



विज्ञान एवं प्रौद्योगिकी मंत्रालय MINISTRY OF SCIENCE AND TECHNOLOGY

# Hands-on Workshop on Advanced Characterization of Nanomaterials

Supported by

Department of Science and Technology, New
Delhi
23<sup>rd</sup>-24<sup>th</sup> September 2023
Organised by



School of Nano Sciences &
Central Instrumentation Facility (CIF)
Central University of Gujarat

Convenor **Dr. Charu Lata Dube** 

Co-Convenor

Dr. Hitesh Kulhari

Dean: Prof. Pallavi Sharma

## **About Central University of Gujarat**

The Central University of Gujarat (CUG) was established by Parliament of India through the Central Universities Act (2009). The primary objectives of CUG are dissemination and advancement of knowledge by providing instructional and research facilities in various branches of learning, making special provisions for integrated courses in humanities, social sciences, science and technology in educational programmes, taking appropriate measures for promoting innovations in teaching-learning methods and interdisciplinary training and research, educating and training human resource for the country's development, establishing academic-industries partnership to promote advancements in science and technology, paying special attention to the improvement of social and economic conditions and welfare of the people, especially pertaining to their intellectual, academic and cultural development.

#### **About School of Nano Sciences**

School of Nano Sciences (SNS) was earlier established as Centre for Nano Sciences in 2012. Later, it was upgraded to School of Nano Sciences in 2016. The thrust area of research at SNS are energy storage devices, rechargeable batteries, glasses for energy applications, advanced nanomaterials for environmental applications, drug delivery and nanomedicines, nanomaterials for catalysis, water purification, biosensors.

### **About Central Instrumentation Facility (CIF)**

The CUG has established CIF for catering research needs of all the School working towards sciences. It includes P-XRD, SC-XRD, AAS, CHNS/O, HPLC, GC, LC/MS-QTOF, FTIR, BET, ICP-OES, Spectroscopic Ellipsometer, FT-NMR, DLS, SEM, SECM, AFM, ESCA, Ozonolysis, HR-TEM, TG/DTA, GPC, Potentiostat, UV-Visible Spectrophotometer, Porosimeter, Polarimeter, TOC, FACS, PCR RT-PCR, MALDI-TOF, Confocal Laser Scanning Microscope, Fluorescence microscope, DNA Sequencer, FPLC.

# Overview of the program

The main theme of this workshop is to familiarize the participants with characterization techniques such as XRD, NMR, AFM, TG/DTA etc. The workshop includes theory lectures (hybrid mode) as well as demonstration/hands-on training session (offline mode).

#### **General Instructions**

This hands-on workshop is funded by DST. The registration is free. Faculties from **state of Gujarat (only)** can register. TA by public transport will be provided. Accommodation will be provided on first come first serve basis.

## Registration

To register for the training program, fill google form.

Google form link: https://forms.gle/h3y3CU7PAvmBBhbD6

Contact person: Dr. Charu Lata Dube; Email: charulata.dube@cug.ac.in



PATRON

Prof. Rama Shankar Dubey (Hon. Vice Chancellor)



CHAIR
Prof. Pallavi Sharma
(Professor and Dean (I/C))

# **Expert Lectures**

- **Dr. Asha Bhardwaj,** Assistant Professor, Department of Instrumentation and Applied Physics, Indian Institute of Science (IISc), Bangalore.
- **Dr. Dheeraj Kumar Singh,** Associate Professor, School of Nano Sciences, Central University of Gujarat (CUG), Gandhinagar.
- Dr. Umesh Kumar, Associate Professor, Department of Nutrition Biology, School of Interdisciplinary and Applied Life Sciences, Central University of Haryana (CUH), Mahendergarh.
- **Dr. Pawan Kumar Kulriya,** Associate Professor, School of Physical Sciences, Jawaharlal Nehru University (JNU), New Delhi.
  - **Dr. Panchami Prabhakaran,** Assistant Professor, School of Chemical Sciences, Central University of Gujarat (CUG), Gandhinagar.
- **Dr. Arvind Ananthanarayanan,** Process Development Division, Nuclear Recycle Group, Bhabha Atomic Research Centre (BARC), Mumbai.
- **Dr. Deepak Verma,** Associate Professor, School of Nano Sciences, Central University of Gujarat (CUG), Gandhinagar.