### **ABOUT THE UNIVERSITY**

Pandit Deendayal Energy University's 100 acre campus is located in Gandhinagar, which is the capital city of Gujarat and located 23 Km North from a well-developed city called Ahmedabad with a population of 8 million people. The city is famous for its remarkable cultural development and social life.

PDEU offers multiple courses ranging from engineering, arts and management along with maximum exposure and opportunities to its students through various national and International exchange programs with Best Universities worldwide. For development of its faculties and staff the University endeavors for various Joint Exchange and Research programs.

### **ABOUT DEPARTMENT OF CHEMISTRY**

Department of Chemistry provides its students with the latest scientific knowledge, technology, innovative mind thinking approach and guidance which they embark upon in their careers. Our department believes in nurturing the students, and helping them to develop advanced skills to be life-long learners in their respective fields.

The department offers various undergraduate, and postgraduate courses in Chemistry. Also, it is highly active in the diverse areas of research (specialized and interdisciplinary areas).

Consisting of highly skilled faculty and equipped with high profile instruments, the department puts great efforts in bringing out the best out of its students.

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## **HIGHLIGHTS OF WORKSHOP**

- Hands-on training on synthesis of nanomaterials
- Understanding of the synthetic aspects
- Informative sessions on Various synthetic approaches
- Characterization of synthesized nanomaterials
- Certificate of training will be awarded on successful completion of the workshop



## **Organizing Committee**

Patron : Prof. Sundar Manohoran

(Director General)

Vice Patron : Prof. Sunil Khanna

(Director School of Technology)

Chairman: Prof. Rajib Bandyopadhyay

(Head, Department of Chemistry)

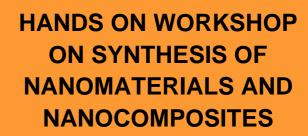
Coordinator(s): Dr. Rama Gaur

Dr. Syed Shahabuddin

Lab Coordinators: Dr. Vasudev Trivedi

**Student Coordinators: Hardik Koshti** 

Krunal Parekh



01 FEB - 05 FEB 2022

M.Sc. & Ph.D. students, professionals working in industry and any other interested individuals can

apply



### **CONTACT US**

COORDINATORS DR. RAMA GAUR

rama.gaur@sot.pdpu.ac.in; +079-2327 5356,

DR. SYED SHAHABUDDIN

syed.shshabuddin@sot.pdpu.ac.in; +079 2327 5338

LIMITED SEATS (20 PARTICIPANTS ONLY)

ORGANIZED BY
DEPARTMENT OF CHEMISTRY
SCHOOL OF TECHNOLOGY
PANDIT DEENDAYAL ENERGY UNIVERSITY

Gandhinagar, Gujarat-382426 INDIA

www.pdpu.ac.in



# **Program Schedule**

#### **DAY 1:**

- Registration & Inaugural
- Overview of the program and Interaction with the participants
- Introduction to Nanomaterials and Nanotechnology Engineering at the Nanoscale
- Synthetic approach for the synthesis of nano-based materials
- Hands on Session on Synthesis of metal/metal sulfide nanoparticles by Wet Chemical Approach

#### DAY 2:

- Size and shape dependent properties of nanomaterials
- Characterization techniques for the analysis of synthesized nanoparticles
- Role of solvent and reagents in nanoparticle synthesis
- Hands-on session on synthesis of metal oxide nanoparticles by sol-gel route

#### DAY 3:

- Strategies for developing high performance functional material
- Synthesis and application of zeolite as a functional material
- Demonstration on synthesis of zeolite by hydrothermal approach
- Hands on session on synthesis of zeolites by hydrothermal thermal approach

#### DAY 4:

- FT-IR and UV-Vis analysis of the synthesized nanoparticles
- Synthesis and application of mesoporous nanomaterials
- Hands-on session on synthesis of mesoporous nanomaterials

#### DAY 5:

- Photocatalysis: An effective tool for degradation of organic pollutants
- Hands on session on synthesis of conducting polymer based nanocomposite
- Group Discussion
- Closing Ceremony & Certificate Distribution





The workshop envisions to train the PG students and PhD scholars about the insights to the synthesis of nanomaterials and make them future ready for contributing as a material chemist.



# Aim of the workshop

This workshop will be an exploration of the world of nanotechnology to faculties, research scholars and students. The participants will be equipped with useful knowledge of the design, processing, properties, and application potentials of the broad range of nanomaterials and nanocomposites, emphasized through hands - on lab sessions. Participants will learn about the various synthetic routes for the preparation of an array of nanoscale materials and their functional composites. The lectures and hands-on sessions will be given by renowned experts and Faculty of PDEU who are active in the nanotechnology research area.



## **Registration Details**

Open to all the academicians, researchers, scholars and students

REGISTRATION FEE:

: Rs. 2500/-Students Academician & Staff : Rs. 4000/-Industry Delegates & Others : Rs. 5000/-

Registration fees includes workshop materials, certificate of participation, breakfast, high tea and lunch.

Accommodation to out-station participants will be provided on payment basis and first-cum basis

Certificates will be provided



- Dr. Sudhanshu Sharma (IIT Gandhinagar)
- Prof. Rajib Bandyopadhyay (PDEU)
- Dr. Swapnil Dharaskar (PDEU)
- Dr. Mahuya Bandyopadhyay (IITRAM)
- Dr. Manu Sharma (Central University of Gujarat)
- Dr. Syed Shahabuddin (PDEU)
- Dr. Rama Gaur (PDEU)





## **Link for Payment**

https://onlinepayment.pdpu.ac.i n/conferences/

Scan the QR code for payment

## Link for Registration

https://forms.gle/Bg3FcjiUKZ8L HffP9

Scan the QR code for registration



Last date for Registration: 30th January 2022