



## DST-SERB HIGH-END WORKSHOP (KARYASHALA)

# Advanced energy storage materials & device fabrication

jointly Organized by

Kerala State Council for Science, Technology & Environment  
Sasthra Bhavan, Thiruvananthapuram, Kerala  
&  
Dept. of Nanoscience & Technology, University of Calicut  
Thenhipalam, Malappuram, Kerala

**VENUE: UNIVERSITY OF CALICUT, MALAPPURAM**

**DATE: 27-31 May 2024**

### About the Karyashala

KARYASHALA, a High-end workshop is an effort by the Department of Science and Technology (DST)-Science and Engineering Research Board (SERB), Government of India via Accelerate Vigyan to improve the research productivity of promising PG and Ph.D. students from universities and colleges nationwide through high-end workshops. This workshop comprising theory, hands-on sessions and exposure visits, is proposed for week program for twenty-five (25 Nos) participants.

The workshop is designed to support motivated students who have a strong willingness to achieve excellence in their scientific and engineering research pursuits and provide opportunities to acquire specialized research skills in a specific theme of "Advanced Energy Storage Materials and Device Fabrication". The workshop schedule is enunciated in such a way that the participants will have hands-on experience with the latest and advanced research trends in energy storage systems

### About Organizing Institutes

#### • Kerala State Council for Science, Technology and Environment (KSCSTE)

KSCSTE is an autonomous body under the Ministry of S&T, Kerala constituted in 2002 at Thiruvananthapuram. KSCSTE act as an agency for change and development through science and technology. The council promotes and activates programmes for increasing the stock of knowledge in science and fine-tunes policies that are significant for the sustained development of humanity. Achieving excellence in basic research, academia-industry interactions, strengthening indigenous initiatives, building strong infrastructure, and developing a high-quality science education system in the state are the targeted goals of KSCSTE. This has been achieved through various schemes and programs and via R&D organizations established by the council.

#### • University of Calicut

The University of Calicut is a state-run public university headquartered in Thenhipalam, Malappuram District, Kerala, India. It was the first university to be set up in northern Kerala in 1968. The university is coordinated by UGC (re-accredited by NAAC with an A+ grade). The university manages more than 400 independent affiliated colleges spread across northern Kerala. It is also the largest affiliated university in Kerala. The University of Calicut ranked 69 among Indian universities in the NIRF ranking for 2022.

### Specific Objectives

- Provide insight to young researchers in the broad area of energy storage systems, with special emphasis on current trends and challenges.
- Provide fundamental knowledge to scholars through the technical sessions in nanostructured materials for energy storage applications such as batteries, supercapacitors, fuel cells, thin-film photovoltaics, triboelectric nanogenerators, etc.
- Hands-on training and demonstration of thin film preparation, various approaches to device fabrication, types of energy storage devices, and applications
- Demonstration of specific characterization to test the performance of the materials as well as the prototype device.

### Eligibility

Karyashala is open for science and engineering postgraduate (PG) students and PhD scholars who are enthusiastically working on chemistry, physics, electrochemistry, material science, nanoscience and nanotechnology, chemical engineering, etc. Preference will be given to the students who have an interest and background towards energy storage systems.

\*Note: Only 25 candidates will be shortlisted for the participation.

## How to Apply

- Interested eligible candidates can register through google form [link](#) by uploading application form with duly signed Recommending Authority/Head of the Department/ Institute so as to submit on or before 10th May 2024.
- Only selected candidates will be informed by email/phone, therefore the candidates must provide valid E-mail IDs and phone while doing the online registration.
- The selected candidates will have to acknowledge and accept the offer for participating in the workshop through return email, failing which the waitlisted candidates may be selected for the workshop.
- The last date for registration is 10th May 2024

## Accommodation and Travel

- Daily necessary expenses such as local conveyance, stationery, consumables, accommodation, food etc. for the participating students will be borne by the host institute through SERB funding support.
- The participating students will also be eligible for TA reimbursement (by Bus/Train) for their journey to the host institute from their hometown/home institute, both ways once ticket produced.
- Boarding and lodging will be provided to the participants during the training period at the University of Calicut hostel on sharing basis.
- Participants are requested not to bring family members/spouse with them, as the university has limited accommodation facilities.
- A certificate regarding successful completion of workshop shall be issued to the participants who attend the entire workshop.

## Important Dates

- **Last date for online registration: May 12, 2024**
- **Intimation of selection of candidates: May 14, 2024**
- **Confirmation from participants: May 16, 2024**



## Chief Patron

**Prof. K.P Sudheer**  
Executive Vice President, KSCSTE  
Thiruvananthapuram, Kerala 695 004

## Patron

**Dr. M.K Jayaraj**  
Vice Chancellor, University of Calicut  
Thenhipalam, Malappuram, Kerala 673635

## Event Coordinators

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**Visit our website for further information:**  
<https://kscste.kerala.gov.in>

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