

**Physical Mode – Six Days  
Faculty Empowerment Programme**

**ON**

**Advanced Materials: Synthesis, Characterization  
and Applications**

**[06-03-2023 to 11-03-2023]**

**REGISTRATION FORM**

**Name:**

**Designation:**

**Qualification:**

**Date of Birth and Age:**

**Institutional Address:**

**Communication Address:**

**Mobile No:**

**Email Id:**

**Signature of the Applicant**

**Date:**

**Place:**

**Signature & Seal of HOD/Principal/ Dean**

**Guidelines:**

- There is no participation fee
- Session time will be from 9.00 am to 4.45 pm
- Total number of participants will be strictly 50 (Fifty only)
- Eligible participants will be selected based on first come first serve basis
- Lunch will be provided only on the first and last day of the programme.

**Resource Persons:**

The session will be handled by experts from academia, research organizations and industry in the subject areas.

**Who can attend?**

Faculty members from the physics, applied chemistry, chemical engineering, nanotechnology, material science, medical physics, biotechnology, and energy studies departments from Anna University, Constituent colleges, Regional offices, Government Colleges & all Engineering Colleges Affiliated to Anna University.

**Last date for receiving the  
Registration form** } **10-02-2023**

**For details contact**

**The Co-ordinator**

**Dr. S .Shanthi**

**Crystal Growth Centre**

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**Dr. S. Shanthi**

**Dr. S. Moorthy Babu**



***Sponsored by***

**Centre for Faculty Development**

**Anna University**

**Chennai -25**

***Organized by***

**Crystal Growth Centre,**

**Anna University,**

**Chennai – 600 025.**

## About Crystal Growth Centre:

Crystal Growth Centre was established by Anna University in 1982 with the interest of promoting research interests in the field of Crystal Growth and characterizations. With the active involvement and contribution of eminent and hardworking faculty and researchers, the Centre was recognized by the University Grants commission in 1990 as the CGC:UGC-AU Facility for Crystal Growth. The objectives of the centre are to continuously upgrade the research activities and to contribute in the frontier areas of research and technology relevant to crystal growth and characterization.

The centre had implemented several major national research programs supported by National funding agencies such as DST, DAE, DRDO, UGC, ISRO, MNES, DOE, BRNS, IUAC, CSIR, Tamil Nadu Government and International funding agencies like INDO-DAAD, TWAS, Italy, UKERI, EU and INDO-JAPAN. The mandate of the centre was also to promote the research interests of the researchers from all over India under the visitors program. The Centre had also been continuously organizing several National/ International conferences/ Workshops/ refresher Courses/ seminars/ symposium to constantly promote research and development activities.

## About the Course:

This Faculty Empowerment Programme is intended to provide a platform for the faculties to update and enrich their knowledge in the field of advanced material science and device technology.

The topics and the specialized speakers of this programme are scrupulously selected aimed towards imparting the attendees an overview of the recent research and development in the advancement of applied materials, their analysis and applications in various fields.

Advanced materials are new materials with multi-functionality that are intentionally designed to have superior performance and are enabling the invention of entirely new products and devices which in turn impact every aspect of human life. The inter-disciplinary field "materials science" being the core of most of the branches of engineering requires expertise of different fields for further advancements that will drive innovations leading to quantum leaps in the upliftment of mankind. It is envisaged that the knowledge gained by the participants through the lectures in this programme from eminent academicians and industry experts will play a significant role in motivating their students towards contribution to this important field triggering the cyclic process. The major focus of discussion will be on the material development and analysis in the fields such as Nano Science & Technology, Bio-sensors, Photovoltaics, Thermoelectrics, Fuel cell, and Quantum technologies.

## Course Content:

- Recent trends in Battery Technology
- Bulk and thin film Materials for Device applications
- Polymer Physics in Photovoltaic Applications
- Ferroelectric and multifunctional oxides
- Emerging trends in Display Technology
- Applications of Laser Raman Spectroscopy
- Spectroscopic Ellipsometry for thin layers and surface characterization
- Seebeck co-efficient and thermal conductivity properties of Thermo-electric Materials and Modules
- Particle size analysis and water quality analysis
- Strategies for terrestrial Solar cell Technology
- Single photon detectors for the emerging Quantum Technologies

## Organizing Committee

<b>CHIEF PATRON</b>	:	<b>Dr. R. Velraj</b> <b>Vice Chancellor</b> <b>Anna University</b>
<b>PATRON</b>	:	<b>Dr. G. Ravikumar</b> <b>Registrar</b> <b>Anna University</b>
	:	<b>Dr. R. Jayavel</b> <b>Dean, AC Tech</b> <b>Anna University</b>
<b>CHAIR</b>	:	<b>Dr. P. Vanaja Ranjan</b> <b>Director, CFPD</b>
		<b>Dr. V. Adaikkalam</b> <b>Addl Director, CFPD</b>
<b>CO-CHAIR</b>	:	<b>Dr. S. Moorthy Babu</b> <b>Director, Crystal Growth Centre</b>
<b>Co-ordinators</b>	:	<b>Dr. S. Shanthi</b> <b>Dr. S. Moorthy Babu</b> <b>Crystal Growth Centre</b>
<b>Organizing Centre</b>	:	<b>Crystal Growth Centre</b> <b>Anna University</b>

## IMPORTANT DATES

**Submission of Application** : **10.02.2023**

**Intimation of Selection** : **17.02.2023**

**Confirmation by Participants** : **20.02.2023**