



Assistant Professor
 Department of Chemistry
 Gargi College (University of Delhi)
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 India
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Education:

October 2010-April 2016

Ph.D. (Physical Chemistry)

Department of Chemistry, University of Delhi, New Delhi, India. Degree Awarded on 19th November 2016.

Thesis Title: *Electrochemical Studies on Rough Glassy Carbon Electrodes in Room Temperature Ionic Liquids: Experimental Validation of Theories.*

2008 - November 2009

M.Phil (Organic Chemistry)

Department of Chemistry, Pondicherry University, Puducherry, India. Degree Awarded on November 2009.

Thesis Title: *Ketene Acetal Chemistry: Synthesis, Characterization and Theoretical Studies on Tetrahydro-pyrimidine.*

2006 - Aug 2008

M.Sc. (General Chemistry)

Madurai Kamaraj University, Madurai, Tamil Nadu, India
 Specialized six months' research project.

Thesis Title: Photophysical properties of rehenium (I) rectangle and luminescence quenching Studies with quinines

2000- November 2004

B.Sc. Chemistry (General Chemistry)

Thiagarajar College, Madurai Kamaraj University, Madurai, Tamil Nadu, India.

Professional positions:

19th Oct 2015- Present:

Assistant Professor (Permanent)

Department of Chemistry, Gargi College
 University of Delhi, New Delhi-110049, India.

Academic: Teaching, Invigilation, Semester Questioned Setting, Paper Evaluation.

Administrative: Chemical Society Convener, and College Committee Member of Various Society

19th August 20014 up to 23rd Sep 2015:

Assistant Professor (Ad-hoc)

Department of Chemistry, Zakir Hussain College
 University of Delhi, New Delhi-100 023.

Work: Teaching.

9th August 20014 up to 22nd May 2015:

Assistant Professors (Ad-hoc)

Department of Chemistry, SGTB Khalsa College
 University of Delhi, New Delhi-100007

Work: Teaching, Research (Summer Project), Invigilation, Semester Questioned Setting, Paper Evaluation, and conducting practical for Indira Gandhi National Open University

Subjects Taught:

<u>Inorganic Chemistry:</u>	Atomic Structure, Chemical Bonding, Solid State
<u>Organic Chemistry:</u>	Stereochemistry, Reaction Mechanism, Name Reactions Nucleophilic and Electrophilic Substitution Reaction in Aliphatic and Aromatic Systems, Green Chemistry
<u>Physical Chemistry:</u>	Thermodynamics, Ionic Equilibrium, Chemical Equilibrium, Gaseous State
<u>Practical Organic Chemistry:</u>	Preparation Organic Compounds and their Derivatives Chromatographic Techniques
<u>Practical Inorganic Chemistry:</u>	Qualitative and Quantitative analyses
<u>Practical Physical Chemistry:</u>	Thermochemistry, Kinetics, Photochemistry, Surface tension and Viscosity

Work: Teaching, Invigilation, Semester Questioned Setting, Paper Evaluation.

Administrative: Chemical Society 2018-2019 Convener, and Various committee member.

Publications:

- Effect of Uncompensated Solution Resistance on Quasireversible Charge Transfer at Rough and Finite Fractal Electrode, R. Kant, **M. Sarath babu** and S. Srivastav, *Electrochimica Acta*, 2013, 95, 237-245.
URL: <https://doi.org/10.1016/j.electacta.2013.02.010>
- 3-Benzyl-6-benzylamino-1-methyl-5-nitro-1,2,3,4-tetrahydropyrimidine, a M. Kannan, a P. Manivel, **M. Sarath babu**, R. Sathishkumar, H. Surya Prakash Rao and R. Krishna, *Acta Cryst.* 2010. E66, o515,
URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2983565/>
- Experimental validation of bifurcated hydrogen bond of 2,5-lutidinium bromanilate and its charge density distribution, Niranjana Devi Rajendran, Natarajan Mookan, Israel Samuel & Sarath Babu Mookan, *Chemical Papers* **74**, 2020, 2689–2699 URL: <https://link.springer.com/article/10.1007%2Fs11696-020-01107-3#auth-1>
- A theoretical study of chemical bonding and topological and electrostatic properties of the anti-leprosy drug dapsone, Niranjana Devi Rajendran, Natarajan Mookan, Israel Samuel, Sarath Babu Mookan, Govindarajan Munusamy, Selvaraj Gurudeeban & Satyavani Kaliamurthi, *Journal of Molecular Modeling* 26, 2020, 138 URL: <https://link.springer.com/article/10.1007%2Fs00894-020-04393-6#auth-1>
- Experimental validate of the theory of anomalous EDL dynamics at heterogeneous GC-RTIL interface (*Manuscript under preparation*).

Conference/ Symposium/ Workshop Attended:

- Advanced training in mathematics for lecturers in geometric complex analysis from March 21, 2011 to April 2, 2011. Department of mathematics, University of Delhi, New Delhi, India.
- Participated in National seminar on “Frontiers in Natural Products Chemistry–2008 (FNPC-’08) held n Department of Natural Products Chemistry, School of Chemistry. Madurai Kamaraj University on 20th and 21st March 2008, Madurai, Tamil Nadu, India.
- Effect of uncompensated solution resistance on quasi-reversible charge transfer at rough and finite fractal electrode, 2nd INDO-ITALIAN WORKSHOP Department of Chemistry, Delhi University, New Delhi, India.
- Quasi-reversible Charge Transfer on Rough Glassy Carbon Electrode in Ionic Liquid Medium: Theory and Experiment, CRSI 16TH NATIONAL SYMPOSIUM IN CHEMISTRY, Department of Chemistry, Indian Institute of Technology Bombay, India.
- Anomalous Chronoamperometric Response of Ferrocene in 1-Butyl-3-methylimidazolium hexafluorophosphate [BMIM][PF6] at Glassy Carbon Electrode: Theory and Experiment. 20TH ISCB INTERNATIONAL CONFERENCE, Department of Chemistry, University of Delhi, New Delhi, India.
- Underwent Training in workshop on “GREEN CHEMISTRY” conducted by Pondicherry University, Tamilnadu, India.

7. Combating Industrial Pollution for Sustainable Environment A Fusion of Industrial and Scientific Efforts (CIPSE on 22-23 of September 2016): National Conference, Department of Chemistry, Gargi College (University of Delhi), New Delhi-110049.
8. UGC-Sponsored Participated Orientation Programme OR-87 (on November, 25 to December, 23 2016): Human Resource Development Centre Centre for Professional Development in Higher Education University of Delhi, New Delhi-110049.
9. 16th Refresher Course in Physical Science/Nano Science (27th August 2018 to 20th September 2018): Organized by UGC- Human Resource Development Centre Jawaharlal Nehru University, New Delhi-110067.
10. Mentoring the Teacher-Mentors: Capacity Building Programme (19th and 20th of January 2018): Organised by Internal Quality Assurance Cell (IQAC), Gargi College (University of Delhi), New Delhi-110049.
11. Emerging Trends in tertiary Education: Assessing Challenges and Possibilities (29th and 30th of March 2019): National Multidisciplinary Conference, Organised by BA Programme, Chemistry, English and History, Gargi College (University of Delhi), New Delhi-110049.

Honours and Awards:

- Qualified GATE (Graduate Aptitude Test in Engineering) exam held on April 2009 examination, Conducted by IITs, Govt. of India.
- Selected for Shyama Prasad Mukherjee Fellowship (SPM) Interview, Conducted by CSIR, New Delhi, India.
- Qualified JRF-NET, SRF (2010-2012), Conducted by CSIR, New Delhi, India.

Area of Specialization/ Interest:

- Electrochemistry theory and experiment technics on chronoamperometric, chronopotentiometric, chronocoulometry, cyclic voltammetry and impedance spectroscopy
- Organic reactions carried with electrochemical techniques.
- physical organic chemistry

Personal Profile:

Date of Birth : 06.02.80

Sex : Male

Nationality : Indian

Permanent Address : S/O A. Mookan, Door No-1/367, Vellampatty (Post), Natham (Taluk)
Dindigul (District), Tamilnadu (State), India
