



ACHARYA NAGARJUNA UNIVERSITY
ఆచార్య నాగార్జున విశ్వవిద్యాలయం
Accredited by NAAC with 'A' Grade



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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: Hands on training on drug discovery & formulation development
using R& D instruments / equipment

Program Dates: 15th – 21st April 2023

Venue: Acharya Nagarjuna University, Guntur



Register before: 07th April 2023



**Scan to
Register**

No Registration Fee

Click to register: <https://forms.gle/k4pXQYvkwnVWT7v66>

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:

Faculty / Scientists / Post-Doc Fellows / Ph.D. Fellows / Industry Persons / M.Sc. students/ M.Tech. Students who are actively involved in research and development (R&D) in the fields of Chemical Sciences, 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
Acharya Nagarjuna University, Guntur (Spoke)
NIT Warangal, Telangana (Hub)

Funded by
DST, Govt of India

About Acharya Nagarjuna University:

Acharya Nagarjuna University was established in 1976 and has been constantly striving towards achieving progress and expansion during existence for three decades. It was inaugurated on 11-9-1976 by the then President of India Dr. Frakruddin Ali Ahmed. University was named after the famous Buddhist scholar, Philosopher Acharya Nagarjuna who was regarded as the Second Buddha. University was spread over about 300 acres of land on the National high way (NH-16) between Vijayawada and Guntur in Andhra Pradesh with campus student strength of over 5000. The university offers UG (Professional), PG and Ph. D programmes spread over 6 campus colleges. University was accredited by NAAC 'A' grade.

A.N.U College of Pharmaceutical Sciences was established during the academic year 2010-2011 with a plinth area of around 50000 sq. ft and construction cost of 7.50 crores. The college offers both B. Pharm and M. Pharm which are approved by AICTE and PCI, New Delhi & NRIF ranked institution.

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:

Patron

Prof. Raja Sekar Patteti,
Vice-Chancellor, Acharya Nagarjuna University

Chairman

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

Co-Chairman

Prof. Somasekhar V. T.,
Dean (R&C), NIT Warangal

Convenor

Sri S Goverdhan Rao
Registrar, NIT Warangal
Prof. A. Prameela Rani,
Principal, Acharya Nagarjuna University (CPS)

Principal Investigator

Prof. N. Narasaiah,
Dept. of MME, NITW & PI, STUTI

Co-Principal Investigator

Dr. T K Sai,
Principal Scientific Officer, CRIF, NITW & Co-PI, STUTI

Program Coordinators

Smt. GSR Sanjeevini,
Technical Officer, CRIF, NIT Warangal
Dr. D. Ravisankar Reddy, Dr. U. Annapurna,
Dr. Sk. Masthanamma, Dr. K. Sujana,
Dr. M. Gayathri Ramya, Dr. P. Ravi,
College of Pharmaceutical Sciences, Acharya Nagarjuna University

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 **Acharya Nagarjuna University, Guntur** on double 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:

Smt. GSR Sanjeevini ,
Technical Officer, NIT Warangal
office_stuti@nitw.ac.in

Dr. K. Sujana,

Asst. Prof, Acharya Nagarjuna University (CPS)

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.

Instruments covered for training:

UV-VISIBLE SPECTROPHOTOMETER

Multiskan FC Micro Plate Photometer

MICROWAVE SYNTHESIZER

TABLET DISPENSER (DISSOLUTION APPARATUS)

LMDV VISCOMETER

Biopac (Data Acquisition System)

HPLC

MINI TABLET PRESS

REFRIGERATED CENTRIFUGE

HOMOGENISER

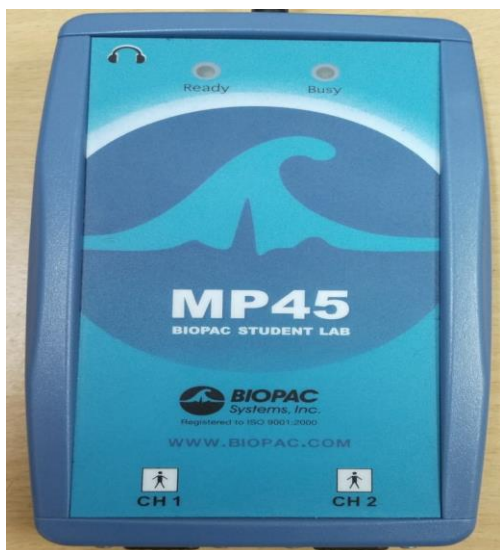
Equipment Name: UV-VISIBLE SPECTROPHOTOMETER

Make: Shimadzu

Model: UV-1800

Application: It is used for the determination of impurities in organic molecules.

It is useful in the structure elucidation of organic molecules, the presence or absence of unsaturation, the presence of hetero atoms



Equipment Name: Biopac (Data Acquisition System)

Make: BIOPAC Systems, Inc.

Model: MP45

Application: Used to measure physiology anywhere, anytime. Used to record and analyze ECG, EEG and EMG data. Used for animal analysis like Gastric wave analysis, pressure volume loop analysis, Blood pressure, sleep analysis. Also used to check the potency of a drug by using Bioassays (invitro)

Equipment Name: HPLC

Make: Agilent Technologies

Model: 1200 Infinity series

Application: HPLC is commonly used for the separation and analysis of non-volatile compounds.

It is used in tablet dissolution study of the pharmaceutical dosage form.



Equipment Name: Multiskan FC Micro Plate Photometer (FIST)

Make: Thermo Scientific

Model: FSP 120-AAAN3

Application: Used to Perform a Quantitative ELISA Assay to Detect Human TNF-a, Detection of Bacterial Endotoxins, Immunochemical determination of 17 β -estradiol from bovine urine samples, An Easy Determination of the Antioxidant Power of Beverage Samples

Equipment Name: MICROWAVE SYNTHESIZER

Make: CATALYST SYSTEMS

Model: CATA-2 R

Application: Microwave assisted organic synthesis exploits dielectric volumetric heating as an alternative heat source, which results in faster and more selective reactions due to uniform heat distribution and for the synthesis of organic compounds with in low time and high yield.





Equipment Name: MINI TABLET PRESS

Make: Riddhi

Model: CT-5000

Application: The tablet press system is very valuable in the pharmaceutical industry.

It is mainly used for manufacturing a wide range of tablets in a uniform format from various materials such as powder moulded and many others.

The finely ground powder is filled in between the cavities created by the punches and dies during the tablet formation process, and then the fists are pushed together with great force.

Equipment Name: TABLET DISPENSER (DISSOLUTION APPARATUS)

Make: LABINDIA

Model: DS8000

Application: Dissolution testing evaluated critical parameter such as

- 1) Predict adequate bioavailability
- 2) Help to avoid batch to batch variation
- 3) QC and IPQC test.
- 4) Selection of best formulation & comparison of excipient effect on dosage form
- 5) In vivo - in vitro co-relation



Equipment Name: REFRIGERATED CENTRIFUGE

Make: THERMOFISHER SCIENTIFIC

Model: SORVALL ST8R

Application: Refrigerated centrifuges are used to separate samples of different densities while under a consistent range of temperature. As such, it is essential that this kind of laboratory centrifuge run at maximum speeds while still maintaining a consistent level of temperature. Most refrigerated centrifuges maintain and control temperatures ranging anywhere between -20 and -40 degrees Celsius.



Equipment Name: LMDV VISCOMETER

Make: LABMAN

Model: LMDV-200

Application:

1. Labman LMDV series is Rotational Digital Direct Reading Viscometer to measure absolute viscosity of Newton Liquids as well apparent viscosity of non-Newton liquid featured by high flexibility reliable Test result, easy operation and good appearance



Equipment Name: HOMOGENISER

Make: BIO-GEN SERIES

Model: PRO200

Application:

1. Scaling for drug development
2. Synthesis of essential drug components
3. Increase in stability of emulsions in order to avoid creaming and coalescence
4. Employed in daily beverages, pharmaceutical and cosmetic industry