

# NASI Workshop on Fundamental Concepts of Energy Storage Materials (Thermodynamics Applied to Energy Storage with Esoteric Particles)

organised by

THE GANDHIGRAM RURAL INSTITUTE  
(DEEMED TO BE UNIVERSITY)

GANDHIGRAM - 624 302, DINDIGUL, TAMILNADU, INDIA

Date: 20<sup>th</sup> to 22<sup>nd</sup> - February 2025



## ABOUT THE INSTITUTE

The Gandhigram Rural Institute (GRI), founded by two dedicated disciples and contemporaries of Mahatma Gandhi, Dr. G. Ramachandran and Dr. T. S. Soundaram Ramachandran, has as its foundation Mahatma Gandhi's revolutionary philosophy of Nai Talim, which effectively bridges the cognitive and practical dimensions, and focuses on the holistic development of learners, with an emphasis on skill development through value-based education, rooted in indigenous cultures and traditions. Since its establishment in 1956, GRI has been unstintingly contributing to higher education and has successfully pioneered rural higher education. The curricular model developed at GRI organically integrating teaching, research, and extension has earned the Institute, the status of Deemed University in 1976 by UGC, the five-star status by NAAC in 2002, 'A' Grade during the reaccreditation in 2010 by NAAC and 'A' Grade in its third cycle of reaccreditation in the year 2016.

## ABOUT THE DEPARTMENT

In 1965, the Department of Physics blossomed into an independent entity and was offering Diploma in Rural Services with Mathematics and Chemistry as allied subjects with Physics as core subject. The examinations were conducted by the National Council for Rural Higher Education, New Delhi and the DRS was awarded. In 1976, the Gandhigram Rural Institute was elevated to the status of a Deemed University and the Department started offering and issuing B.Sc. Degree programme in Physics with Chemistry and Mathematics as allied subjects. Considering the need for offering the PG programme in Physics, the Department of Physics offered M.Sc. Degree programme in Applied Physics in 1987. This Degree programme was later in 1994 renamed as M.Sc. (Physics). The Department started admitting students to the Ph.D. programme in 1991 and M.Phil Degree in Physics during the academic year 2009-10 and thereafter, the Department is supported by DST-FIST Level "A" in 2016 and level "B" in 2024.

## ABOUT THE WORKSHOP

This NASI (National Academy of Sciences India) workshop is meant for motivating PG students, Research scholars and Faculties from colleges in and around neighboring districts. It is Co-sponsored by Chennai Mathematical Institute (CMI) and Institute of Mathematical Sciences (IMSc). It strives to broaden participants' understanding of Thermodynamics applied to energy storage with esoteric particles. This program is meant to help students comprehend ideas from an extensive perspective.

## INVITED SPEAKERS

- Professor H S Mani,  
Visiting Professor,  
Chennai Mathematical Institute  
Chennai  
Email: [hsmani@gmail.com](mailto:hsmani@gmail.com)
- Professor V Ravindran,  
Director,  
The Institute of Mathematical Sciences,  
Chennai  
E-Mail: [ravindra@imsc.res.in](mailto:ravindra@imsc.res.in)
- Professor S Sivakumar,  
Dean - Research  
Professor, Physics  
Krea University, Sri City, Andhra Pradesh  
Email: [sivakumar.srinivasan@krea.edu.in](mailto:sivakumar.srinivasan@krea.edu.in)
- Professor K S Gandhi,  
Dept of Chemical Engineering  
Indian Institute of Science - Bangalore.  
Email: [gandhi@iisc.ac.in](mailto:gandhi@iisc.ac.in)
- Dr.A. Basherrudin Mahmud Ahmed,  
Assistant Professor,  
Department of Theoretical Physics,  
School of Physics, Madurai Kamaraj University  
Madurai - 625021 Tamil Nadu  
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## ORGANIZING COMMITTEE

### Chief Patron

Prof. N. Panchanatham  
Vice-Chancellor  
GRI-DTBU  
Gandhigram

### Patron

Dr.L.Rathakrishnan  
Registrar i/c  
GRI-DTBU, Gandhigram

### Convener

Dr. S. ARIPONNAMMAL  
Professor and Head  
Department of Physics  
GRI-DTBU,  
Gandhigram

### Co-Convener

Dr. S. Ganesh  
Department of Physics  
GRI-DTBU

### Members

Dr.G.MURALIDHARAN  
Dr.P. VICKRAMAN  
Dr.K.MARIMUTHU  
Dr.P.NITHIANANTHI  
Dr.C.RAJA MOHAN  
Dr.G.MARIAPPAN  
Dr.T.ARUL RAJA  
Dr.C.SASIREKHA  
Dr.K.RAJARAM  
Dr.R.BABU MAREESWARAN  
Department of Physics  
GRI-DTBU

### ELIGIBILITY

- First and second year PG students with Physics as one of the major subjects.
- Research scholars and Faculties of Physics and Chemistry of GRI.

### KEY OUTCOMES

At the end of the workshop, the participants will be able to:

- Grasp Thermodynamic principles in energy storage.
- To understand these principles applied to esoteric particles.
- They can have critical knowledge skills by exploring concept.
- Build a strong foundation in energy storage.

### HOW TO APPLY

- No Registration Fee.
- For Registration, apply through the link <https://forms.gle/8WuCmM7kpxT5ktHr8>

- Lunch and refreshment will be provided for the participants.



**"Energy Saved is Energy  
Generated: Science Shapes  
Future World"**

### IMPORTANT DATES

- Submission of application : 17 February 2025
- Confirmation of selection : 18 February 2025

### SELECTION

- The list of selected candidates will be intimated through given mail ID by 19.02.2025.

### CONTACT DETAILS

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The Gandhigram Rural Institute  
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Gandhigram -624 302  
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Email: arinasicmi@gmail.com

### VENUE

Seminar Hall

Department of Chemistry  
The Gandhigram Rural Institute  
(Deemed to be university)  
Gandhigram-624302  
Dindigul,  
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### FOR QUERIES

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