

Dr. S. K. Suja



Designation : Associate Professor,
Lady Doak College, Madurai.

Qualification : M.Sc., M.Phil., M. Ed., D. I. S., Ph.D.

Official Address : Department of Chemistry,
Lady Doak College,
Madurai -2.

Residential Address : Plot. No. 2, SS Illam, Gayathri Nagar 2nd Street,
Thiruppalai, Madurai-14

Experience : 25 years

Subject Specialization : Biosensors, Electro-catalysis, Carbohydrate polymers,
MOFs, Supramolecular gels

General Expertise : Outcome-Based Education, NEP integrated TANSCHÉ Curriculum Design

Email id : suja@ldc.edu.in

Mobile Number : 9443781016

Research Guidance

- M. Phil – 8
- Ph. D - 4 (1- Awarded, 3- Ongoing)

Administrative Responsibilities

- Human Rights Unit- Convener (2014-2015)
- Prizes Committee – Convener (2015-2016 & 2016-2017)
- Curriculum Planning and Evaluation cell- Convener (2018-2019- till date)
- IQAC member 2018-2019 to till date
- NAAC Member (Criteria I – In-charge) 2018-2019 to till date
- Research and Development Cell Mentor – 2018-2019 to 2019-2020
- AQAR coordinator – 2023-2024

Membership in Professional bodies

- Life member in the Society for Biological Chemists.
- Life member in the Society for Advancement of Electrochemical Science and Technology
- Life member in Indian Society for Electroanalytical Chemistry
- Member of Board of Examiners
 - American College, Madurai,
 - Ayya Nadar Janaki Ammal College, Sivakasi,
 - Yadava College, Madurai.

Consultancy Services

- Willing to provide consultancy services for Research and Internship in the fields of Biosensors, Electro-catalysis, Carbohydrate polymers, MOFs, Supramolecular gels and Workshop on Outcome-Based Education & NEP integrated TANSCHC Curriculum Design

Recognized Reviewer for the Journals

- Journal of Hazardous Materials (**Elsevier**)
- Journal of Photochemistry and photobiology: Biology (**Elsevier**)
- RSC advances – **Royal Society for Chemistry**
- Carbohydrate polymers (**Elsevier**)
- Trends in Food Science and Technology (**Elsevier**)
- Journal of Nanostructure in Chemistry (**Springer**)
- Food Chemistry (**Elsevier**)

Awards Received

- C V Raman Prize 2022 – for outstanding Professional and Research achievements in Chemistry by Institute of Researchers, Kerala, India.

Funded Projects

DAE	- Rs. 10 lacs (as Co-Investigator)
UGC	- Rs. 1.85 lacs (as Principal Investigator)
DST – FIST	- Rs. 43 lacs (as Principal Investigator) - Ongoing

Invited Talk

- Seminar cum intercollegiate meet- Biovista – 2019, Department of Biochemistry, Government Arts College, Paramakudi
- Special meeting in Chemistry Association, Department of Chemistry, Walf Board College, Madurai.
- Chemistry Association Inauguration, Department of Chemistry, Parvathy's Arts and Science College, Dindigul.
- First international online conference on Blends, Composites, Bio-composites and Nanocomposites, Mahatma Gandhi University, Kerala, Siberian Federal University, Russia. Federal University, Brazil. Wroclaw University of Technology, Poland. and Technical University of Gdansk, Poland
- International Online Conference on Macromolecules, Mahatma Gandhi University, Kerala and Gdansk University of Technology, Poland.
- International Online Conference on Macromolecules, Mahatma Gandhi University, Kerala and Gdansk University of Technology, Poland
- Fifth International Online Conference on Reuse and Recycling of Materials (Polymers, Wood, Paper, Leather, Glass, Metals, Ceramics, Semi-conductors, Water etc) and their products, Mahatma Gandhi University, Kerala, Siberian Federal University, Russia. Federal University, Brazil. Wroclaw University of Technology, Poland. and Technical University of Gdansk, Poland
- Invited Talk to International Online Conference on Nano Materials (ICN 2021) Organized by Mahatma Gandhi University, Kottayam, Kerala, India, Wroclaw University of Technology, Wroclaw, Poland, Gdansk University of Technology, Poland and Wuhan University, China.
- Seminar cum intercollegiate meet- Biovista – 2022, Department of Biochemistry, Government Arts College, Paramakudi
- 'Awareness about Drug Abuse', Carrier Guidance cell, Parvathy's Arts and Science College, Dindigul.
- Faculty Development Programme on "Outcome-Based Education – An Unified Approach" organized by A.D.M. College for Women, Nagapattinam.

Chair Person

- International Online Conference on Macromolecules, Mahatma Gandhi University, Kerala and Gdansk University of Technology, Poland for the short invited talks on the title - **Hydrogels**
- International Online Congress on Membranes and Membrane Assisted Processes (ICMMAP2021) Organized by Mahatma Gandhi University, P.D Hills P.O, Kottayam Kerala, India & Wroclaw University of Technology Wroclaw, Poland- for the short invited talks on the title - **Membrane filtration**
- International Online Conference on Nano Materials (ICN 2021) Organized by Mahatma Gandhi University, Kottayam, Kerala, India, Wroclaw University of Technology, Wroclaw, Poland, Gdansk University of Technology, Poland and Wuhan University, China for the short invited talks on the titles - **Quantum dots and Removal of Toxic dyes**

Book Chapters Published

- **CNT –based Bio-nanocomposite as Electrochemical Sensors**, Advances in Nanostructured composites, (2019) CRC Press, Taylor & Francis Group
- **Tribology of Polymers, Polymer Composites, and Polymer Nanocomposites**, Tribology of Polymers, Polymer Composites, and Polymer Nanocomposites, 2022, Elsevier Publishers
- **Macromolecular Enzymes-Triggered Electrochemical Biosensing**, , Foundation and Growth of Macromolecular Science -Advances in Research for Sustainable Development, CRC Press, Taylor & Francis Group (2023)
- **Supramolecular Gel-Based Materials for Sensing Environmentally Sensitive Molecules**, Foundation and Growth of Macromolecular Science - Advances in Research for Sustainable Development CRC Press, Taylor & Francis Group (2023)

List of Publications (Recent)

1. S. Arockia Shyamala Paniyarasi, · S. K. Suja, · R. Nimma Elizabeth, Doping and Surface Modification Enhance the Applicability of Nanostructured Fullerene–MWCNT Hybrid

Draped $\text{LiNi}_{0.1}\text{Mg}_{0.1}\text{Co}_{0.8}\text{O}_2$ as High Efficient Cathode Material for Lithium-Ion Batteries, *Journal of Inorganic and Organometallic Polymers and Materials*, (2021)

2. G. Jayanthi Kalaivani, **S.K. Suja*** Cholesterol oxidase immobilized inulin based nanocomposite as the sensing material for cholesterol in biological and food samples, *Enzyme and Microbial Technology* 140 (2020) 109631.
3. G. Jayanthi Kalaivani, **S.K. Suja*** Nanomolar level sensing of glucose in food samples using glucose oxidase confined MWCNT-Inulin-TiO₂ bio-nanocomposite, *Food Chemistry* 298 (2019) 124981.
4. K. Yazhini, **S.K. Suja***, Synthesis and characterization of hetero-metal oxide nano-hybrid composite on pectin scaffold, *Applied Surface Science* 491 (2019) 195–205
5. G. Jayanthi Kalaivani, **S.K. Suja***, Enzyme-less sensing of the kidney dysfunction biomarker creatinine using an inulin based bio-nanocomposite, *New J. Chem.*, (2019), 43, 5914-5924.
6. K. Yazhini, **S.K. Suja***, G. Jayanthi Kalaivani, J. Bagyalaksmi, S. Pavalamalar, Non-enzymatic sensing of kidney dysfunction biomarker using pectin– MWCNT Nanocomposite, *Applied Surface Science* 449 (2018) 736–744
7. G. Jayanthi Kalaivani, **S.K. Suja*** Electroenzymatic sensing of urea using CP/MWCNT-inulin-TiO₂ bioelectrode, *Applied Surface Science* 449 (2018) 266–276
8. G. Jayanthi Kalaivani, **S.K. Suja**, TiO₂ (rutile) embedded inulin—A versatile bio-nanocomposite for photocatalytic degradation of methylene blue, *Carbohydrate Polymers*, Volume 143, 5 June 2016, Pages 51-60
9. E. Jackcina Stobel Christy, J. Jasmin Glory Kiruba, K. Suganya, S. Pavala Madhumitha **S.K. Suja**, G. Jayanthi Kalaivani “Extraction of pectin from fruit wastes- an effective method of municipal solid waste management”, *International journal of advanced research*, 2 (2014), 936-944. ISSN: 2320-5407. IF: 1.659.
10. **S.K. Suja**, G. Jayanthi Kalaivani, R. Lavanya “Drug-Drug interaction & DNA binding studies of Azathioprine – An Antileuketonic Drug”, *Research Journal of pharmaceutical , Biological & Chemical Sciences* 5 (2014), 176-186. ISSN: 0975-8585. IF: 0.35.
11. A. Shahira Banu, K. Yazhini, S. Mathiya, **S.K. Suja**, G. Jayanthi Kalaivani, Spectral and cyclic Voltammetric monitoring of removal of Crystal Violet using *Carica Papaya* Seeds, *Research Journal of pharmaceutical , Biological & Chemical Sciences* 5(2014), 214 – 230.

12. Mahalakshmi, K. Yazhini, S. Mathiya, G.Jayanthi Kalaivani, **S.K.Suja**, A Novel approach to investigate Adsorption of crystal violet from aqueous solutions using peels of *Annona squamosa*, Iranica Journal of energy and Environment 5(2014) 113-123.
13. A. Subramanian, S. Santhosh Kumar, **S. K. Suja**, M. Sudarshan, A. Chakraborty, Antioxidant and free radical scavenging activity of annular and seasonal ayurvedic medicinal plants *elephantopus scaber l.* And *biophytum sensitivum dc.*, International Journal of Pharmaceutical, Biological and Chemical Sciences 3 (2014), 06-17.
14. S. Santhosh Kumar, A. Subramanian, **S. K. Suja**, Free Radical Scavenging Capacity and Antioxidant Activity of an Ayurvedic Medicinal Plant *Solanum rubrum Mill*”, Research Journal of Pharmacheutical, Biological and Chemical Sciences”, 4 (2013), 417-426.
15. A. L. Kavitha, H. Gurumallesh Prabu, S. Ananda Babu, and **S. K. Suja**, Magnetic Nanoparticles-Chitosan Composite Containing Carbon Paste Electrode for Glucose Biosensor Application, Journal of Nanoscience and Nanotechnology, 12, (2012), 1-7.
16. **S.K.Suja**, S.Sharmila Pandi, Greener oxidation of selected aromatic hydroxy compounds, Journal of Current Sciences, 1(2010),37-42.

Seminars/Conferences/Workshops Organized	: 07
Faculty Development Programme	: 2
Refresher Courses/Orientation Programmes	: 6
Seminars/Conferences/Workshops attended	: 35
Papers Presented in National/ International Conferences	: 31
