

# Synthesis and Characterization of Materials for Energy Storage Devices

## Overview

This is an interdisciplinary, short-course that provides a treatment of the storage, conversion and conservation of energy using advanced materials. The course is uniquely designed for one credit and it will be divided into three themes:

- Synthesis of Advanced Energy Materials
- Surface and Structural Characterization
- Assembly of Energy Storage Devices



### You should attend if...

- you are a graduate student or an engineer interested in gaining an understanding of the fundamental elements of energy materials.
- you are a researcher/ a research scientist or a young faculty interested in applying energy materials to problems of energy storage to conservation to conversion.

## International Faculty



Prof. Timothy S. Fisher is James G. Dwyer Professor in Mechanical Engineering at Purdue University, USA. His research has included studies of nanoscale heat transfer, carbon nanomaterial synthesis, coupled electro-thermal effects in semiconductor and electron emission devices, energy conversion and storage materials and devices, microfluidic devices, biosensing and related computational methods ranging from atomistic to continuum scales. He is active in service to the American Society of Mechanical Engineers through a variety of responsibilities, and is a former Co-Editor of the journal Energy Conversion & Management and currently Specialty Chief Editor for Heat and Mass Transfer of the journal Frontiers in Mechanical Engineering. Prof. Fisher has taught a nanoHUB-U course on Thermal Energy at the Nanoscale (<https://nanohub.org/courses/TE>).

### Other Speakers

- Prof. G.U. Kulkarni (Director, Centre for Nano and Soft Matter, Bangalore)  
 Prof. Rakesh Kumar Sharma (Head of Chemistry, IIT Jodhpur)  
 Dr. Ritu Gupta (Assistant Professor, IIT Jodhpur)

## REGISTRATION DETAILS

**12 to 16 December 2015**  
 Room 2102, Academic Block-II, IIT Jodhpur

- Number of participants for the course will be limited to 50.
- Course fees includes course material and tutorials only.
- Accommodations are available at IITJ Guest House and Hostel on first come first serve basis upon payment.

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| Participants from abroad                          | US \$200 |
| Industry/ Private Organizations                   | Rs. 4000 |
| Academic Institutes and Government Organizations* | Rs. 1000 |

\* The course fee will be made half for SC/ST students.

### Course Coordinator

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For registration, log on:  
<http://www.gian.iitj.ac.in/GREGN/>