# UNIVERSITY OF ALLAHABAD, PRAYAGRAJ



**Organizes** 

One week Training Program on DST supported

# **Advanced Research Instruments**



Under STUTI Program, Department of Science & Technology (DST), Govt. of India



### **Chief Patron Prof. Sangita Srivastava**

Vice-Chancellor UoA, Prayagraj

#### **Patron**

Prof. Shekhar Srivastava Director, IIDS UoA, Prayagraj

## **PMU Coordinator** Prof. B.P. Singh

AMU-Aligarh

# **Prof. Ravindra Dhar** Centre of Material Sciences UoA, Prayagraj

**Coordinator** 

#### **About the University**

University of Allahabad is the fourth oldest University of India. The years since its foundation in 1887 have been marked by landmark achievements in the domain of learning and an abiding commitment to high academic standards, cultivation of values and the search for excellence and perfection. Presently, the University has departments arrayed in four faculties, namely Arts, Commerce, Law and Science. The University maintains two Institutes, namely the Institute of Interdisciplinary Studies (IIDS) and the Institute of Professional Studies (IPS). IIDS is composed of different centres imparting teaching and research in cutting edge interdisciplinary areas. Centre of Material Sciences is a part of IIDS working in the area of Synthesis, Characterization and Engineering of Materials. These Departments/Centres offers research, post graduate and graduate programmes as well as Diploma and Certificate courses. Some Departments/Centres offer professional courses as well at the graduate level.

#### **About the Centre of Material Sciences**

The "Centre of Material Sciences" came into existence in 2009. Main aim of the centre is to train the student at Master level and to carry out high end research in the interdisciplinary areas to cater the present high tech need of the society. Faculty members of Centre are well trained from reputed research and teaching organizations of the country and abroad. Centre has been awarded "FIST" grant from Department of Science & Technology, India in 2017. In a sort span of time, Centre has progressed many steps. Centre has got several projects from DST, BRNS, DAE, UGC and DIT. Several research papers have been published in reputed international journals in collaboration with National and International institutes.

#### Highlights of the STUTI program

The training program being organized from August 23 to 29, 2022 (Seven Days) at the UoA under the "Synergistic Training program Utilizing the scientific and Technological Infrastructure (STUTI)" supported by the Department of Science and Technology (DST), Government of India. The scheme intended to create human resource and its capacity building through open access to S&T Infrastructure across the country. It envisions a hands-on training and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access of S&T facilities. Moreover, it will enable the budding researchers and the professionals to develop better understanding and familiarization with the available resources/scientific equipment supported by the Govt. of India.

#### Topics to be covered

The training programme includes lectures on the: Introduction to Materials/ Nanomaterials; **Synthesis** and advanced characterization techniques; Tuning of physical properties of materials; Liquid crystal materials: Measurements and characterization tools; Interaction of radiation with matter; Fundamentals of characterization techniques. The programme also includes hand-on-training on: Synthesis of Nanomaterials; Xray diffractometer (XRD); Thermal Analysis System; High temperature resistivity setups; Polarized light microscope; Impedance analyzer and IR spectrometers etc.

#### **Objectives**

- To introduce the participants with the better understanding and familiarization with the available resources/scientific equipment supported by the Govt. of India.
- > To provide the participants with the knowledge of cutting-edge research in the fields of materials science and nuclear physics.
- > To introduce and demonstrate the participants with the qualitative and quantitative characterization tools needed in designing and implementing appropriate strategies for research work.
- > To provide the participants with a comprehensive knowledge of the various tools and techniques needed to characterize the materials.
- To equip the participants with skills required to operate sophisticated analytical instruments which are imperative for scientific research.

### **PROGRAM FACULTY**

Lectures / Training will be provided by the eminent subject experts/faculty members

### **ELIGIBILITY**

Assistant Professors / Associate Professors/ Professors /Scientists /Post-Docs, Research Fellows and Ph.D. students actively involved in the field of Basic/Allied sciences or engineering are eligible.

#### REGISTRATION PROCESS

E mail\* duly recommended application with following details. Selected candidates will be provided free local hospitality (fooding & lodging in Hotel/Guest House) for attending the course.

### No Registration Fee

Registration Deadline: August 15, 2022

Notification of selected candidate: August 16, 2022 Duration of course: August 23 - 29, 2022

Mode of Training Programme: Offline (30 seats)

For further queries, feel free to contact us on \*Email: prof.ravindra.dhar@gmail.com

### **REGISTRATION FORM**

- Name:
- Designation: University/Institute:
- Gender (M/F):
- Mailing Address:
- Mobile no.:
- E-mail Id:

Dr. Brajendra Singh

**ORGANIZING COMMITTEE** 

**Dr. Prashant Dubey** 

Dr. Manoj Kumar Singh:

Dr. Rajiv Giri

Outstation participants will be given TA up to a maximum of AC 3T for the shortest route.