STAFF PROFILE

1) Name : Dr. M. SARAVANA KUMAR

2) Designation: Assistant Professor

3) Department: Chemistry

4) Qualifications:

Academic: M.Sc., Ph.D

Additional:

5) Experience (in years): Teaching: 10 years Research: 15 years

6) Area of Specialization: Synthetic organic chemistry, Coordination chemistry, Chemosensors.

7) Contact: E-mail: saraniisc@gmail.com Mobile Number: 9840819843

8) Grants Received (Conference/Workshop/Seminar/any other): Nil

Event Title	Agency	Fund Received	Date

9) Project Completed: Nil

Project Title	Agency	Fund Received	Duration

10) Project ongoing: Nil

Project Title	Agency	Fund Received	Duration

11) Research Guidance:

Programme	No. of Scholars	
	Completed	Pursuing
Ph. D.		2
M. Phil.	6	

12) Research Publications:

	International	National
Total Number of Publications	14	4

List of International Publications: 14

- 1. 2-Acetylpyridine-*N*(4)-Morpholine Thiosemicarbazone (HAcpMTSc) as a Corrosion Inhibitor on Mild Steel in HCl, SLA Kumar, M Gopiraman, MS Kumar, A Sreekanth, Industrial & engineering chemistry research 50 (13), (2011) ,7824-7832
- 2. Chemoselective reduction of azides catalyzed by molybdenum xanthate by using phenylsilane as the hydride source, MR Maddani, SK Moorthy, KR Prabhu, Tetrahedron 66 (1),(2010),329-333



- 3. Anticorrosion potential of 4-amino-3-methyl-1, 2, 4-triazole-5-thione derivatives (SAMTT and DBAMTT) on mild steel in hydrochloric acid solution, MS Kumar, SLA Kumar, A Sreekanth, Industrial & engineering chemistry research 51 (15), (2012), 5408-5418
- 4. Novel heterocyclic thiosemicarbazones derivatives as colorimetric and "turn on" fluorescent sensors for fluoride anion sensing employing hydrogen bonding, SLA Kumar, MS Kumar, PB Sreeja, A Sreekanth, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 113, (2013)123-129
- 5. Bisthiocarbohydrazones as colorimetric and "turn on" fluorescent chemosensors for selective recognition of fluoride, SL Ashok Kumar, R Tamilarasan, MS Kumar, A Sreekanth, Industrial & engineering chemistry research 50 (22), (2011), 12379-12383
- 6. 1, 5-Bis (2-hydroxyacetophenone) thiocarbohydrazone: A novel colorimetric and fluorescent dual-mode chemosensor for the recognition of fluoride, SLA Kumar, MS Kumar, RP John, PT Muthiah, A Sreekanth, Materials Science and Engineering: C 33 (5),(2013),2519-2525
- 7. 4-Salicylideneamino-3-methyl-1, 2, 4-triazole-5-thione as a sensor for aniline recognition, MS Kumar, R Tamilarasan, A Sreekanth, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy 79 (2), (2011), 370-375.
- 8. Spectroscopic and TDDFT investigation on highly selective fluorogenic chemosensor and construction of molecular logic gates, SM Basheer, SLA Kumar, MS Kumar, A Sreekanth, Materials Science and Engineering: C 72, (2017) 667-675
- 9. An efficient triazole-based fluorescent "turn-on" receptor for naked-eye recognition of F—and AcO—: UV—visible, fluorescence and 1H NMR studies, MS Kumar, SLA Kumar, A Sreekanth, Materials Science and Engineering: C 33 (6), (2013), 3346-3352
- 10. Highly selective fluorogenic anion chemosensors: naked-eye detection of F- and AcOions in natural water using a test strip, MS Kumar, SLA Kumar, A Sreekanth, Analytical Methods 5 (22), (2013),6401-6410
- 11. Corrosion inhibition studies of ecbolium viride extracts on mild steel in HCl, SLA Kumar, P Iniyavan, MS Kumar, A Sreekanth, J. Mater. Environ. Sci 3,(2012),461-468
- 12. Synthesis, Spectral, and Structural Characterization of Bisthiocarbohydrazone Derivatives, SLA Kumar, MS Kumar, SJ Jenniefer, PT Muthiah, A Sreekanth, Phosphorus, Sulfur, and Silicon and the Related Elements 188 (8), (2013)1110-1118
- 13. Investigation on DNA/Protein interaction of thiosemicarbazone based octahedral nickel (II) and iron (III) complexes, SM Basheer, P Rasin, SLA Kumar, MS Kumar, A Sreekanth, Journal of Molecular Structure 1260, (2022)132913
- 14. Reinforced corrosion resistance of mild steel in acidic medium by bis (2-acetylpyridine) dithiosemicarbazone (DTSc): electrochemical, surface and spectroscopic studies, SM Basheer, SLA Kumar, N Sarathi, P Rasin, MS Kumar, M Muralisankar, Journal of Solid State Electrochemistry, 27, (2023), 2323-2335

List of National Publications: 4

- 1. Bose, R., M.S. Kumar, A.Manivel and S.C. Mohan. Chemical constituents of Sauropusandrogynus and evaluation of its antioxidant activity. Res. J. Phytochem., 12(2018)7-13.
- 2. Hemalatha, O.K., A.Manivel, M.S. Kumar and S.C. Mohan, Synthesis and characterization of Sn/ZnO nanoparticles for removal of organic dye and heavy metal. Int. J. Biol. Chem., 12 (2018) 1-7.
- 3. Kumar, P.M.R., M.S.Kumar, A. Manivel and S.C. Mohan, Structural characterization and antidiabetic activity of polysaccharides from Agaricus bisporus mushroom. Res. J. Phytochem., 12 (2018) 14-20.

4. Vathsala Devi, G., A. Manivel, M.S. Kumar and S.C. Mohan, Biotransformation of insoluble lead compound into the non-toxic form by soil fungus. Eur. J. Biomed. Pharmaceut. Sci., 5 (2018) 658-662.

13) Chapters in Books: --- Nil

14) Other Publications (Proceedings):

15) Books Published: Nil

16) Presentation in Seminar / Conference:

International: 5

1. Synthesis and Characterization of a Functionalized Phenolic Resin for Electrochemical Detection of Trace Metals. M. Saravana Kumar, A. Sreekanth, Poster Presented at International Conference on Functional Polymers, NIT Calicut, January 28-30, 2011.

2. 4-Salicylideneamino-3-methyl-1,2,4-triazole-5-thione and its coordination behavior towards toxic aromatic amines. M. Saravana Kumar, S. L. Ashok Kumar, A. Sreekanth, Poster Presented at ACCC3 Conference, India Habitat Centre, New Delhi, India, Organised by Department of Chemistry, IIT Kanpur, October 17-21, 2011.

3. Triazole Schiff base as a Versatile Component for Acetate Sensor and as a Corrosion Inhibitor for Mild Steel in Hydrochloric acid. M. Saravana Kumar, A. Sreekanth, Poster Presented at ICRAM conference, VIT University, Vellore, February 20-22, 2012.

4. Spectroscopic and advanced surface characterization studies on inhibition in mild steel involving Schiff's bases. M. Saravana Kumar, A. Sreekanth, Poster Presented at 26th International Conference on Surface Modification Technologies 2012. Ecole Centrale de Lyon, Ecully, France, June 20–22, 2012.

5. Synthesis, structural characterisation and biological activity of 2-acetylpyrrole-N(4)cyclohexylthiosemicarbazone, Poster presented at International conference on Modern Trends in Chemistry (MTC-25) held at Vivekananda College, Tiruvedakam west. 23th February 2018.

National: Nil

17) Participation in Conference: Nil

19) Participation in Workshop: 1

 Participated in the "Science Academies' Lecture Workshop on Recent Trends in Advanced Material Science" during 01 - 02, September 2017, sponsored by Indian Academy of Sciences (IASc) Bangalore, Indian National Science Academy (INSA) New Delhi & The National Academy of Sciences (NASI) Allahabad, Govt. of India, organized by the Department of Physics, ArulmiguPalaniandavar College of Arts and Culture, Palani – 624 601.

20) Participation in Orientation Programme/ Induction Programme/ Short term Courses: 1

- 1. Participated in 28 days Orientation programme conducted by UGC Academic Staff College, Madurai Kamaraj University from 27.10.2015 to 23.11.2015
- 21) Participation in Faculty Development Programme: 6
- 1. Participated in the 21 days Refresher Course conducted by UGC Academic Staff College, Madurai Kamaraj University from 02.11.2016 to 22.11.2016.
- 2. Participated in 16 weeks ARPIT Programme in chemistry conducted by SWAYAM Sri Guru Tegh Bahadur Khalsa College, Delhi from 06.12.2018 to 30.03.2019
- 3. Participated in 1 week FDP organised by Guru Angad Dev Teaching Learning Centre, A Centre of MHRD under PMMMNMTT from 21.05.2020 to 26.05.2022.
- 4. Participated in 2 weeks FDP organised by Teaching Learning Centre, Ramanujan College, University of Delhi, 25.07.2020 to 10.08.2020.
- 5. Participated in 1 week FDP organised by Guru Angad Dev Teaching Learning Centre, A Centre of Ministry of Education under PMMMNMTT from 13.01.2022 to 19.01.2022.
- 6. Participated in the 14 days Refresher Course in Chemistry, conducted by Ramanujan College, University of Delhi from 30 June 2023 to 14 July, 2023

22) Conference/ Seminar/ Workshop Organized: 1

- 1. Organized an One Day International Seminar on Emerging Trends in Chemistry and Energy Science during 7 February 2020
- 23) Invited Speaker/ Session Chair Conference/ Seminar/ Workshop: 2
 - 1. Delivered an invited talk on "Sensing of Fluoride anion by Organic Molecules" in the short term course held in NIT, Tiruchirappalli, July 23-27, 2012.
 - 2. Delivered a lecture on "Green chemistry" at the Industrial conference meets, Cadila Pharmaceutical Ltd, Ahmadabad, January 2007.

- 24) Other Co-curricular / Administrative Responsibilities:
 - 1. Coordinator of Citizen Consumer club from 2013-2021
 - 2. Dean Industrial relationship for the academic year 2021-2022
- 25) Member in Board of Studies: -- Nil
- 26) Editorial/Review Board Member: -- Nil
- 27) Membership in Professional Bodies: -- Nil
- 28) Awards received: Nil
- 29) Consultancy: Nil
- 30) Patents: Nil
- 31) Any other information: Nil