

# SYED IBRAHIM J

Seeking a Scientific Assistant role to apply research and instructional skills

Sivakasi, TamilNadu 626124

Mobile : 9655341300

[i.syedibrahim2140@gmail.com](mailto:i.syedibrahim2140@gmail.com)

[www.linkedin.com/in/jsyedibrahim2140](http://www.linkedin.com/in/jsyedibrahim2140)

## EDUCATION

**Vellore Institute of Technology, Vellore - PhD program in Chemistry - Discontinued**

Aug 2022 - July 2025

- Acquired proficiency in computational tools, enhancing methodological rigor and reproducibility in research outputs.

**National Centre for Ultrafast Processes, University of Madras. – Masters in Science (Photonics and Biophotonics)**

Jun 2020- Jun 2022

**Ayya Nadar Janaki Ammal College, Sivakasi — Bachelors in Science (CHEMISTRY)**

Jun 2017 -Apr 2020

- Elected as Joint Secretary of UG Chemical Association 2017-18

## EXPERIENCE

**Vellore Institute of Technology, Vellore - Teaching cum Research Assistant**

Aug 2022 - July 2025

- Handled a UV-Vis spectrometer for two years to support faculty-led research and evaluation projects.
- Supported faculty in research, evaluation, and teaching activities while mentoring students and clarifying academic doubts

## PROJECTS

**Atmospheric Degradation of MSAM by Crigeo Intermediates - A Theoretical Study**

-Utilized Gaussian 16, TUMME, and MESS software packages to perform computational modeling, kinetics simulations, and mechanistic evaluations in

## SOFTWARES

### Thermochemical Analysis

- Gaussian 16
- Chemcraft

### Kinetic Analysis

- TUMME
- KISTHEIP
- MESS

## Instruments handled

- JASCO V730 UV-visible spectrophotometer
- Cary 100 Bio UV-visible double beam spectrophotometer
- Perkin Elmer spectrofluorometer
- HORIBA JOBIN YVON Fluoromax 4P spectrofluorometer
- Agilent Diode array UV-Vis spectrophotometer

## WORKSHOPS ATTENDED

- 2-day hands-on workshop on Optical design using Zemax
- Five days hands-on Training on DFT organized by Centre for Functional Materials, Vellore and SCUBE Scientific
- Participated in Two days state level workshop on Microscale experiments in chemistry under UGC Autonomy Grant
- Participated in workshop on Spectroscopic Measurements

support of research projects.

## **Nucleation potential of MSAM in marine environment**

-Utilized Gaussian, ABCluster, and AQME software packages for computational chemistry workflows, including molecular optimization, cluster generation, and automated quantum mechanical evaluations to support research projects.

### **PYRENE-ADORNED N-HETEROCYCLIC CARBENE COMPOUNDS: SYNTHESIS, CHARACTERIZATION AND PHOTOPHYSICAL PROPERTIES.**

– newly synthesized luminescent compounds will act as excellent fingerprint powder and it can be applied to develop the latent fingerprints in forensic applications

## **INTERNSHIP**

### **Nirmal Optronics, Chennai - *Optical System Design using ZEMAX OPTICSTUDIO software***

Sep 2022 - Dec 2022

- Completed the different modules of Zemax optic studio
- Worked on modeling 3D systems which includes the designing of Off axis Parabola

## **CERTIFICATIONS**

- Quantum Chemistry of Atoms & Molecules - IIT Bombay
- Developing SoftSkills and Personality - IIT Kanpur
- Speaking Effectively - IIT Kharagpur
- Introduction to Programming with MATLAB - offered by Vanderbilt University
- Honor's diploma in Computer Application

## **PUBLICATIONS**

- Crige Intermediate as a sink for MSAM - A Theoretical study - Manuscript under review
- MSAM as a stabilizing agent for atmospheric nucleation - Manuscript yet to be communicated