

#### Organizing Committee

1. Prof. M K Jayaraj, Vice-Chancellor, University of Calicut (Patron)
2. Prof. M Nasser, Pro Vice-Chancellor, University of Calicut (Co-patron)
3. Prof. P P Pradyumnan, Member Syndicate (Co-patron)
4. Prof. Mohamed Shahin Thayyil, Head Department of Physics (Chairperson)
5. Prof. Rajeev S Menon, Head, Department of Chemistry (Vice-Chairperson)
6. Prof. S Sindhu, Head, Department of Nanoscience and Tech. (Vice-Chairperson)
7. Prof. Abraham Joseph, Department of Chemistry (Mentor)
8. Prof. Poovathinthodiyil Raveendran, Department of Chemistry (Mentor)
9. Dr. Zuhail K P, Department of Physics (Convenor)
10. Dr. Shibu E S, Department of Nanoscience and Technology (Convenor)
11. Dr. Fazalurahman K, Department of Chemistry (Convenor)

#### National Advisory Committee

1. Prof. T Pradeep, IIT Madras
2. Prof. K L Sebastian, IISc Bangalore
3. Prof. E D Jemmis, IISc Bangalore
4. Prof. Vijayamohanan K Pillai, IISER Tirupati
5. Prof. Srinivasan Sampath, IISc Bangalore
6. Prof. Suresh Das, IISER Thiruvananthapuram
7. Prof. Ayyappanpillai Ajayaghosh, NIIST Thiruvananthapuram
8. Prof. Satish Patil, IISc Bangalore
9. Prof. K George Thomas, IISER Thiruvananthapuram
10. Prof. P. Vijayan, University of Calicut



# National Conference on Advanced Materials NCAM 2024

27<sup>th</sup> June 2024  
EMS Seminar Complex



School of Physical Sciences  
University of Calicut

## About NCAM

National Conference on Advanced Materials (NCAM 2024) is organized by the School of Physical Sciences (Department of Physics, Chemistry and Nanoscience & Technology) University of Calicut on June 27, 2024. The conference is organized as a honoring event to Prof. M K Jayaraj who is about to complete his tenure as the Vice-Chancellor of the University of Calicut. He has made enormous contributions in the area of materials science especially thin films, luminescence materials and energy materials.

This conference will play a pivotal role in shedding light on the recent advancements in Materials Science and in designing new strategies to meet the contemporary needs of society through sustainable development. The conference will have plenary lectures and invited talks by eminent scientists spanning the broad domain of Materials Science.

## About University of Calicut

University of Calicut, the largest University in Kerala, was established in the year 1968. The University has been recently re-accredited by the NAAC with an A+ grade (3.45 CGPA) in the fourth cycle of the accreditation. With 37 post-graduate departments and 408 affiliated colleges, the University aims to excel in education and research in Kerala with a special focus on the Malabar region. The School of Physical Science includes the Department of Physics, Chemistry and Nanoscience & Technology with 33 faculties and around 120 researchers.

## About Prof. M. K. Jayaraj

Prof. M. K. Jayaraj currently serves as the Vice Chancellor of the University of Calicut. He assumed the office in 2019, leading the university to achieve an NAAC A+ grade. During his tenure, he contributed significantly in building an efficient research ecosystem in the university. He is a material scientist with research interest in the area of thin films and nano-composite devices, including sensors, detectors, and energy converters. He began his academic career as a lecturer at Cochin University of Science and Technology (CUSAT). Over time, he held several academic and administrative responsibilities, including Director of the Center of Excellence in Advanced Materials and a Member of the Syndicate. He is awarded with the prestigious MRSI Medal in 2019. He has successfully executed 18 funded research projects totaling 5 crore INR and has supervised the completion of 33 PhD theses.



## Program Schedule

- 10.00 AM** - Welcome Address  
**Prof. Mohamed Shahin T**  
Chairperson, NCAM 2024
- 10.05 AM – 10.20 AM** - Brief out line of research life of  
**Prof. M K Jayaraj**  
**Dr. Aldrin Antony, CUSAT**
- 10.20 AM – 11.10 AM** - PL 1  
**Prof. M K Jayaraj**  
Hon. Vice Chancellor, UoC  
“Metal oxide based artificial synapses for neuro morphic computing”
- 11.10 AM – 11.30 AM** - Tea Break
- 11.30 AM -12.10 PM** - IL 1  
**Padma Shri Prof. T Pradeep, IIT Madras**  
“Can water droplets make soil?”
- 12.10 PM – 12.50 PM** - IL 2  
**Prof. P. S. Anil Kumar, IISc Bengaluru**  
“Quantum materials and heterostructures”
- 12.50 PM – 1.50 PM** - Lunch Break
- 1.50 PM – 2.30 PM** - IL 3  
**Dr. T. N. Narayanan, TIFR- Hyderabad**  
“Multifaceted MoS<sub>2</sub> Crystals: Catalysis to Valleytronics”
- 2.30 PM – 3.20 PM** - IL 4  
**Dr. Aldrin Antony, CUSAT**  
“Application of low dimensional materials in photovoltaics, sensors and nanozymes”
- 3.20 PM – 3.40 PM** - Tea Break
- 3.40 PM – 5 PM** - Valedictory/honouring function for  
**Prof. M K Jayaraj (Hon. Vice Chancellor) & Prof. M Nasser (Hon. Pro Vice-Chancellor)**