## **PROFILE**

### **G.SUDHA**

W/o S.Muthukumar, 228/4, Pillayar kovil street Alkondarkulam, Sankarankovil (T.K) ,Tenkasi District) Tamil Nadu, Pin.627862.India

**E-Mail:** sudhachem84@gmail.com

Mobile No: +91-9677959578,9787697991



### **ACADEMIC CHRONICLE**

**Ph.D**: 2012 – 2017 (organic Chemistry)

Institution & University: Department of Chemistry, Manonmaniam Sundaranar

University, Tirunelveli.

**M.Phil**: 2009 – 2010 (General Chemistry)

Institution & University: School of Chemistry, University of Madras, Chennai.

Aggregate: **78.00%**, First class with distinction

M.Sc: 2006 -2008 (General Chemistry)

Institution & University: School of chemistry, Madurai Kamaraj University, Madurai.

Aggregate: 65% First class

**B.Sc**: 2003 -2006 (General Chemistry)

Institution & University: Sri Parasakthi College for women, Monomaniam Sundaranar

University, Tirunelveli. Aggregate: **73%**, First class

HSC: 2004 -2005 (Tamil, English, Maths, Chemistry, Physics, Biology)

Institution & University: Govt. Girls Higher Secondary School, Kadayanallur.

Aggregate: 81%, First class with distinction

SSLC: 2002 -2003 (Tamil, English, Maths, Science, Social Science)

Institution & University: Govt. Girls Higher Secondary School, Kadayanallur.

Aggregate: 81%, First class with distinction

#### RESEARCH AND PROJECT DETAILS

**Ph.D:** In the Field of organic Chemistry

Topic of the Research: "PHOTOCATALYST IMMOBILIZED FLY ASH DERIVATIVES FOR DEGRDATION OF TOXIC ORGANIC COMPOUNDS" under the supervision of **Dr. E. Subramanian**, Professor & Head, Department of Chemistry, Manonmaniam Sundaranar University, Tirunelveli.

**M.Phil Project:** "POLYAMIDOAMINE DENDRIMER MEDIATED SOLUBILITY STUDY OF NIMESULIDE-EFFECT OF pH AND COMPARISON WITH SURFACTANTS." under the guidance of. **Dr. E. Murugan,** Professor, School of Chemistry, University of Madras, Chennai.

**M.Sc Project:** "SYNTHESIS OF FLAVANOID AND ISO-FLAVANOID COMPOUNDS." under the guidance of **Dr. S. Gandhidasan**, Professor, School of Chemistry, Madurai Kamaraj University, Madurai.

### LIST OF PUBLICATION

### Research papers published 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, Int. Res. J. Nat. Appl. Sci. 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. J. Adv. Chem. Sci. 1(3) (2015) 117-120.
- 3. **G. Sudha,** E. Subramanian, Influence of pollutant ionic charge on their photodegradation by fly ash derived CeO<sub>2</sub>/Zeolite-NaX catalyst. J. Adv. Chem. Sci. 2(1) (2016) 212-214.

### Research papers under communication/preparation

- 4. **G. Sudha,** E. Subramanian, C. Murugan, Constructive role of nano Cobalt-Cerium mixed metal oxide loading in stabilizing and converting coal fly ash derived zeolite into a better photocatalyst. (Communicated to Journal of Materials Research and Technology).
- 5. **G. Sudha**, E. Subramanian, Synthesis, characterization and photocatalytic study of cobalt oxide/Zeo-NaX catalyst with methylene blue dye degradation (to be communicated).

# Research papers published in conferences

- 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).

### LIST OF SEMINARS/CONFERENCES/WORKSHOP

### Research papers presented at National & International 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)

### Participation in Conference/Workshop

- 1. International Conference on recent advances in materials research and its applications (ICRAMRIA-2015), St. Xavier's College, Tirunelveli, India, December 16, 2015.
- Academy Lecture Workshop on Recent Advances in Chemistry (RAC)- 2016, PG
   Research Department of Chemistry, Sri Paramakalyani College, Alwarkuchi, February
   26, 2016.
- 3. Seventh Science Conclave, Indian Institute of Information Technology, Allahabad, India, December 8-12, 2014.
- 4. *Polymer Conference of Young Researchers* (PCYR14), CSIR-National Institute for Inter-disciplinary Science and Technology, Thiruvananthapuram, India, October 18, 2014.
- 5. Workshop on Advance Oxidation Techniques–Skill Training and Demonstration (AOT-2014), Anna University, Chennai, India, October 1, 2014.
- 6. Workshop on Tune and Prune Your Research Materiel Characterization Techniques, Sree Chitra Tirunal Institute for Medical Sciences & Technology, Thiruvananthapuram, India, August 21-22, 2014.

#### ACADEMIC AWARDS/ ACHIEVEMENTS AND PARTICIPATIONS

- Selected merit research scholar in *Seventh Science Conclave*, Indian Institute of Information Technology, Allahabad, India, December 8-12, 2014.
- Serviced as *NSS volunteer* in school and college levels (one Special Camp)

### **Instruments Handled**

# Extensively handled and used the following techniques

UV/Visible Spectrophotometer
FT-IR Spectrophotometer
Powder X-ray diffraction
Diffuse reflectance spectroscopy
Liquid Chromatography-Mass Spectrometry