



# MANNAR THIRUMALAI NAICKER COLLEGE

(Autonomous)

(Founded by the Tamilnadu Naidu Mahajana Sangam) (Re-Accredited with 'A+' Grade by NAAC)  
Madurai - 625 004, Tamilnadu, India.



International Conference on

## EMERGING TRENDS IN PHYSICS, ENERGY STORAGE MATERIALS AND NANOTECHNOLOGY (ICEPEN 2025)

(Hybrid Mode)

3<sup>rd</sup> & 4<sup>th</sup> February 2025

Organized by

**PG & RESEARCH DEPARTMENT OF PHYSICS**  
**Mannar Thirumalai Naicker College**  
(Autonomous) Madurai - 625 004



### GREETINGS!

We cordially invite you to the International Conference on "Emerging Trends in Physics, Energy Storage Materials and Nanotechnology (ICEPEN 2025)" scheduled on 3<sup>rd</sup> & 4<sup>th</sup> February 2025 at Mannar Thirumalai Naicker College (Autonomous), Madurai, Tamilnadu, India.

### ABOUT THE COLLEGE

"Mannar Thirumalai Naicker College" was established in 1974. In the Golden Jubilee year, the college is reaccredited and bestowed with 'A+' Grade (CGPA 3.34) by NAAC in 2024. The college enjoys Autonomy status which paves the way for having not only the academic freedom but also the flexibility in functioning at all levels. The college offers 19 Under Graduate programmes, 8 Post Graduate programmes and 5 Ph.D programmes under various disciplines of interest to the students. At present, 3,594 students are pursuing higher education, served by 188 Teaching Faculty and 88 Administrative Staff, working with commitment and devotion to scale the institution on par excellence with the best institutions of the state.

### ABOUT THE DEPARTMENT

The Department of Physics was established in 1979 with a laboratory to teach Physics as an ancillary subject for B.Sc., Mathematics students. Under Graduate Programme in Physics was started during 1988-1989 and the Physics laboratory is upgraded year by year to cater the needs of change in the syllabus. The Laboratory is equipped with advanced equipment. All the classrooms are enabled with ICT facilities. Post Graduate programme in Physics was established during 2018-2019 under Self-Financed Stream. Our department Research centre was established during 2022-2023.

### About ICEPEN-2025

The International Conference on Emerging Trends in Physics, Energy Storage materials & Nanotechnology (ICEPEN 2025) will be held on 3<sup>rd</sup> & 4<sup>th</sup> February, 2025, at Mannar Thirumalai Naicker College, Madurai, Tamilnadu, India. This conference is an international event focused on the advanced level exposure in various fields of research such as X-ray Crystallography, Material Science, Spectroscopy, Energy storage, Nanotechnology, Bio-Materials. It is a premier gathering for researchers, industry professionals, and innovators to explore the latest advancements their applications across various fields. It is aimed at bringing together leading academicians, researchers, scientists, practitioners and professionals and provide them a platform to exchange their newest research findings, experiences and views on diverse areas of Physics. The conference includes prompt keynote Speakers, presentations, oral talks and poster presentations in the related topics.

## Keynote & Invited Speakers



**Dr. S.T.SENTHILKUMAR**  
Center for Advanced Materials Research (CAMR)  
University of Sharjah, Sharjah, UAE



**Dr. K.SAMANTH**  
Research Professor,  
Dept. of Chemical Engineering,  
Sungkyunkwan University,  
Suwon, Gyeonggi-do, Korea



**Dr. Eng. DENI SHIDQI KHAERUDINI**  
Senior Research Scientist at  
Research Center for Physics (RCP)  
Deputy of Engineering Sciences  
Indonesian Institute of Sciences (LIPI), Indonesia



**Dr. VINODH RAJANGAM**  
Research Professor,  
University of Quebec at Trois-Rivieres,  
Green Hydrogen Laboratory, Canada



**Dr. M. ULAGANATHAN**  
Department of Physics  
Amrita School of Physical Sciences  
Amrita Vishwa Vidyapeetham  
Coimbatore, India



**Dr. MUTHU SENTHIL PANDIAN**  
Research Scientist, Photovoltaic Devices Laboratory  
SSN Research Centre, SSN Institutions  
Kalavakkam, Chennai, Tamil Nadu



**Dr. G. MURUGADOSS**  
Associate Professor (Research)  
Centre for Nanoscience & Nanotechnology,  
Sathyabama Institute of Science  
and Technology  
(Deemed to be University)  
Jeppiaar Nagar, Rajiv Gandhi Road,  
Chennai, Tamilnadu, India



**Dr. A.KATHIRVEL**  
Research Associate,  
Department of Physics  
Indian Institute of Technology  
Madras



**Dr. MADHU CHENNABASAPPA**  
Associate Professor, Department of Physics  
Sri Jayachamarajendra College of Engineering  
JSS Science and Technology University,  
Mysuru, INDIA



**Dr. P.S.SATHEESH KUMAR**  
Professor of Physics, Department of Physics  
NPR College of Engineering and Technology  
Natham, Dindigul, Tamilnadu, India

## ADVISORY COMMITTEE

**Dr. Anitha K**  
Madurai Kamaraj University, Madurai, Tamil Nadu

**Dr. Eswaramoorthy R, ARCI,**  
Hyderabad, Telangana

**Dr. Jayavel R**  
Centre for Nanoscience and Technology, Anna University, Chennai, Tamil Nadu

**Dr. Jih-Hsing Chang**  
Chaoyang University of Technology, Taiwan

**Dr. Krishna Chandar N**  
Department of Physics, School of Advanced Sciences, VIT University, Vellore, Tamil Nadu.

**Dr. Mani V N**  
Hindustan University, Chennai, Tamilnadu.

**Dr. Pandikumar Alagarsamy**  
CSIR- CECRI, Karaikudi, Tamilnadu

**Dr. Ramalingam G**  
Alagappa University, Karaikudi, Tamilnadu

**Dr. Raman Sankar**  
National Taiwan University, Taipei, Taiwan

**Dr. Ramasamy P**  
President, Indian Association for Crystal Growth,  
Dean, SSN Institutions, Chennai, Tamil Nadu

**Dr. Ramesh Babu R**  
Professor & Head, Department of Physics,  
Bharathidasan University, Tiruchirappalli, Tamil Nadu

**Dr. Sabarinathan V**  
Manonmaniam Sundaranar University,  
Thirunelveli, Tamil Nadu

**Dr. Santanu Das**  
IIT(BHU) Varanasi, Uttar Pradesh

**Dr. Sathish Marappan**  
CSIR- CECRI, Karaikudi, Tamilnadu

**Dr. Suman Singh**  
CSIR-CSIO, Chandigarh

**Dr. Sundaram Chandrasekaran**  
Guilin University, China

**Dr. Sagayaraj P**  
Meenakshi Academy of Higher Education and  
Research, Chennai, Tamilnadu

**Dr. Selvasekera Pandian**  
Emeritus Professor, Bharathiyar University, and  
Director, Material Research Centre, Coimbatore,  
Tamilnadu

**Dr. Sethuraman K**  
Professor and Head, Department of Materials  
Science, Central University of Tamil Nadu,  
Thiruvavur, Tamilnadu

**Dr. Srinivasan K**  
Department of Physics, Bharathiar University,  
Coimbatore, Tamilnadu

**Dr. Suman Singh**  
CSIR-CSIO, Chandigarh

**Dr. Ting-Yu Liu**  
Department of Materials Engineering, Ming Chi  
University of Technology, New Taipei City, Taiwan

**Dr. Vadivel. M**  
School of Physics and Optoelectronic  
Engineering, Shandong University of Technology,  
China

**Dr. Velraj**  
Former Vice-Chancellor, Institute for Energy  
Studies, Anna University, Chennai, Tamilnadu

**Dr. Vijayakumar P**  
Institute of Power Engineering, Universiti Tenaga  
Nasional, Jalan Ikram UNITEN, Malaysia

**Dr. Vijayan N**  
CSIR-National Physical Laboratory, New Delhi

## Presentation & Publication

- ☆ At least one author of each accepted paper must register and present their work during the Conference.
- ☆ Presentations will be conducted either in oral or poster format, based on the decision of the organizing committee.
- ☆ Accepted and presented papers will be included in the ICEPEN 2025 Conference Proceedings with ISBN
- ☆ Selected high-quality papers will be considered for publication in reputed Scopus Indexed Conference Proceedings / Journals @ Author's own cost.

**Paper submission format and fee link** <https://drive.google.com/file/d/1eJcbJQ8ILZnYNY12MLJr3D-oYQGSdIFJ/view?usp=sharing>

## Guidelines for Abstract & Posters

Abstract : 250 words with 1.5 line spacing and corresponding author should be highlighted bold  
Font style and size : Times New Roman , 12  
Line spacing : 1.5  
Poster size : 3ft x 3 ft

**Awards: Best oral and Poster presentations will be awarded.**

## IMPORTANT DATES

**Abstract Submission** : 13<sup>th</sup> January 2025  
**Acceptance intimation** : 24<sup>th</sup> January 2025  
**Last Date for Registration** : 30<sup>th</sup> January 2025

## REGISTRATION FEE

**Faculty members** : Rs.1000/-  
**Research Scholars** : Rs.750/-  
**UG & PG Students** : Rs.400/-  
**Industrialist** : Rs.1500/-

For payment



UPI ID: sangeesai2011@oksbi

## BANK DETAILS FOR REGISTRATION

**Name** : R. Sangeetha  
**Acc. No.** : 20335164095  
**Bank Name** : State Bank of India (SBI), Madurai.  
**IFSC** : SBIN0002254  
**Branch** : Pasumalai, Madurai.

**LINK FOR REGISTRATION** <https://forms.gle/CMpQx4wXa82zogPg9>

## ORGANIZING COMMITTEE:

### Patrons

**Er. S. Rajagopal, B.E.,** President  
**Mr. M. Vijayaragavan, B.A.,** Secretary  
**Mr. R. Jeyaram, B.A.,** Vice-President  
**Ln. K. Rajendra Babu, MJE,** Asst- Secretary  
**Mr. A. Alwarsamy, M.A.,** Treasurer

### Conference Chair

**Dr. A. Ramasubbiah,** Principal

### Conference co-chair

**Mr. C. Prabhu,** Director (SF)

### Head of the Department

**Dr. S.S. Jayabalakrishnan,** Assistant Professor

### Convenor

**Dr. R. Sangeetha**  
Assistant Professor of Physics

### Co-Convenors

**Dr. G. Dhanalakshmi**  
Assistant Professor of Physics  
**Ms. N. Lakshmi Kruthika**  
Assistant Professor & Head of Chemistry

### Executive Members of the Department

**Dr. P.P. Kannan,** Assistant Professor  
**Dr. N. Venkatesh Bharathi,** Assistant Professor  
**Dr. R. Sindhan,** Assistant Professor  
**Dr. P. Hemalatha,** Assistant Professor

*For Further Details Contact*

**Dr. R.Sangeetha**

Convenor, Mobile: 9698886661  
E-mail: [icepen2025@mannercollege.ac.in](mailto:icepen2025@mannercollege.ac.in)

**Dr. G. Dhanalakshmi**

Co-Convenor, Mobile: 9940113878

**Ms. N. Lakshmi Kruthika**

Co-Convenor, Mobile: 9952828932