

## Department of Physics

### **1. About the Department:**

The Department of Engineering Physics, established in 2009, caters the foundation courses. We have fourteen highly qualified and dedicated faculty members with specialization in nanomaterials, sensors, solar cells, polymer research, photocatalysis, crystal growth and theoretical research. And, it has been duly recognized as a Research Centre by Anna University, Chennai, for conducting Ph.D. programs. Presently, 17 research scholars Pursuing Ph.D., and one scholar had completed Ph.D. in 2024. The total funding received is over 1.38 crores and the consultancy revenue generated is more than 4.2 lakhs. The department has published more than 200 research articles, 11 patents and over 2000 citations.

### **2. Facilities Available for Industry Collaboration**

- X-Ray Diffractometer: Structural analysis of powder samples
- Electrochemical workstation: Supercapacitor, battery, electrochemical sensing, etc.
- FTIR: Functional group presence analysis.
- UV – vis spectrophotometer: Properties of materials and their interactions with light

### **3. Consultancy Services**

Areas: Nano materials synthesis and characterization, Expert guidance to M.Sc., and Ph.D., project.

### **4. Testing Services**

- Structural analysis of powder samples
- Functional group presence analysis.
- Properties of materials and their interactions with light

### **5. Executive Development Programs**

An Executive Development Program on Materials Preparation and Characterization focuses on equipping working professionals, research scholars with the latest skills, knowledge, and practical tools in the domain of materials science and engineering.

- Materials Preparation and Characterization
- Duration: Two weeks
- Topics: Nano materials synthesis, Characterization, DFT analysis

## **6. Research and Development Collaborations**

- **Research Focus Areas:** sensors, solar cells, crystal growth, photocatalysis, polymeric materials, computational biophysics, density functional theory and thermoelectric.
- **Collaboration Opportunities:** Experimental and theoretical research collaborations in the above fields.

## **7. Achievements and Success Stories**

- SCIMAGO ranking 2024 – Rank 2 in Tamilnadu, Rank 6 in India & Rank 1133 in the world.
- Top 2% scientist (2021, 2022 & 2024): Prof. E. Ranjith Kumar
- Three days international conference -SERB sponsored: 2L
- Number of Faculty completed Postdoc: 5
- Number of Research Supervisors: 11
- Highest Impact Factor: 16.4