

PROFILE

Dr. G. SUDHA M.Sc, M.Phil, Ph.D

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Career Objective

To work as a dedicated academician and researcher in Chemistry, contributing to quality teaching and impactful research in the areas of organic chemistry, photocatalysis, and environmental chemistry.

Academic Profile

- Ph.D. (Organic Chemistry), 2012–2017, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli.
- M.Phil. (General Chemistry), 2009–2010, School of Chemistry, University of Madras, Chennai, Aggregate: 78.00%, First class with distinction.
- M.Sc. (General Chemistry), 2006–2008, School of Chemistry, Madurai Kamaraj University, Madurai, Aggregate: 65%, First class.
- B.Sc (General Chemistry), 2003–2006, Sri Parasakthi College for Women, Manonmaniam Sundaranar University, Tirunelveli, Aggregate: 73%, First class
- HSC, 2004–2005, Govt. Girls Higher Secondary School, Kadayanallur, Aggregate: 81%, First class with distinction.
- SSLC, 2002–2003, Govt. Girls Higher Secondary School, Kadayanallur, Aggregate: 81%, First class with distinction.

Professional Experience

- Assistant Professor in Chemistry, Yadava College, Madurai
03.08.2022 – Till date.
- Lecturer in Chemistry, J.P. College of Engineering, Ayikudy
01.08.2011 – 20.02.2012.

Research and Project Details

Ph.D. (Organic Chemistry)

Topic: “Photocatalyst Immobilized Fly Ash Derivatives for Degradation of Toxic Organic Compounds”

Supervisor: Dr. E. Subramanian, Professor & Head, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli.

E-Thesis:

<https://shodhganga.inflibnet.ac.in/handle/10603/18549/browse?type=author&order=ASC&rpp=20&value=Sudha+G>

M.Phil Project

Title: “Polyamidoamine Dendrimer Mediated Solubility Study of Nimesulide – Effect of pH and Comparison with Surfactants.”

Guide: Dr. E. Murugan, Professor, School of Chemistry, University of Madras, Chennai.

M.Sc Project

Title: “Synthesis of Flavonoid and Iso-flavonoid Compounds.”

Guide: Dr. S. Gandhidasan, Professor, School of Chemistry, Madurai Kamaraj University, Madurai.

Publications in Journals

1. G. Sudha, E. Subramanian, C. Murugan, “Development of iron oxide/Zeo-NaX nano photocatalyst from coal fly ash and its activity assessment by methylene blue dye degradation”, *International Research Journal of Natural and Applied Sciences*, 2(2) (2015) 114–128.
2. G. Sudha, E. Subramanian, “Synthesis, characterization and photocatalytic study of cerium oxide/Zeo-NaX catalyst with brilliant green dye degradation”, *Journal of Advanced Chemical Sciences*, 1(3) (2015) 117–120.
3. G. Sudha, E. Subramanian, “Influence of pollutant ionic charge on their photodegradation by fly ash derived CeO₂/Zeolite-NaX catalyst”, *Journal of Advanced Chemical Sciences*, 2(1) (2016) 212–214.
4. G. Sudha, Praveenraja, “Synthesis and Characterization of Metal Oxide Immobilized Fly Ash Photocatalysts”, Vol. 3, Issue 11, 854–859, November 2025.
DOI:10.56975/jaaf.v3i11.501444.
5. G. Sudha, M. Amuthini, “Physico-Chemical Assessment of Groundwater Quality in Selected Zones of Madurai District, Tamil Nadu, India”, 14(1)(2026) 09–13.
DOI:10.22271/chemi.2026.v14.i1a.12640.

Publications in Conference Proceedings

1. G. Sudha, E. Subramanian, “Synthesis, characterization and photocatalytic study of cobalt oxide/Zeo-NaX catalyst with methylene blue dye degradation”, *Conference Proceedings on CEEH-2015, Chemistry for Sustainable Energy, Clean Environment and Health* (2015) 75–78. (ISBN: 978-93-81402-17-1).
2. G. Sudha, E. Subramanian, “Synthesis, characterization and photocatalytic study of cobalt-cerium oxide/Zeo-NaX catalyst with methylene blue dye degradation”, *Conference Proceedings on ICRAMCS-2015, International Conference on Recent Advances in Materials and Chemical Sciences* (2015) 101–102. (ISBN: 978-93-85477-46-1).
3. G. Sudha, E. Subramanian, “Synthesis, characterization and photocatalytic study of cerium oxide/zeolite-NaX with brilliant green dye degradation”, *Conference Proceedings on*

FACTs-2016, International Conference on Frontier Areas in Chemical Technologies (2016) 135–136. (ISBN: 978-81-928690-7-0).

Papers Presented at Seminars / Conferences

1. Synthesis, characterization and photocatalytic study of cerium oxide/zeolite-NaX with brilliant green dye degradation, G. Sudha, E. Subramanian, International Conference on Frontier Areas in Chemical Technologies (FACTs-2016), Alagappa University, Karaikudi, Tamil Nadu, India, March 21–23, 2016. (Poster).
2. Synthesis, characterization and photocatalytic study of Co–Ce oxide/zeolite-NaX with methylene blue dye degradation, G. Sudha, E. Subramanian, International Conference on Recent Advances in Materials and Chemical Sciences (ICRAMCS-2015), Gandhigram Rural Institute (Deemed University), Gandhigram, India, December 14–15, 2015. (Oral).
3. Synthesis, characterization and photocatalytic study of cobalt oxide/zeolite-NaX with methylene blue dye degradation, G. Sudha, E. Subramanian, National Conference on Chemistry for Sustainable Energy, Clean Environment and Health (CEEH-2015), Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India, January 21–22, 2015. (Oral).
4. Synthesis, characterization and photocatalytic study of iron oxide/zeolite-NaX with methylene blue dye degradation, G. Sudha, E. Subramanian, International Conference on Emerging Environmental & Advanced Oxidation Technologies for Energy, Environment and Sustainability (EEAOTEES-2014), Anna University, Chennai, India, September 29–30, 2014. (Oral).
5. Constructive role of nano cobalt–cerium mixed metal oxide loading in stabilizing and converting coal fly ash derived zeolite into a better photocatalyst, G. Sudha, E. Subramanian, International Conference on Biologically Active Molecules (ICBAM'25), Saraswathi Narayanan College, Madurai, India, March 7, 2025. (Poster).
6. Synthesis, characterization and photocatalytic study of CuO–fly ash nanocomposite as green photocatalyst, G. Sudha, M. Pravin Raja, International Conference on Biologically Active

Molecules (ICBAM'25), Saraswathi Narayanan College, Madurai, India, March 7, 2025. (Poster).

7. Visible-light photocatalytic degradation of methylene blue over CeO₂-loaded Zeo-NaX derived from coal fly ash, G. Sudha, E. Subramanian, International Conference on Innovations in Science, Technology, Management and Public Health (ICISTMPH-2025), Yadava College, Madurai, India, December 26–29, 2025. (Oral).

Participation in Conferences / Workshops

1. International Conference on Recent Advances in Materials Research and its Applications (ICRAMRIA-2015), St. Xavier's College, Tirunelveli, India, December 16, 2015.
2. Academy Lecture Workshop on Recent Advances in Chemistry (RAC-2016), PG & Research Department of Chemistry, Sri Paramakalyani College, Alwarkurichi, February 26, 2016.
3. Seventh Science Conclave, Indian Institute of Information Technology, Allahabad, India, December 8–12, 2014.
4. Polymer Conference of Young Researchers (PCYR-14), CSIR-National Institute for Interdisciplinary Science and Technology, Thiruvananthapuram, India, October 18, 2014.
5. Workshop on Advanced Oxidation Techniques – Skill Training and Demonstration (AOT-2014), Anna University, Chennai, India, October 1, 2014.
6. Workshop on “Tune and Prune Your Research – Material Characterization Techniques”, Sree Chitra Tirunal Institute for Medical Sciences & Technology, Thiruvananthapuram, India, August 21–22, 2014.
7. National Workshop on Superionic Conductors and Its Applications to Battery, Fuel Cell and Supercapacitors (NSICA-2022).
8. International Conference on Sustainable Nano and AI Linked Innovations for Next-Gen Healthcare (SNAIL'26).

Academic and Professional Memberships

- Voluntary Director, Science Club, Yadava College, Madurai.
- Member, Human Rights Club, Yadava College, Madurai.
- Chairperson, International Conference on Innovations in Science, Technology, Management and Public Health (ICISTMPH-2025), Yadava College, Madurai.

Awards and Achievements

- First prize for poster presentation at the International Conference on Biologically Active Molecules (ICBAM-25).
- Selected as merit research scholar at Seventh Science Conclave, Indian Institute of Information Technology, Allahabad, India, December 8–12, 2014.
- Served as NSS volunteer at school and college levels (one special camp).

Instrumentation Skills

- UV/Visible spectrophotometer.
- FT-IR spectrophotometer.
- Powder X-ray diffraction.
- Diffuse reflectance spectroscopy.
- Liquid chromatography–mass spectrometry (LC–MS).

Declaration

I hereby declare that the above particulars are true to the best of my knowledge and belief.

Place: Madurai

Date:

(Signature)

G. Sudha

