



# PERIYAR UNIVERSITY

Salem- 636011, Tamil Nadu, India.

#### **INTERNATIONAL SEMINAR ON**

## **Innovative Energy Technologies for a Sustainable Future: Bridging Research and Application**

Organized By

## Department of Energy Science and Technology

Sponsored by

Anusandhan National Research Foundation (ANRF)

Department of Science & Technology, Ministry of Science and Technology, Covernment of India







Venue: Seminar Hall, Science Block II

27th & 28th March 2025

#### **Organizing Committee**

Chief patron Prof. R. Jagannathan

Vice-Chancellor Periyar University Salem-636011

#### Patron

#### Dr. V. Raj

Registrar (i/c) Periyar University Salem-636011

Convenor & Organizing Secretary

#### Dr. K.A. Ramesh Kumar

Professor & Head Department of Energy Science and Technology **Periyar University** Salem-636011

#### Organizing Secretary

#### Dr. P. Maadeswaran

**Assistant Professor** Department of Energy Science and Technology Periyar University Salem-636011

#### Organizing Members

**Dr. R. Thangappan,** Assistant Professor Dr. T. Elangovan, Assistant Professor Department of Energy Science and Technology Periyar University Salem-636011

#### **Important Dates**

Online registration starts :05.03.2025 Deadline for registration :24.03.2025 Intimation of Acceptance : 25.03.2025

#### Registration fee(Including 18% GST)

UG/PG/Research Scholars: Rs.236/-

Academicians: Rs.354/-Industrialists: Rs.590/

## For Registration:

https://docs.google.com/forms/d/e/1FAI pQLSfr1T5u9VeWH4SMp8RnjbjFeLzS\_KZ aP7-mkrnJEUwHfUOADA/viewform

OR



### FOR FURTHER DETAILS:

Dr. P. MAADESWARAN **Assistant Professor Organizing Secretary Department of Energy Science and Technology Periyar University** 

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#### **About the University**

The Government of Tamil Nadu established Periyar University in Salem on 17<sup>th</sup> September 1997 as per the provisions of the Periyar University Act, 1997. The University covers the area comprising four districts namely Salem, Namakkal, Dharmapuri, and Krishnagiri. The University obtained 12(B) and 2(f) status from the University Grants Commission, New Delhi and it was reaccredited by the NAAC with "A++" Grade in 2021. The University secured 56th rank among Indian Universities by MoE NIRF 2024. As Young University of the state, it strives hard offering a quality education by revamping research and extension activities, curriculum by enhancement, academic flexibility, strong publications in peer reviewed journals, world class laboratory facilities and antiplagiarism software to endorse original research.

#### Department of Energy Science and Technology

The Department of Energy studies was established in the year 2015 (later renamed as Energy Science and Technology) with major intention of promoting quality education in the arena of renewable energy. In the year 2019, with a mission to provide manpower with knowledge and skill for the growth of India's energy sector with innovative energy technologies, the department has started to a new course M.Tech Energy Technology with the approval of AICTE New Delhi, effective from 2020-21 academic years onwards. The faculties of Energy Science and Technology are actively involving themselves in research and extension activities, paper and book publications. Attending and presenting papers at national and international level seminars and conferences. The students are encouraged to make maximum use of library and computer lab which are available to them round the clock. The learning environment is always continuous and inculcates in the students. The Department strongly emphasis on quality education, effective teaching pedagogies and real industry interface to propel to a better career of the students.

#### ANRF Seminar/symposia (SSY) Program

The Science and Technology Professional Bodies & Academes of Science and Engineering play an important role in creating cohesiveness amongst scientific community by organizing technical meetings, seminars, conferences and workshops. Anusandhan National Research Foundation (ANRF) extends partial financial support, on selective basis, for organising such events (National as well as International). The support is primarily given to encourage participation of young scientists and research professionals in such events along with nominal support for pre-operative expenses like announcements brouchers etc. The primary focus of the scheme is to support events having strong orientation towards scientific research in the areas of basic sciences, engineering, technology, agriculture & medicines.

#### **About the Seminar**

The seminar focuses on highlighting advancements in cutting-edge technologies, including nanotechnology, semiconductor devices, renewable energy systems, and AI-driven solutions, while bridging the gap between research and real-world applications. Participants will explore scalable, efficient, and sustainable strategies to address global energy challenges through multidisciplinary approaches, integrating materials science, engineering, and computational technologies. Ultimately, the seminar aims to catalyze the transition to sustainable energy systems and inspire groundbreaking innovations for a greener future.

#### The topics to be covered

- Nanotechnology in Semiconductors: Enabling Energy-Efficient Innovations for a Sustainable Future
- Functional Nanomaterials: Transforming Clean Energy Applications Through Innovation
- Photocatalytic Nanomaterials: Bridging Green Energy Research and Environmental Sustainability Organometallic Chemistry: Catalyzing Renewable Energy Transformations
- Electrochemical Energy Storage and Hydrogen Production: Pioneering Solutions for a Greener
- Solar Thermal Energy and Heat Transfer: Engineering a Sustainable Energy Future
- Al and Energy Systems Modelling: Accelerating the Clean Energy Transition
- Hybrid Solar and Wind Energy Systems: Powering the Path to Sustainability
- Green Smart Building Architecture

# **Chief Guest**

Dr. V. Balasubramanian. Professor & Director, CEMAJOR, Department of Manufacturing Engg, Annamalai University, Tamilnadu, India.

## **Resource Persons**



Department of Semiconductor Science, Seoul, Republic of Korea.



Dr. G. Kumaresan Professor, Institute for Energy Studies, Department of Mechanical Engineering CEG, Anna University, Chennai.

Associate Professor

Department of Hydro and Renewable Energy,

Indian Institute of Technology, Roorkee, Uttarakhand.



Professor Department of Energy and Power Electronics, School of Electrical Engineering, Vellore Institute of Technology, Vellore.

Research Centre for Nanotechnology Systems,

National Research and Innovation Agency Indonesia.



**Assistant Professor** Centre for Energy & Environment, Malaviya National Institute of Technology, Rajasthan.



Associate Director of Academic Affairs, Head of Department of Biotechnology, Maejo University, Thailand.



T.V. Arjunan
Professor, Department of Mechanical Engineering, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarth.



Professor Department of Electronics and Communication, Dayananda Sagar University, Bangalore.

