



## Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI)

### A One Week Training Program on Characterization using sophisticated Instruments (STUTI-CSI-2022)

**8- 14<sup>th</sup> Aug 2022**

#### Call for Registration and Participation

##### Chairmen

**Prof. P. M. Padole,**  
Director, VNIT Nagpur

&

**Prof. N. V. Ramana Rao,**  
Director, NIT Warangal

##### Co-Chairman

**Prof. (Mrs.) M. A. Chaudhari**  
Dean (R&C), VNIT Nagpur

&

**Prof. V. Rajeswar Rao,**  
Dean (R&C), NIT Warangal

##### Coordinators

**Prof. (Mrs.) Anupama Kumar**  
Professor, Head, VNIT, Nagpur

&

**Dr. Susanta K. Nayak**  
Assistant Professor, VNIT, Nagpur

##### Organized by the

Visvesvaraya National Institute of Technology (VNIT), Nagpur (SPOKE)

&

National Institute of Technology, Warangal (HUB)

##### In Association with the

DST, STUTI

#### Overview of the STUTI program:

The role of Science and Technology is pivotal for the evolution of mankind. The program being organized as part of Azadi Ka Amrit Mahotsav consists of both theory as well as hands-on experience with various instruments, supported by DST. The uniqueness of the program includes a minimum of four hours of theory and the remaining 50% of the duration is on practical training on the equipment.

The effort would be made for hands-on use of equipment for demonstration/characterization by each participant. The program's aim is to promote research collaborations to the maximum extent. Characterization techniques have almost become an essential tool for all type of materials. It has made quantum leaps in the last decade, being a powerful field in physics, chemistry, material science, biology, and medicine.

The STUTI DST-supported training program is aimed to impart basic principles and advanced knowledge related to the basic sciences and open new vistas for students. The science awareness program provides a platform for interaction and exchange of innovative ideas on current trends in the fields of Science and Technology, with talks by eminent people on this relevant field.

#### Objectives of the Training Program:

- To enable the participants to understand the principles and applications of Powder X-Ray Diffraction (PXRD), BET, GC-MS, UV-Vis-DRS Spectrophotometer, HPLC, Polarized optical microscope (POM) with hotstage, Electroanalytical techniques like DPV and Electrochemical Impedance spectroscopy.
- To impart hands-on experience on above mentioned instrumental techniques.

#### Topics to be covered:

- This program will focus on the effective teaching and learning of experiments on PXRD, POM with Hot-stage, BET, GC-MS, UV-Vis-DRS Spectrophotometer, CV, DPV and EIS, FTIR and HPLC for characterization and interpretations of sample analysis.

#### Resource Persons:

Eminent Faculty from NEERI, and faculty from VNIT Nagpur

#### Mode of Delivery:

Resource persons will deliver the lectures physically and hands-on sessions through physical mode.

The essence of this program is to improve the teaching ability of the faculty and enable learners to learn. The theme of the program is a way in building capacity of making better faculty or researcher or scientists. Lectures will be delivered through presentation, discussion and hands-on sessions. Ultimate goal of this event is to develop the faculty members/ research scholars/ scientists/ PDFs in the new pedagogy and emerging areas of science and technology.

**Venue: VNIT, Nagpur**

#### Important Instructions:

- ❖ **Not more than 3 people from one institution for this training program are allowed.**

Visvesvaraya National Institute of Technology (VNIT)

Nagpur-440010, Maharashtra



विज्ञान एवं प्रौद्योगिकी विभाग  
DEPARTMENT OF  
**SCIENCE & TECHNOLOGY**

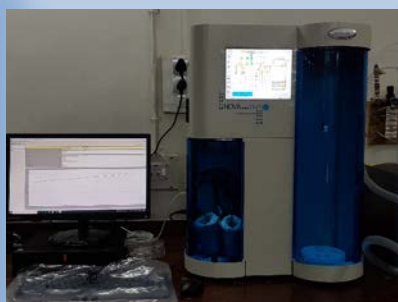
**75**  
Azadi Ka  
Amrit Mahotsav

# Sophisticated Instruments List at the Department of Chemistry, VNIT Nagpur for this training program

PXRD



BET



GCMS



UV-Vis-DRS



HPLC



## About VNIT, Nagpur:

Visvesvaraya National Institute of Technology (VNIT), Nagpur is one of the thirty National Institutes of Technology in the country. It is an Institute of National Importance, named after Bharat Ratna Sir M. Visvesvaraya. Earlier, the Institute was known as Visvesvaraya Regional College of Engineering (VRCE). It was established in the year 1960 under the scheme sponsored by Govt. of India and Govt. of Maharashtra and currently offering graduate, postgraduate and research programs in interdisciplinary areas of science and technology leading to B.Tech., M.Sc, M.Tech. and Ph.D. degrees.. The vision of institute is to contribute effectively to the national endeavour of producing quality human re-source of world class standard by developing a sustainable technical education system to meet the changing science and technological needs of the country incorporating relevant social concern and to build an environment to create and propagate innovative technologies for the economic development of the nation.

## About NIT Warangal:

National Institute of Technology Warangal, formerly known as Regional Engineering College, was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 14 Departments offering eight undergraduate and 31 post-graduate programs besides doctoral programmes. About 5000 students across the country and about 500 international students study on the campus. It is a fully residential campus spread across 250 acres with excellent infrastructure in the form of state of the art library, seminar halls, guest houses and research laboratories

FTIR



POTENTIOSTAT



POM with Hot-stage



Register before: 1<sup>st</sup> Aug 2022

[Call for Registration and Participation](#)

## Eligibility Criteria:

Persons of Indian origin, Faculty / Scientists / Post-Doc Fellows / Ph.D. Fellows / Industry Persons / M.Sc. students/ MTech. students who are actively involved in research and development (R&D) in the fields of Chemistry, Physics, Instrumentation, or any relevant area.

No Registration Fee

Scan to Register



## How to Apply:

Eligible applicants are required to **fill in the prescribed BIODATA format** attached herewith this Brochure/Registration site/link and **get it endorsed by the concerned head of the institute with a seal**. The applicants are required to **upload the same at the appropriate field in the link below**.

<https://forms.gle/mimk1qZC38hfLmTs6>

Shortlisted candidates will be informed through mail. Only the non-local participants are eligible for boarding/lodging at VNIT on a double sharing basis subject to availability. For domestic travel of participants, the reimbursement for train/bus ticket is allowed as per actual (For outstation participants only).

### Steering Committee:

Dr. Suresh S. Umare, Professor (HAG)

Dr. Jayant D. Ekhe, Professor and Dean (P&D)

### Local Organizing Committee:

Dr. Sujit K. Ghosh

Dr. Chayan Das

Dr. Ramani V. Motghare

Dr. Atul V. Wankhade

Dr. Umesh R. Pratap

Dr. Sangesh P. Zodape

Dr. S. Laxmi Gayatri

Dr. Abhishek Banerjee

Dr. Sandipan Halder

### About Department of Chemistry, VNIT Nagpur

Department of Chemistry is one of the oldest departments in the Institute, which has been serving to cater to the needs of UG and PG level students of sciences and engineering discipline of various branches, in the field of chemistry and it also actively engaged in R&D work in different areas of science and technology. The department has been successful in obtaining many R&D projects funded by different funding agencies such as DST, SERB, MHRD, UGC, BRNS, CSIR and/or others. More than fifty Ph.D. degrees have been awarded from the department so far while around twenty eight students are currently pursuing their research work for the Ph.D. Degree. The department has also been involved in Continuing education programs such as STTP courses, seminars and conferences. Since 2017 the Department has had an unique distinction to be a DST-FIST Sponsored Department with well equipped laboratories with some of the modern instrumental facilities.

**Program Dates: 8<sup>th</sup>- 14<sup>th</sup> August 2022**

**Venue: VNIT, Nagpur**

### Contact Us:

#### Coordinators (VNIT)

**Dr. Anupama Kumar**

*Professor & Head,*

*Department of Chemistry, VNIT, Nagpur*

*Email:- anupamakumar@chm.vnit.ac.in*

**&**

**Dr. Susanta K. Nayak**

*Assistant Professor,*

*Department of Chemistry, Nagpur*

*Email:- sknayak@chm.vnit.ac.in*

#### Co-coordinator (NITW):

**Mr. Harish Madupu, Technical Officer, CRIF,**

*NITW Mob: 7010881253*

*e-mail: office\_stuti@nitw.ac.in*

### Organized by

**Visvesvaraya National Institute of Technology Nagpur (Spoke), NIT Warangal (Hub)**



विज्ञान एवं प्रौद्योगिकी विभाग  
DEPARTMENT OF  
**SCIENCE & TECHNOLOGY**

**Funded by**

**DST, Govt of India**



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Azadi Ka  
Amrit Mahotsav



### Note:

The shortlisted candidates will be intimated through mail. All the selected participants have to submit the uploaded bio-data form physically for the confirmation of participation.

Non-local participants are eligible for boarding/ lodging at VNIT on single/double sharing basis subject to availability of accommodation.

For domestic travel of participants, the reimbursement for train/bus tickets is allowed as per actual up to 3AC fare (for outstation participants only).



सत्यमेव जयते



## **BIODATA FOR (STUTI-CSI-2022)**

Synergistic Training program Utilizing the Scientific and Technological Infrastructure (STUTI)  
A One Week Training Program on Characterization using sophisticated Instruments (STUTI-CSI-2022)

**VNIT, Nagpur (SPOKE)**

**VNIT Warangal (HUB)**



<b>NAME (Prof./Dr./Mr./Ms.)</b>	
<b>DESIGNATION</b>	
<b>NAME OF ORGANIZATION</b>	
<b>Date of Entry in Service</b>	
<b>CATEGORY (GENERAL / SC / ST / OBC)</b>	
<b>DATE OF BIRTH</b>	
<b>SEX (M/ F)</b>	

<b>Complete Address (Office)</b>	
<b>Complete Address (Residence)</b>	

<b>Contact Details</b>	<b>Phone (O)</b>	<b>Phone(R)</b>	<b>Mobile No.</b>	<b>Email</b>

<b>EDUCATIONAL / PROFESSIONAL QUALIFICATIONS (GRADUATION ONWARDS)</b>					
Sr. No.	EXAMINATION/ DEGREE	UNIVERSITY/ INSTITUTE	YEAR	SUBJECT	DIVISION/ PERCENTAGE OF MARKS

<b>EXPERIENCE</b>					
Sr. No.	NAME OF THE ORGANISATION	DESIGNATION	FROM	TO	DUTY PERFORMED

<b>TRAINING ATTENDED</b>				
Sr. No.	YEAR	NAME OF THE TRAINING PROGRAMME	NAME OF THE INSTITUTE	DURATION

<b>PAPER PUBLISHED / PATENT FILED/OBTAINED</b>				
<b>Sr. No.</b>	<b>YEAR</b>	<b>TOPIC OF PAPER/ BOOK</b>	<b>GIST OF PAPER</b>	<b>NAME OF JOURNAL/ MAGZINE/ PUBLISHER</b>

**Briefly give details of significant contribution made by you in the field of Science & Technology during your career. (100 words)**

**Date:**

Name & Signature of the Participant

**Place:**

(Head of the Institution)