge" was presented in the One Day UGC sponsored International Conference on Expanding Frontiers in Chemistry (EFC-19), organized by PG Department of Chemistry, Arul Anandar College, Madurai on 13th September 2019.
- "Fabrication of *Curcuma rubescens* sunscreen lotion and invitro evaluation of Sun Protection Factor (SPF)" was presented in the National Conference on Latest Trends in Life Sciences held at Hajee Karutha Rowther Howdia College, Uthamapalayam on 26th September 2019.
- "Anticancer and DNA binding studies of Tetrapod and floral nanostructures synthesized from Acorus calamus" was presented in the International Conference on Technologies for Smart Green Connected Societies 2021, led by Yamagata University Japan, organized by SPAST Foundation and Associated Partner Institutions, held from 29.11.2021 to 30.11.2021.
- "In vitro evaluation of sun protection factor for the lotions prepared using *Alternanthera* sessilis, Sterculia foetida, and Annona reticulata extracts" was presented in International Conference on Environmental, Agricultural, Chemical and Biological Sciences during 22, 23 & 26, January 2022, organized by VOICE in association with CAFRE, University of Pisa, Italy.
- "Experimental and theoretical of Spiro heterocyclic compounds as potential inhibitor for mild steel in acid medium" in Indo-South Korea-Thailand International e-Conference on Nanoscience and Nanotechnology for Energy, Environment and Biomedical Applications INEEBA-2022 Conference Proceedings, ISBN: 978-93-5768-301-2, page no.84.

Papers Presented in National Conferences: 6

- "Sterculia foetida-mediated gold nanoparticles and their antiproliferative activity against breast cancer cell lines (MCF-7)" One day National Symposium on Recent Trends in Chemistry (NSRTC 2017), February 24th, 2017.
- "Facile synthesis of Zinc oxide nanoparticles using Water hyacinth extract and its antiproliferative activity against Breast cancer cell lines" ACT and RSC sponsored one day National Seminar on Recent Advances in Bioorganic and Medicinal Chemistry (RABAMCHEM 2017), February 15th, 2017.
- "In silico analysis of anti-inflammatory activity of selected organic compounds against COX-2 inhibitor, ICMR Sponsored National Conference on Challenging Issues and Technological Approaches in Medicine (CITAM 2016), February 19-20th, 2016.
- "Corrosion inhibition of Mild steel in acid media by 5-Pyrazolone", National Conference on Recent Applications of Nanomaterials in Chemistry and Environmental Research, February 18-19th, 2011.
- "Inhibition of Mild steel corrosion in acidic media by N-Arylthiosemicarbazone", Sixteenth National Convention of Electrochemists, December 15-16th, 2011.
- "Smart Materials" in the event of Resonance' 2010, February 19th, 2010, organized by Department of Chemistry, Gandhigram Rural Institute Deemed University, Dindigul.

Faculty Development Program

- 9-Day National Level Online Faculty Development Program on "Foregrounding the Spectrum of Character Building in Modern Human Life" organized by Department of Humanities & Sciences, Balaji Institute of Technology & Science, Warangal Rural-506331, Telangana from 25 June - 03 July, 2021.
- Faculty Development Program on "Scientific paper writing for newbies: Nuances, tools and techniques" held on 19.06.2021 organized by the Guru Nanak Centre For Research (GNCR), Chennai.
- Two days National FDP on "Aspects of Research Paper Writing", from 25.06.2021 to 26.06.2021, organized by Khandelwal Vaish Girls Institute of Technology, Jaipur.

- Three day Virtual Faculty Development Program on "Enhancing Excellence in Higher Education Through Assessment and Accreditation", from 06.05.2020 to 08.05.2020, organized by Sree Narayana Guru College, Coimbatore.
- National Online FDP on "How to Bring Lasting Changes in Students", organized by Sri Sarada College for Women (Autonomous), Salem 16, Tamil Nadu on 15.05.2020.
- One Week Faculty Development Program on "Molecules and Beyond the Molecules" organized by Department of Humanities and Basic Sciences, from 15th June 2020 to 19th June 2020 at Godavari Institute of Engineering and Technology (Autonomous), Rajamahendravaram, Andhra Pradesh, INDIA
- National Online FDP on "Google Forms and its Applications", organized by IQAC, CIAE
 LMS, Hajee Karutha Rowther Howdia College, Uthamapalayam, on 12.10.2020.
- National Online FDP on "Writing Research Grants Applications and Intellectual Property Rights", organized by IQAC, Hajee Karutha Rowther Howdia College, Uthamapalayam, on 24.06.2020.
- Faculty Development Programme (FDP) on "Outcomes-Based Education" conducted by Inpods from 4th to 6th November, 2020.

e-Conferences / Webinars / e-Workshop Attended: 35

- M. Jannathul Firdhouse, has attended the "Training Workshop on AMOS SPSS" organized by the R&D Cell of Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, on 7.8.2023.
 M. Jannathul Firdhouse, has attended the webinar on "Advancements of Atomic Force Microscope (AFM)" organized by Bharat Ratna Prof.C.N.R Rao Research Centre, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore on 23.09.2023
- M. Jannathul Firdhouse, has participated in the International Conference on "Functional Nanomaterials and Nanodevices" organized by Faculty of Allied Health Sciences, Chettinad Academy of Research and Education, Kelambakkam, Tamil Nadu on 26.09.2023.
- 3. **M. Jannathul Firdhouse,** has attended the One-day National Level FDP on "Green Audit and Energy Audit" conducted by IOT Academy on 01.04.2023.
- 4. International Webinar-III, 2021 on "PEM fuel cells for Electric vehicles" and "Heterogeneous catalyst design for desulfurization targeting clean environment" organized by the PG & Research Department of Chemistry, The American College, Madurai, Tamil Nadu, India on June 28, 2021.
- 5. International Webinar entitled 'HANDS ON EXPERIENCE-Building Efficient Survey Questionnaire and Tools & Techniques for Referencing' on 22nd June, 2021 organized by the Faculty of Education, Dr. M.G.R. Educational and Research Institute, Tamil Nadu, Chennai.

- 6. Workshop on "Fundamentals of Publishing in Top Journals" organized by Department of Business Administration, Maharaja Agrasen Institute of Management of Studies, in association with ThinkQuest club & Collaboration with Elsevier, on 16th June 2021.
- 7. National Level Webinar-II, 2021 on "Addressing Alzheimer's Disease A Chemist's Perspective" and "Forensic science at a Glance" organized by the PG & Research Department of Chemistry, The American College, Madurai, Tamil Nadu, India on June 23, 2021.
- 8. International Webinar entitled 'HANDS ON EXPERIENCE-Building Efficient Survey Questionnaire and Tools & Techniques for Referencing' on 22 nd June, 2021 organized by the Faculty of Education, Dr.M.G.R.Educational and Research Institute, Tamil Nadu, Chennai-95, India.
- 9. International Webinar-III, 2021 on "PEM fuel cells for Electric vehicles" and "Heterogeneous catalyst design for desulfurization targeting clean environment" organized by the PG & Research Department of Chemistry, The American College, Madurai, TamilNadu, India on June 28, 2021.
- 10. National Level Webinar-II, 2021 on "Addressing Alzheimer's Disease A Chemist's Perspective" and "Forensic science at a Glance" organized by the PG & Research Department of Chemistry, The American College, Madurai, TamilNadu, India on June 23, 2021.
- 11. Workshop on "Fundamentals of Publishing in Top Journals", organized by Department of Business Administration, MAIMS in association with Think Quest and Elsevier on 16th June, 2021.
- 12. Online Awareness Session on the topic "Psychology And Psychiatry "Know" are Two Different Doors", conducted by Psyclout Mental Health Services, on 05.06.2021.
- 13. Virtual National Seminar on "Bioinformatics and Quorum Sensing" on 05.06.2020, organized by Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- 14. Webinar on DIGI TEACH on 07.05.2020, organized by Mangayarkarasi College of Education for Women, Madurai.
- 15. National Webinar on "Effective ways for reaching Millennium Learners, organized by Morning Star Home Science College on 10.5.2020.
- 16. Two Day National Level E- Workshop on "Understanding OBS Studio & Streamyard for E-Content Creation and Live Streaming", from 10.07.2020 to 11.07.2020, organized by Dr.M.G.R Educational And Research Institute, Adayalampattu Phase -II campus.
- 17. One day International webinar on "The Journey of Supramolecular Chemistry: From an Accidental Discovery to Advanced Materials" organized by Department of Science and Humanities (Chemistry) at RMK College of Engineering and Technology on 9th July 2020.
- 18. International Webinar on "Plasmon-Enhanced Spectroscopy and its Role in Analytical Chemistry" organized by Research & PG Department of Chemistry, Saraswathi Narayanan College, Madurai, on 24th July 2020.

- 19. International Webinar on Recent Advances in Chemical Sciences, St. Xavier's College, Palayamkottai, Tamil Nadu, on 28th July 2020.
- 20. Three-Day National Level webinar on "Chemistry in Circular economy & Sustainability (CHEMinar 20)" organized by Department of Chemistry, Madurai Kamaraj University, Madurai, from 29th to 31st July 2020.
- 21. International Weekly Webinar Series on 'Instrumental Techniques in Chemistry', organized by the Department of Chemistry, N.S.S. College, Manjeri, Kerala from 18th July 2020 to 15th August 2020.
- 22. Two-Day National Level Online Workshop on Insightful Rudiments of Originating Google Forms & Generating Certificates- A Horde of Approaches Adaptable for Online Academic Motives on 25 & 26 September, 2020 organized by Department of Humanities & Sciences, Balaji Institute of Technology & Science, Narsampet, Warangal Rural, Telangana, India.
- 23. International Webinar on Chemistry on 29.05.2020, organized by The American College, Madurai.
- 24. A Five-Day National Level Online Course on "Chemistry in Our Day-to-day Life" organized by Jamal Mohamed College, Tirchy, from 04.06.2020 to 08.06.2020.
- 25. One Day International conference (Webinar) on Pandemic Pedagogy in Higher Education of COVID-19, conducted by Bharathiar University, Coimbatore, on 13.05.2020.
- 26. Webinar on Personal Effectiveness- Need of the Hour, organized by Sakthi Institute Of Information And Management Studies on 14.5.2020.
- 27. National Webinar on A Green Chemistry and Green Engineering- A Unique Solution of Industrial Disasters, organized by Kings College of Engineering on 17.5.2020.
- 28. National webinar on "Application of Spectroscopy in Research Field", organized by Ismail National Mahila PG College on 18.06.2020 .
- 29. Webinar on "Cyber Safety For Women", organized by Sri Adi Chunchanagiri Women's College on 21.05.2020.
- 30. National Webinar on An Insight Into NAAC- RAF, organized by V.O.Chidambaram College on 22.5.2020.
- 31. National Webinar on New Horizons for E-learning in Higher Education organized on 14.05.2020 and 15.05.2020 by EdFly.
- 32. Successfully completed the module on Standing up for Science on Friday 15th May, 2020 by Researcher Academy, Elsevier.
- 33. Successfully completed the module on How to review a manuscript on 17th May, 2020 by Researcher Academy, Elsevier.
- 34. Successfully completed the module on A guide to journal citation metrics on 17th May, 2020 by Researcher Academy, Elsevier.
- 35. International webinar entitled "NANO THE TINY WARRIOR"- Engineering Nanomedicine and Drug Delivery System organized by Department of Chemistry, Kongu Engineering College, Perundurai-638060, Erode, Tamil Nadu on 30.05.2020.

- 36. International webinar entitled "Basic Science Behind Medical MRI" organized by PG & Research Department of Chemistry, Thiruvalluvar Government Arts College, Rasipuram 637401, Tamil Nadu, India on 29.06.2020.
- 37. International Webinar on "Writing Proposals for Funding Agencies: Project Design and Project Proposals" organized by Department of Commerce, Rathinam College of Arts and Sciences, Coimbatore on 29.05.2020.
- 38. Webinar on Recent Advances in Nanotechnology on Chemical and Biomedical Fields organized by Department of Chemistry, KPRIET on 23.05.2020.
- 39. Moodle Learning Management System training organized at Bannari Amman Institute of Technology in January 2020 semester, with course material provided by the Spoken Tutorial Project, IIT Bombay.
- 40. State Level Webinar on "Solving Problems with NMR Spectroscopy", organized by PG Department of Chemistry, Hajee Karutha Rowther Howdia College, Uthamapalayam, on 10.06.2020.
- 41. National Level Webinar on "Asymmetric Synthesis and its Applications", organized by PG Department of Chemistry, Hajee Karutha Rowther Howdia College, Uthamapalayam, on 30.06.2020.
- 42. International Webinar on "Chemical Biology of COVID-19" organized by PG abd Research Center of Chemistry, Jayaraj Annapackiam College for Women, Periyakulam, on 11.06.2020 and 12.06.2020.

Conferences / Seminars / Training / Workshop Attended: 39

- 1. One day International conference on Recent Trends in Arts, Science, Engineering and Technology, 30th December 2018 conducted by DK International Research Foundation, Perambalur, Tamil Nadu.
- 2. Indian Academies of Sciences sponsored "Lecture Workshop on Recent Trends in Chemistry (RTC-9)" on 28th & 29th September 2018, organized by PG and Research Centre of Chemistry, Jayaraj Annapackiam College for Women, Periyakulam.
- 3. One day **Training Programme on "Field-Emission Scanning Electron Microscope FESEM sponsored by DST-CURIE** on 25th May, 2018 organized by Department of Chemistry, Avinashilingam University, Coimbatore.
- 4. One day Workshop on "Online examination and feedback using smart phones" on 27th March 2018 conducted by Department of Computer Science, Madurai Kamaraj University, Madurai.
- 5. One day Workshop on "Analytical Instrumentation Techniques Theory and Practice" in Prof. Evelyn Rhine Lecture Series on 14th February, 2017 organized by Department of Chemistry, Lady Doak College, Madurai.
- 6. One day **Workshop on "Recent trends in Spectroscopy Research"** on 4th March, 2016 organized by Department of Chemistry, Avinashilingam University for Women, Coimbatore

- and Society for Advancement of Chemical Sciences and Education (SACSE), Indira Gandhi Centre for Atomic Research, Kalpakkam.
- 7. One day Royal Society of Chemistry sponsored Workshop on "Frontiers Materials" on 15th February, 2016 organized by Department of Physics, Avinashilingam University for Women, Coimbatore.
- 8. Three day Workshop on "Molecular Modeling and Computer-Aided Drug Discovery" from 2nd to 4th March, 2015 organized by Department of Biochemistry, Biotechnology and Bioinformatics, Avinashilingam University for Women, Coimbatore.
- 9. One day National Seminar on Nanomaterials Research "Vision Nano 2015" on 21st February 2015, organized by Department of Nanotechnology, Sri Ramakrishna Engineering College, Coimbatore.
- 10. **One day workshop on "3D Printing"** on 10th February 2015, organized by Faculty of Engineering, Avinashilingam University for Women, Coimbatore.
- 11. **UGC Sponsored Students' Workshop on Quality Education for All**, on 17th November 2014, organized by Avinashilingam University for Women, Coimbatore.
- 12. Recent strategies in Drug Discovery Hands on experience workshop on QSAR, Pharmacophore and Docking tools on 25-27th September 2014, organized by Department of Pharmacology, PSG College of Pharmacy, Coimbatore.
- 13. Research convention on "**Post Research Methods**" Avinashilingam University for Women, Coimbatore, 1st & 2nd August 2014.
- 14. **DST-CURIE sponsored Workshop on Intellectual Property Rights (IPR-2014)** on March 15, 2014 organized by Avinashilingam University for Women, Coimbatore.
- 15. One day National Seminar on Nanomaterials Research "Vision Nano 2014" on 22nd February 2014, organized by Department of Nanotechnology, Sri Ramakrishna Engineering College, Coimbatore.
- 16. "Theme Meeting on Advanced Characterization Techniques for Engineered Nanomaterials (ACTEN-2014)" on 30th and 31st January 2014, organized by Centre for Nanoscience & Nanotechnology, Sathyabama University, Chennai.
- 17. UGC-TANSCHE sponsored "National Conference on Recent Developments in Green Chemistry" on 18-19th December 2013, organized by Department of Chemistry, Kongu Nadu Arts and Science College, Coimbatore.
- 18. "Training course on Instrumental methods of chemical analysis" on 28-29th October 2013, conducted by the South India Textile Research Association, Coimbatore.
- 19. One day Workshop on "Spectroscopy and its Applications" on 18th February 2013, organized by Post Graduate and Research Department of Chemistry, Sri Ramakrishna Mission Vidalaya College of Arts and Science, Coimbatore.
- 20. Research convention on "Path finder Explore, Experiment, Elucidate Research" Avinashilingam University for Women, Coimbatore, 7th-9th February 2013.
- 21. UGC sponsored Academic Salon cum Workshop on "Portfolio Assessment and Rubrics in Evaluation" on 10th January 2013, organized by Department of Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- 22. UGC sponsored Academic Salon cum Workshop on "Exploring the Potential of Multiple Choice Questions in Assessment" on 9th January 2013, organized by Department of

- Education, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- 23. "Workshop on Intellectual Property and Innovation Management in Knowledge Era" on 17th October, 2012, organized by Gandhigram Rural Institute Deemed University, Dindigul, Tamil Nadu.
- 24. DST-CURIE sponsored Workshop on "Industry-Institute Connect" on 27th September 2012, organized by Department of Chemistry, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore.
- 25. Recent Advances in Crystal growth and Crystallography (RACC-2012) on 21-22nd March 2012, organized by School of Physics, Madurai Kamaraj University, Madurai.
- 26. On the job training for a period of one month (May 2010) in Salim Ali Centre for Ornithology and Natural resources, Annaikatti.
- 27. One day workshop on "Structural Bioinformatics" on 23.01.2010 organized by Department of Bioinformatics, Dr. G. R. Damodaran College of Science, Coimbatore.
- 28. A two day Lecture programme on "Advances in Chemistry" on 7-8th October, 2010, organized by Post Graduate and Research Department of Chemistry, PSGR Krishnammal College for Women, Coimbatore.
- 29. National level Workshop on "Interpretation of Spectral data and Indentification of Phytoconstituents" on 4 and 5th February 2010, organized by Department of Chemistry, Karpagam University, Coimbatore.
- 30. International Seminar on "Research Methodology and Data Interpretation" on 28th January 2010, organized by Department of Biochemistry, Biotechnology and Bioinformatics, Avinashilingam University for Women, Coimbatore.
- 31. National level seminar on "Bioresources Conservation and Management" on 8 and 9th January 2010, organized by Department of Plant Biology and Plant Biotechnology, Advanced Zoology and Biotech, Microbial Biotech, PSGR Krishnammal College for Women, Coimbatore.
- 32. One day hands on workshop on "**Structural Bioinformatics**" on 23rd January 2010 organized by Dr.G.R.Damodaran College of Science, Coimbatore.
- 33. One day Workshop on "Stress Management and Behavioural Problems" on 25.03.06, organized by Indian Association for Pre-School Education, Coimbatore Branch.
- 34. Training program "**Teach to the Future Program**" from 25.9.05 to 2.10.05, under the Intel K-12 Education Program-India.
- 35. Underwent fifteen days Dietetic Internship Training at KG Hospital (2004), Coimbatore.
- 36. "Symposium on Widening Horizons in Chemistry", on February 22nd 2003, organized by Department of Chemistry, Avinashilingam University for Women, Coimbatore.

Extracurricular and Co- Curricular Activities

• Volunteer in the Research Convention Program held at Avinashilingam University, Coimbatore during 23rd & 24th January 2015 and 18-20th February 2016.

- Volunteer in DST-Curie sponsored National Workshop on "Conducting Innovative Corrosion Control Research" from January 27-31, 2014.
- Actively participated in Marathon 2008 on August 39th 2008.
- Actively participated as a Two-Wheeler rider in the Wearing Helmet Awareness Rally 2009 organized by NSS unit, Avinashilingam University, Coimbatore..
- Volunteer in Community social service (2008-2010) at Postgraduate level.
- Actively participated in Basic Guide Captains' training course from 16th -22nd December 2004.
- Volunteer in National service scheme (2001-2004) at Undergraduate level.
- Participated in ten days special camping program from 17-26th March 2003, organized by NSS unit, Avinashilingam University, Coimbatore.

Personal profile

Name : M. Jannathul Firdhouse

Date of Birth : 25.01.1984
Nationality : Indian
Religion : Muslim

Sex & marital status : Female & Married Husband Name : S. Khan Mohamed

Languages known : English, Tamil (To read, write and

speak)

I hereby declare, all the above mentioned details are true to my knowledge.

Thanking you

at Dat M

Yours Sincerely,

(M. Jannathul Firdhouse)
