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Azadi Ka
Amrit Mahotsav



विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

Warangal - 506 004, Telangana

Synergistic Training Program Utilizing the Scientific and
Technological Infrastructure (STUTI)

Call for Registration and Participation Training Program on R&D Equipment

Theme: Modern Spectroscopic, Thermal and Microscopic Techniques

Program Dates: 21st -27th September 2022

Venue: Defence Institute of Advanced Technology, Pune



Register before:
10th September 2022

Scan to Register

No Registration Fee

Click to Register: <https://forms.gle/2ELz1icDhpRuPoG86>

Objectives of the Program:

- To enable the participants to understand the principles, applications, and hands-on experience on sophisticated analytical instruments.
- To gain knowledge about the in-depth analysis of the characterization techniques using high-end analytical instruments.
- To interact with eminent professors/scientists/ industrial research personnel and discuss real-time research and make collaborations.
- To encourage the participants to utilize the facilities and enhance the research temper.
- To create a research-friendly atmosphere by letting the creative minds of the country exchange ideas and share their knowledge among their fellow participants.

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.

Important Instruction:

Fill in the prescribed bio-data form attached with this brochure and get it endorsed by the head of the institution. And keep the scanned copy ready, which needs to be uploaded during registration.

Organized by

Defence Institute of Advanced Technology, Pune (Spoke), NIT Warangal (Hub)

Funded by DST, Govt of India

Instruments covered under training:

NMR	DSC	XRD	HPLC
Gas Chromatography	PSA	SEM	TGA-FTIR
Flash Chromatography	MFM	FTIR	UV
Thermogravimetric Analyser	Fluorescence		

About Defence Institute of Advanced Technology, Pune:

The Defence Institute of Advanced Technology, (DIAT) is premier Deemed-to-be University under section 3 of UGC act funded by DRDO. The Institute, a premier autonomous educational entity, equipped with modern laboratories, well-qualified faculty members, is engaged in post graduate education and research leading to M.Tech and Ph.D degrees. At DIAT, to meet the needs of Armed Forces, DRDO, Defence Quality Assurance, Ordnance Factories, Directorate of Aeronautical Quality Assurance, and other Public Sector undertakings many specialized / customized PG courses are conducted. NIRF-2022 ranking of DIAT is 71 in Engineering category.

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, 35 post-graduate programs and guiding 952 PhD scholars besides post-doctoral programs. About 6864 students across the country including 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.

STUTI Team:

Patrons:

Dr. C.P. Ramanarayanan

Vice Chancellor, DIAT, Pune

Prof. N. V. Ramana Rao,

Director, NIT Warangal

Chairman

Prof. V. Rajeswar Rao,

Dean (R&C), NIT Warangal

Principal Investigator

Prof. N. Narasaiah,

Dept. of Metallurgical and Material Engineering, NIT Warangal

Convener

Prof. Pawan K. Khanna

Director School of Materials & Chemical sciences, DIAT, Pune

Coordinators

Dr. Shaibal Banerjee

Associate Professor, DIAT, Pune

Dr. T K Sai,

Principal Scientific Officer, CRIF, NITW & Co-PI, STUTI

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

Contact Us:

office_stuti@nitw.ac.in

Dr. T U Patro

Programme Coordinator
DIAT, Pune

About STUTI:

The Scheme 'Synergistic Training program Utilizing the Scientific and Technological Infrastructure' (STUTI) is intended to build human resource and its knowledge capacity through open access S&T Infrastructure across the country. As a complement to the various schemes of DST funding for expansion of R&D Infrastructure at academic institutions, STUTI scheme envisions a hands-on training program and sensitization of the state-of-the-art equipment as well as towards sharing while ensuring transparent access of S&T facilities.

400 MHz Nuclear Magnetic Resonance Spectrometer:

Make: Bruker

Model: Ascend 400

Applications: Characterization of Organic, Organometallic Compounds, Monitoring Reaction



Differential Scanning Calorimeter:

Make: NETZSCH

Model: DSC 204 FI Phoenix

Applications: To measure various thermal properties of materials such as Tg, heat capacity, melting temperature etc.

X-Ray Diffraction Spectrometer:

Make: Proto Manufacturing

Model: Proto AXRD

Applications: Identification of unknown crystalline materials.





HPLC Chromatography:

Make: HITACHI (HPLC)

Model: L-2490

Applications: To purify individual constituents from mixture

Thermogravimetric Analyser-FTIR:

Make: Perkin Elmer

Model: STA 8000

Applications: Thermal Analysis of Compounds

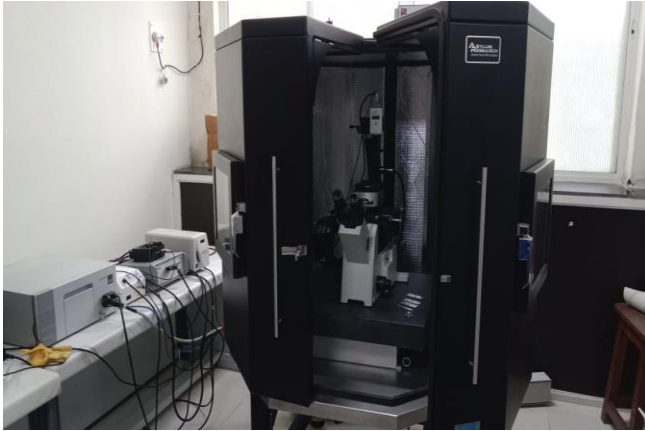


Flash Chromatography:

Make: Agela Technology

Model: MP200

Applications: To purify individual constituents from mixture



Magnetic Force microscopy (MFM)

Make: Oxford Instrument

Model: VFM3

Applications: To image various magnetic structures including domain walls, closure domains, recorded magnetic bits, etc.

GAS Chromatography:

Make: Thermo Scientific

Model: Trace GC700

Applications: To purify individual constituents from mixture



Thermogravimetric Analyser

Make: Perkin Elmer

Model: STA-6000

Applications: Thermal Analysis of Compounds

Fluorescence Spectrophotometer:

Make: AGILENT

Model: G9800A

Applications: For compound/material characterization





UV Spectrophotometer:

Make: Analytica Jena

Model: SPECORD 210

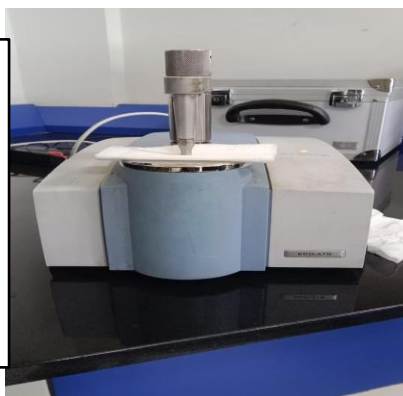
Applications: For compound/material characterization

FTIR Spectrometer:

Make: BRUKER

Model: ALPHA

Applications: For compound/material characterization



Particle Size Analyser:

Make: Sympatec

Model: Nanophox

Applications: To measure the size of ultra fine particles

Scanning Electron Microscope:

Make: Zeiss

Model: Sigma

Applications: High-resolution images of shapes of objects (SEI) and chemical compositions



BIODATA FOR STUTI-21 DST TRAINING PROGRAM

NAME Prof./Dr./Mr./Ms.																		

DESIGNATION																		
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ORGANIZATION																		

DATE OF ENTRY IN SERVICE																		
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CATEGORY (GENERAL / SC / ST / OBC)																		
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DATE OF BIRTH																		
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SEX (M/ F)		
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COMPLETE ADDRESS (OFFICE)																		

COMPLETE ADDRESS (RESIDENCE)																		

CONTACT DETAILS	PHONE (O)	PHONE (R)	MOBILE No.	E-MAIL

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

EXPERIENCE					
Sr. No.	NAME OF THE ORGANIZATION	DESIGNATION	FROM	TO	DUTY PERFORMED

TRAINING ATTENDED				
Sr. No.	YEAR	NAME OF THE TRAINING PROGRAMME	NAME OF THE INSTITUTE	DURATION

RESEARCH EXPERIENCE				
Sr. No.	YEAR	TOPIC OF RESEARCH	SPONSORING AGENCY	GIST OF RESEARCH

PAPER PUBLISHED / PATENT FILED/OBTAINED				
Sr. No.	YEAR	TOPIC OF PAPER/ BOOK	GIST OF PAPER	NAME OF JOURNAL/ MAGAZINE/ PUBLISHER

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

Date:
Place:

(Signature of the Participant)

(Head of the Institution)