



Dr. Mallikarjuna Swamy S.M.

Assistant Professor

EXPERIENCE (TEACHING):

- **Assistant Professor** at RNSIT (August 2025 - till date).
- Taught B.Tech laboratory courses at SRM Institute of Science and Technology (SRMIST), Kattankulathur Campus, Chennai, Tamil Nadu (2021–2023).
- **Lecturer** at Jnana Amrutha PUC College, Bellary (2020).

QUALIFICATIONS:

- **B.Sc. (Physics, Chemistry, Mathematics)** from Sahyadri science college, Kuvempu university, Karnataka, India.
- **M.Sc. Physics** from Manipal academic of higher education, Manipal, Karnataka, India.
Research Project Title: “Effect of sintering temperature on structural and electrical properties of thermoelectric system Cu_2Se ”.
- **Qualified the Karnataka State Eligibility Test (KSET) for Assistant Professor, conducted by the University of Mysore in 2021.**
- **Doctor of Philosophy (Ph.D.)** from SRMIST, KTR campus, Chennai, Tamil Nadu, India.
Research Project Title: “Non-invasive Glucose Detection in Diverse Biological fluids using EGFET Configuration with Metal-Organic Framework Modified Electrodes”.

SPECIALIZATION (ACADEMICS):

- **Physics - Material Science**
- **Physics - Classical Mechanics**
- **Solid State Physics**
- **Condensed matter Physics**
- **Sensor technology**
- **Biophysics**

RESEARCH EXPERTISE

- **Extended gate field effect transistor-based chemical and biosensors.**
- Experience in developing **enzymatic and non-enzymatic glucose sensors with invasive and non-invasive detection methods.**
- Experience in developing **non-enzymatic ascorbic acid with invasive and non-invasive detection method.**
- Experience in developing **Heterojunction devices.**
- Experience in developing **VOC detection sensors.**
- Expertise in the synthesis **Metal-organic frameworks (MOFs):** Coordination-modulated MOFs, MXene-MOF hybrid materials, MOF derived metal oxides, bimetallic MOFs, metal oxalate-templated MOFs for **sensing applications.**
- Transferring **e-waste material into functional materials** for sensing applications.
- Expertise in various **sensor electrode fabrication.**

PUBLICATIONS:

1. **Google Scholar:** <https://scholar.google.com/citations?user=1zZfV1sAAAAJ&hl=>
2. **Orcid ID:** orcid.org/0009-0002-3973-6755.
3. **Research Gate:** <https://www.researchgate.net/profile/Mallikarjuna-Shabanur-Matada>.

KEY JOURNALS PUBLISHED

1. ACS Applied Materials & Interfaces
2. ACS Sustainable Chemistry & Engineering
3. ACS Applied Nano Materials
4. ACS Applied Electronic Materials
5. Journal of Materials Chemistry B
6. Surfaces and Interfaces