CURRICULUM VITAE

Sr. Dr. J. Agnes

Assistant Professor, Department of Physics,

St. Antony's College Of Arts and Sciences For Women,

Amala Annai Nagar, Thamaraipadi, Dindigul-624 005, Tamil Nadu, India.



Area of Specialization

Nano Science and Technology

Academic Qualification:

| Exam. Passed | Board / College | Subject | Year | Percentage |
|-----------------|---------------------------------------------------|---------|--------------------------------|------------|
| B.Sc. | St. Xavier's College (Autonomous), Palayamkottai. | Physics | 2013-2016 | 82.2 |
| M.Sc. | St. Xavier's College (Autonomous), Palayamkottai. | Physics | 2016-2018 | 77.9 |
| Ph.D | St. Xavier's College (Autonomous), Palayamkottai. | Physics | 31.08.2019 To 29.01.2024 | Awarded |

| Degree | Title of the work | University |
|-----------------------|-----------------------------------|--------------------------|
| | Solvothermal synthesis and | |
| | characterizations of chitosan | |
| Ph. D | encapsulated metal oxide | Manonmaniam Sundaranar |
| Reg.No:19211282132026 | nanoparticles modified with | University, Tirunelveli. |
| | folic acid for antibacterial | |
| | activity and cytotoxic studies on | |
| | MCF-7 and hMSCs cell lines | |

LANGUAGE • TAMIL • ENGLISH • HINDI

Teaching Experience:

| Course | Name of the Institution | Duration |
|--------|---------------------------------|----------|
| B.Sc | St.Antony's College of Arts and | 2024 - |
| | Sciences for Women, Dindigul. | |

List of Research papers published:

- Solvothermal Synthesis And Characterization Studies Of Nickel Oxide Nanoparticles International Journal of Creative Research Thoughts, Volume 9, Issue 8, pp.d854-d863, August 2021
- 2. Synthesis and Characterization Studies of Pure ZnO and Bentonite Doped ZnO Nanocrystals, International Journal of Emerging Technologies and Innovative Research. Vol.8, Issue 9, page no.e784-e794, September 2021.
- 3. Preparation and characterization studies of Mn₃O₄ Nanoparticles/Graphene sheet composites, Journal of Xi'an Shiyou University, Natural Science Edition, Volume 17 Issue 12 pp 404-41, December 2021
- 4. Synthesis and Characterization studies of Mesostructured Chitosan coated CuO Nanoparticles with Folic Acid, Journal of Xi'an Shiyou University, Natural Science Edition, 17(12):274-285, December 2021.
- 5. Preparation and Characterization Studies of Graphene Oxide And its Antimicrobial Activity, Wutan Huatan Jisuan Jishu, Volume 17, Issue 12, pp. 36-44, December 2021.
- Synthesis and Characterization Studies of Selenium Decorated Reduced Graphene Oxide Assisted Cobalt Acetate (Co (AC₂)4H₂O) Nanoparticles, Journal of Xi'an Shiyou University, Natural Science Edition, 17(11):389-396, December 2021.
- 7. Synthesis and characterization of chitosan encapsulated nickel oxide nanoparticles modified with folic acid, Materials Today: Proceedings, 66 (2022) 1658-1663, https://doi.org/10.1016/j.matpr.2022.05.256.
- 8. Synthesis, Characterizations and Antibacterial Studies of Chromium trioxide Nanoparticles. International Journal for Modern Trends in Science and Technology, vol 8 pp. 252-258, 2022.
- 9. Antibacterial Activity Of Copper Oxide Nano Particles against Gram Positive And Negative Bacterial Strain synthesized By Precipitation Technique, International Journal of Zoology and Applied Biosciences, Volume 7, Issue 1, pp: 17-22, 2022.
- 10. Synthesis, and antibacterial activity of Aluminium Oxide Nanoparticles, Journal of Xi'an Shiyou University, Natural Science Edition, 18(04):263-267, April 2022.
- 11. Optical, and electrochemical performance of selenium decorated reduced grapheme oxide assited (CoSe₂) nanoparticles for oxygen reduction reaction, Materials Today: Proceedings, 66 (2022) 1846-1851 https://doi.org/10.1016/j.matpr.2022.05.287

- 12. Preparation and Characterization of Chitosan-Encapsulated Cobalt Oxide Nanoparticles Modified with Folic Acid, Journal of Inorganic and Organometallic Polymers and Materials, vol. 33, no. 2, pp. 555-561.
- 13. Preparation and characterization studies of chitosan encapsulated ZnO nanoparticles modified with folic acid and their antibacterial activity against selected bacterial species, Particulate Science and Technology, 2023. Vol.41,No.6, 774-784.
- 14. Optical, thermal, electrochemical, properties of nano graphene oxide/nickel oxide nanocomposite suitable for supercapacitor applications, Materials Today: Proceedings, https://doi.org/10.1016/j.matpr.2023.05.615

Conferences, Webinars, Workshops, and Seminars attended:

| S.NO. | TITLE | LEVEL | Count |
|-------|-------------------------------|---------------|-------|
| 1 | Conference | International | 2 |
| 2 | Seminar | - | 5 |
| 3 | Webinar | National | 18 |
| | | International | 7 |
| 4 | Special Talk | - | 1 |
| 5 | Lecture | - | 2 |
| 6 | Symposium | - | 2 |
| 7 | Workshop | National | 2 |
| 8 | Faculty Development Programme | - | 4 |

PRESENTATIONS:

- 1. Presented a paper entitled "Synthesis and characterization studies of Mesostructured chitosan coated Fe₃O₄ Nanoparticles with Folic Acid in the International virtual conference on Innovative Research in Humanities, Science, and Technology on 6th &7th January 2022 organized by Selvam Arts & Science College Namakkal.
- 2. Presented research paper entitled "Synthesis and Characterization Studies of Mesostructured Chitosan coated CuO nanoparticle with Folic Acid" at the international conference on RECENT ADVANCES IN MATERIALS AND RADIATION MEASUREMENTS (RAMRAM-2022, Proceedings) organized by the Department of Physics, Sri Sivasubramaniya Nader College of Engineering, during 10-11 February.

- 3. Presented a paper entitled "Synthesis and characterization of lead added Zinc oxide nanoparticles" at the International Conference on Emerging Materials and its Applications organized by the Department of Physics St. Xavier's College (Autonomous) Palayamkottai on 1st March 2022. **Conference Proceeding: ICEMA-2022, ISBN NO: 978-81-956471-0-1.**
- 4. Presented a paper on "Solvothermal Synthesis of chitosan encapsulated CuO nanoparticles modified with Folic acid and its antibacterial activity against selected bacterial species" at the International Conference of Recent Progress in Biological Sciences organized by the Department of Zoology, Ayya Nadar Janaki Ammal College, Sivakasi during 4th and 5th March 2022.
- 5. Presented the research paper entitled "Synthesis and characterization of chitosan encapsulated nickel oxide nanoparticles modified with folic acid" in the international conference on Recent Advances in Engineering Materials (ICRAEM 2022) held at Alva's Institute of Engineering & Technology, Moodbidri Karnataka, India during 03-05, March 2022.
- 6. Presented a paper entitled "Preparation and characterization of chitosan encapsulated cobalt oxide nanoparticles modified with folic acid" at the first International Conference on Minerals, Materials, and Manufacturing Methods ICMMMM'22 organized by the Center for Material Science Faculty of Engineering Karpagam Academy of Higher Education, Coimbatore, India during March 18-19, 2022. **ISBN: 978-93-5578-155-0**
- 7. Presented the paper titled "Synthesis and antibacterial activity of chitosan encapsulated Fe₃O₄ nanoparticles treated with folic acid against selected bacterial species" at the International Conference on Recent Innovations in Engineering, Technology, Management, and Science (ICRIETMS-2022), organized by PSN Engineering College, Tirunelveli on 24th-25th March 2022.
- 8. Presented a research paper entitled "Preparation and characterization studies of chitosan encapsulated ZnO nanoparticles modified with Folic acid and their antibacterial activity against selected bacterial species" in the second international conference on Advances in chemistry with specific reference to catalysis, sensors, drug delivery Energy materials and anticancer studies organized by the department of physical chemistry, university of madras in collaboration with Royal society of chemistry (RSC), RUSA2.0, Tamilnadu state council for Higher education J PSI, Chennai during March 28-29. Conference Proceeding: (2nd ICACSEM-2022), ISBN: 978-93-91255-09-1.
- 9. Presented a Paper entitled "Preparation and physical properties of chitosan encapsulated CuO nanoparticles modified with Folic acid for antibacterial activity" at the Annual international conference on multidisciplinary research and innovation (AICMRI-2022) organized by ESN Publication, December 16-18. **ISBN: 978-93-95196-30-7.**