Dr. J.Saranya M.Sc., M.Phil., Ph.D
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ABOUT MYSELF

Dr. J. Saranya is an associate professor at the Department of Chemistry, Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, India. She has more than 8 years of teaching and research experience. Her research interest lies in the area of corrosion science, energy storage devices and organometallic chemistry. She has 25 research papers in SCI and SCOPUS indexed journals. She has attended various conferences, seminars and presented more than 20 papers at national and international levels. Reviewer for the journals African Journal of Microbiology and Materials today Proceedings.

ACADEMIC EDUCATION

- **B.Sc (Applied Sciences)** from Anna University, Coimbatore (2002 - 2005)
- **M.Sc (Applied Chemistry)** from Anna University, Coimbatore (2005 - 2007)
- **M.Phil (Chemistry)** with specialization in Physico–Organic Chemistry from Bharathiar University, Coimbatore (Full time: 2007 - 2008)
- **Ph.D (Chemistry)** with specialization in Physico–Organic Chemistry from Bharathiar University, Coimbatore (Full time: 2013 - 2016)

PROFESSIONAL EXPERIENCE

- **Dec 2016 – till date:** Associate Professor, Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Telangana
- **Jul 2016 – Dec 2016:** Assistant Professor, CMR Institute of Technology, Hyderabad, Telangana
- **Aug 2011 – Jan 2012:** Assistant Professor, St.Peter's Engineering College, Hyderabad, Telangana
- **Jan 2011 – May 2011**: Assistant Professor, Professional Group of Institutions, TamilNadu
- **June 2008 – Jan 2011:** Lecturer, Maharaja Prithvi Engineering College, Avinashi, TamilNadu

ADMINISTRATIVE EXPERIENCE

- BOS Chairman of the Department of Chemistry at GRIET from April 2017 to May 2018
- Subject Coordinator, CMRIT (Jul 2016- Dec 2016)
- Internal Exam cell I/C, MPEC, Tamil Nadu (2008-2011)

COURSES TAUGHT

- Engineering Chemistry
- Environmental Science
- Applied Chemistry

- Engineering Chemistry Laboratory

COMMITTEE WORK

- Moodle coordinator, GRIET, Hyderabad (2019-20)
- Member (Discipline Committee) GRIET, Hyderabad (2016-2017)
- Cultural committee, GRIET, Hyderabad (2017-18)

PUBLICATIONS

International

1. A.Arun, K.Ramya Sree, Ram Subbiah, J.Saranya, N.Sateesh, Wear on Thermal &Plasma Spray Coated Al-2014 Alloy under Dry Sliding Conditions, *International Journal of Engineering and Advanced Technology (IJEAT)*, 9(1) 2019 (SCOPUS Indexed) DOI: 10.35940/ijeat.A9572.109119

2. K.Lavanya, J.Saranya, S.Chitra, "Recent Reviews on Quinoline derivative as corrosion inhibitors"- *Corrosion Reviews.* DOI: https://doi.org/10.1515/corrrev-2017-0129 (SCIE & SCOPUS Indexed) IF= 2.528

3. Nirmala Devi Gowraraju, Saranya Jagadeesan, Subramanian Chitra "Synthesis and Characterization of Dextrin based polymer electrolytes for potential applications in energy storage devices"- *Ionics. DOI 10.1007/s11581-017-2135-5Accepted on 28.04.2017 & Article in Press* (SCI & SCOPUS Indexed) IF= 2.347

4. Nirmala Devi Gowraraju, Saranya Jagadeesan, Subramanian Chitra, Polyamidoaminoepichlorohydrin resin a novel synthetic anti-corrosive water soluble polymer for mild steel, Progress in Organic Coatings, 109 (2017) 117-125. (SCI & SCOPUS Indexed) IF = 2.995

5. S. Jone Kirubavathy, J. Saranya, A. Bhuvanesh, R. Karvembu, R. Velmurugan, S. Chitra Synthesis, Characterisation and biological evaluation of Ru(III) mercapto-pyrimidine Schiff base complexes, *Applied Organometallic Chemistry*, DOI: 10.1002/aoc.3760, 27 March 2017 (SCI & SCOPUS Indexed) IF = 3.581

6. J. Saranya, P. Sounthari, K. Parameswari, S. Chitra, Synergistic effect of halides and surfactants on the corrosion inhibition of thiazolo thiadiazole derivative for mild steel in acid medium, *Moroccan Journal of Chemistry*, 5 (1), (2017) 164-176. (SCOPUS & ESCI Indexed) IF = 0.552

7. Nirmala Devi Gowraraju, Saranya Jagadeesan, Lukman O. Olasunkanmi, Eno E. Ebenso, Chitra Subramanian, Adsorption characteristics of Iota-carrageenan and Inulin biopolymers as potential corrosion inhibitors at mild steel/sulphuric acid interface, *Journal of Molecular Liquids*, 232 (2017) 9-19 (SCI&SCOPUS Indexed) IF = 4.54

8. J. Saranya, P. Sounthari, K. Parameswari, S. Chitra, Comparison of the inhibition property of Quinoxaline derivative on mild steel in 1.5M H_2SO_4, 3M HCl and 1M H_3PO_4, *Journal of Materials and Environmental Science* 8(1) (2017) 370-377(SCOPUS Indexed) IF = 1.22

9. Nagarajan Anusuya, Jagadeesan Saranya, Palanisamy Sounthari, Abdelkader Zarrouk, Subramanian Chitra, Corrosion inhibition and adsorption behaviour of some bis-pyrimidine derivatives on mild steel in acidic medium, *Journal of Molecular Liquids*, 225 (2017) 406–417 (SCI & SCOPUS Indexed) IF = 4.54

10. P. Sounthari, A. Kiruthika, J. Saranya, K. Parameswari, S. Chitra, Corrosion inhibition property of polyester–groundnut shell biodegradable composite, *Ecotoxicology and environmental safety*, 134 (2016) 319–326 (SCI & SCOPUS Indexed) IF = 3.974

11. Jagadeesan Saranya, Murugaih Sowmiya, Palanisamy Sounthari , Kittusamy Senthil Kumar, Kandhaswwamy Parameswari, Subramanian Chitra, N-heterocycles as corrosion inhibitors for mild steel in acid medium, *Journal of Molecular Liquids*, 216 (2016) 42–52. (SCI & SCOPUS Indexed) IF = 4.54

12. Jagadeesan Saranya, Palanisamy Sounthari , Kandhaswwamy Parameswari, Subramanian Chitra, Acenaphtho[1,2-b] quinoxaline and Acenaphtho[1,2-b]pyrazine as corrosion inhibitors for mild steel in acid medium, *Measurement*, 77 (2016) 175–186. (SCI & SCOPUS Indexed) IF = 2.218

13. J. Saranya, P. Sounthari, K. Parameswari, S. Chitra, Adsorption and density functional theory on corrosion of mild steel by a quinoxaline derivative, *Der Pharma Chemica*, 7(8) (2015) 187-196. (SCOPUS Indexed) IF = 0.529

14. J. Saranya, P. Sounthari, K. Parameswari, S. Chitra, The inhibiting effect of some Quinoxaline derivative towards mild steel corrosion in acid media: Chemical, Electrochemical and Theoretical studies, *Journal of Materials and Environmental Science*, 6 (2) (2015) 425-444. (SCOPUS Indexed) IF = 1.21

15. J. Saranya, G.Saranya, S. Yuvarani, P. Sounthari K. Parameswari, S. Chitra, Experimental and Quantum Chemical Studies on the Inhibition Potential of Some Quinoxaline Derivatives for Mild Steel in Acid Media, *Oriental Journal of Chemistry*, 30(4) (2014) 1719-1736. (SCOPUS & ESCI Indexed) IF = 0.578

16. Valarmathi Eswaramoorthi, Saranya Jagadeesan, Sounthari Palanisamy, Parameswari Kandhasamy & Subramanian Chitra, Soya bean oil based polyurethanes for corrosion inhibition of mild steel in acid medium, Journal of Adhesion Science and Technology, 2016, 30 (5) 468-493 (SCI & SCOPUS Indexed) IF=0.961

17. P. Sounthari, J. Saranya, K. Parameswari, S. Chitra, Satin leaf (Chrysophyllum oliviforme) Extract Mediated Green Synthesis of Silver Nanoparticles: Antioxidant and Anticancer

Activities, *Journal of Pharmaceuticals Science and Research*, 7(6) (2015) 266-273. (SCOPUS Indexed) IF = 2.54

18. G.Nirmala Devi, C.Nusrath Unnisa, J.Saranya, S.Chitra, "Electrochemical Studies of Reinforced Bars in Simulated pore solution using Natural Polymers" *Journal of Materials and Environmental Science.* Accepted on 18.11.2017 & Article in press. (SCOPUS Indexed) IF = 1.22

19. N.Anusuya, P. Sounthari J. Saranya, K. Parameswari, S. Chitra, Corrosion inhibition effect of hydroxy pyrazoline derivatives on mild steel in sulphuric acid solution together with Quantum chemical studies, *Journal of Materials and Environmental science*, 6 (6) (2015) 1606-1623. (SCOPUS Indexed) IF = 1.21

20. N.Anusuya, P. Sounthari J. Saranya, K. Parameswari, S. Chitra, Quantum chemical study on the corrosion inhibition property of some heterocyclic azole derivatives, *Oriental Journal of Chemistry*, 31 (3) (2015) 1741-1750. (SCOPUS & ESCI Indexed) IF = 0.578

21. P. Sounthari, A. Kiruthika, T. Kavitha, J. Saranya, H. Yuvaraj, K. Parameswari, S. Chitra, Polyester-Tobacco Composite: A Novel Anticorrosion Material for Mild Steel in Acid Medium, *Materials Focus*, 3 (6) (2015) 455-464.

22. N.Anusuya, P. Sounthari J. Saranya, K. Parameswari, S. Chitra, Isoxaline derivatives as corrosion inhibitors for mild steel in acid media, *International Journal of Applied and Natural Sciences*, 3(4) (2014) 75-92. IF = 1.66

23. P. Sounthari, A. Kiruthika, J. Saranya, K. Parameswari, S. Chitra, Branched Polymers and their Application in Corrosion Inhibition for Mild Steel in 1M H_2SO_4 Medium, *Oriental Journal of Chemistry*, 30(4) (2014) 1971-1987. (SCOPUS & ESCI Indexed) IF = 0.578

24. P. Sounthari, A. Kiruthika, J. Saranya, K. Parameswari, S. Chitra, 1,3,4-Oxadiazole Dimers: New and Effective corrosion inhibitors for mild steel in sulphuric acid solution, *Journal of Advances in Chemistry*, 10 (1) (2014) 2126 – 2145. IF = 2.115

National

1. S. Chitra, K.Parameswari, A.Selvaraju, J. Saranya, The Inhibition of Chalcone derivatives on the corrosion of mild steel in acid medium, *Journal of Electrochemical Society of India*, 58 (1/2) (2009).

CONFERENCE PROCEEDINGS

International

1. J. Saranya, P. Sounthari, S. Chitra, "Corrosion inhibition and Adsorption behaviour of Thiadiazole derivatives on mild steel in acid medium: Experimental and Theoretical studies", Corrosion: Fundamental and Practical Aspects with Mitigation Strategies, Proceedings of the International Corrosion Prevention Symposium for Research Scholars (CORSYM 2015)

NACE Publications.(ISBN: 978-81-933428-0-0)

2. J.Saranya, S.Chitra, Quinoxaline derivatives for rebar corrosion in simulated pore solution, Corrosion in RCC structures (RCC), Proceedings of the International Conference on Corrosion Control (CORCON2017) NACE Publications.

3. K.Lavanya, J.Saranya, Quinoline as corrosion inhibitors for mild steel: An Overview, Corrosion Monitoring and Testing, Proceedings of the International Conference on Corrosion Control (CORCON2017) NACE Publications.

National

1. J.Saranya, K.Lavanya, "Polyurethane ZnO Nano Composite as Protective Coating on Steel for Rebar Corrosion", Proceedings of the Second National Conference on Materials for Specific Applications (MFSA-2018). (ISBN: 978-81-928677-2-4)

CONFERENCES/SEMINARS

International

1. Presented a paper entitled "Corrosion Inhibition potential of quinoxaline derivatives for mild steel in 1M H_2SO_4" in the Three day International conference on Chemistry: Frontiers and challenges conducted by Department of Chemistry, PSGR Krishnammal College for Women, Coimbatore during 05.02.2014 and 07.02.2014.

2. Presented a paper in the Three day International Conference on Electrochemical Science and Technology (ICONEST-2014) entitled "Adsorption and Density Functional Theory on corrosion of mild steel by (3E)-3-{[4-(phenylsulfonyl)]imino}-3,4-dihydroauinoxalin-2(1H)-one" organized by Indian Institute of Science during 07.08.2014 and 09.08.2014.

3. Presented a paper in the Three day International Conference on Green Technology for Environmental Pollution Prevention and Control (ICGTEPC-2014) entitled "Acenaphthoquinone[1,2-b] quinoxaline and Acenaphtho[1,2-b]pyrazine : Efficient Corrosion Inhibitor for Mild Steel in Acid Medium" organized by National Institute of Technology, Tiruchirappalli during 27.09.2014 and 29.09.2014.

4. Presented and received a BEST PRESENTATION AWARD for a paper entitled "Corrosion inhibition and adsorption behaviour of Thiadiazole derivatives on Mild Steel in acid medium: Experimental and Theoretical Studies" in the Two day International Conference on International Corrosion Prevention Symposium for Research Scholars (CORSYM-2015) at Indian Institute of Technology Madras during 31.07.2015 and 01.08.2015.

5. Presented a paper entitled "Thiazolo thiadiazole derivatives as corrosion inhibitors for mild steel in acid medium: Experimental and Theoretical Studies" in the Three Day International Conference on Trend Setting Innovations in Chemical Sciences and Technology-Nature Inspired Chemistry and Engineering (TSCST NICE) during 4^{th}-6^{th} October, 2016 in JNTUH,

Hyderabad.

National

1. Presented a paper in the National Seminar on "Frontiers Areas in Chemistry" entitled "Inhibitive properties and Electrochemical characterization of 1,4-dihydroquinoxaline-2,3-dione derivative on mild steel in acid medium" conducted by The American College, Madurai during 27.01.2014 and 28.01.2014.

2. Presented a paper in the National Convention of Electrochemists 18 (NCE-18) entitled "Pyran and Cyanopyran derivatives: A Pharmacological product as corrosion inhibitor for mild steel" organized by School of Chemistry, Madurai Kamaraj University, Madurai on 23.07.2014 & 24.07.2014.

3. Presented a paper and won FIRST prize entitled "Experimental and Quantum chemical studies on corrosion inhibition performance of quinoxaline derivatives for mild steel in 1M H_2SO_4" in the One day National Seminar on Recent Advances in Chemistry organized by Department of Chemistry, Arulmigu Palaniandavar College of Arts and Culture held on 11.08.2014.

4. Presented a paper entitled "Experimental and Quantum Chemical Studies on mild steel corrosion by 2, 3-di(furan-2-yl)quinoxaline and 2,3-di(furan-2-yl)pyrazine" in the 17th National Congress on Corrosion Control organized by CSIR CECRI, Karaikudi on 21.08.14 to 23.08.14.

5. Presented a paper and won THIRD prize entitled "Experimental and Theoretical study for corrosion inhibition of mild steel in 1M H_2SO_4 by some new thiadiazole-2-amine derivatives" in Two day National Seminar on Recent Advances in Nanotechnology, Chemistry and Environmental Research (RANCER 2014) conducted by Kongu Engineering College, Perundurai during 11.12.2014 to 12.12.2014.

6. Presented and won SECOND prize for a paper entitled "Inhibitive, adsorption and theoretical studies on quinoxaline and pyrazine derivative as corrosion inhibitors for mild steel in acid medium" in the One day National Seminar on The Widening Horizons of Chemistry organized by Department of Chemistry, Arulmigu Palaniandavar Arts College for Women, Palani on 05.03.2015.

7. Presented a paper entitled "Corrosion inhibition properties of pyran and cyanopyran derivatives: Experimental and quantum chemical studies" in the Two day National Conference on Recent Advances in Chemical Sciences [RACS-2015] organized by Department of Chemistry, Gandhigram Rural Institute-Deemed University, Dindigul held on 05.03.2015 and 06.03.2015.

8. Presented a paper entitled "Quantum chemical and electrochemical studies on the corrosion inhibition of mild steel in 1M H_2SO_4 using thiadiazole derivatives" in the Corrosion Awareness Day (CAD 15) organized by National Corrosion Council of India in collaboration with CSIR-Central Electrochemical Research Institute, Karaikudi and The Gandhigram Rural Institute-Deemed University, Gandhigram at The Gandhigram Rural Institute-Deemed University, Gandhigram on 17.04.2015.

9. Presented a paper entitled "Thermal and electrochemical studies on the corrosion inhibition of polyesters for mild steel in 1M H_2SO_4 medium" in the Corrosion Awareness Day (CAD 15) organized by National Corrosion Council of India in collaboration with CSIR-Central Electrochemical Research Institute, Karaikudi and The Gandhigram Rural Institute-Deemed University, Gandhigram at The Gandhigram Rural Institute-Deemed University, Gandhigram on 17.04.2015.

10. Presented a paper in the 10^{th} Mid-Year Chemical Research Society of India (CRSI), Symposium in Chemistry jointly organized by National Institute of Technology and Bharathidasan University, Tiruchirapalli entitled "Influence of quinoxaline and pyrazine derivative on the corrosion inhibition of mild steel in acid solution: Adsorption, electrochemical, surface and theoretical Studies" held at National Institute of Technology, Tiruchirapalli during 23.07.2015 to 25.07.2017.

11. Presented a paper in the Two day National Conference on Approach of Green Chemistry in Pharma: Chemical and Material Science Sectors – A Perspective entitled "The Inhibitory action of Cyanopyran derivative for Acid and Rebar Corrosion in Simulated Pore solution" held at PSG College of Pharmacy, Coimbatore during 30.10.2015 and 31.10.2015.

12. Presented a paper in the National Convention of Electrochemists 19 (NCE-19) entitled "Comparison of the inhibition property of Thiazolo Thiadiazole Derivative on Mild Steel in 1.5M H_2SO_4, 3M HCl and 1M H_3PO_4" held at National Institute of Technology, Tiruchirapalli during 28.03.2016 and 29.03.2016.

WORKSHOP & FDP

1. Participated in the One day workshop on "Chromatography and Spectroscopic techniques" organized by Department of chemistry, School of Science and Humanities, Karunya University, Coimbatore on 10.10.2013.

2. Participated in the Two day workshop on "Advanced Instrumental Methods for Engineering Materials (AIMEM-2014)" organized by Department of Physical sciences at Bannari Amman Institute of Technology Sathyamangalam during 18.10.2014 and 19.10.2014.

3. Participated in the One day workshop on "Advanced Functional & Nano Materials" organized by the Centre of Excellence in Advanced Materials & Green Technologies (CoE-AMGT) in

association with the Indian Institute of Chemical Engineers-Coimbatore chapter at Amirtha Viswa Vidyapeetham, Coimbatore on 05.02.2015.

4. Participated in the Two day National seminar on “Technical Teachers Quality Improvement (TTQI - 2009)” conducted by Consortium of Self-Financing Professional, Arts & Science Colleges in Tamil Nadu during 30.05.2009 and 31.05.2009.

5. Participated in the One week Faculty development program on “Faculty Orientation Program” conducted by GRIET, Hyderabad from 27.02.17 to 06.03.17

6. Participated in the Five day workshop on “Teacher’s Orientation Program on Universal Human values” conducted by AICTE in JNTUH, Hyderabad from 27.06.17 to 01.07.2017.

7. Participated in “FDP101x: Foundation Program in ICT for Education” conducted by IIT BombayX from 03.08.2017 to 13.09.2017

8. Participated in “FDP201x: Pedagogy for Online and Blended Teaching-Learning Process” by IIT BombayX:14.09.2017 to 16.11.2017

MEMBERSHIP

- Fellow Member, IARA