

# Facilities and Platforms provided in the University

## Instrumentation facilities

The University of Ladakh has been progressively developing its instrumentation facilities to support various academic disciplines. These facilities include:

**X-ray Diffraction (XRD) Lab:** Used for analyzing crystal structures of materials.

**Inductively Coupled Plasma Mass Spectrometry (ICP-MS):** For elemental analysis with high sensitivity and accuracy.

**Brunauer-Emmett-Teller (BET) Analysis Equipment:** Utilized to measure surface area and porosity of materials.

**Microwave Digestors:** Used for sample preparation in chemical analysis and digestion.

**Electrochemical Workstations:** Equipment for electrochemical research and analysis.

**Laboratories for Forensic Sciences:** Equipped for forensic analysis and investigation.

**Geology Labs:** For geological research and analysis of rocks and minerals.

**Space Sciences Facilities:** For research related to space, satellite data analysis, etc.

**Artificial Intelligence Labs:** Dedicated to AI research and development.

## Handholding startups and Entrepreneurs

By integrating instrumentation support into the startup ecosystem at the University of Ladakh, the institution has played a significant role in:

**R&D Opportunities:** Access to sophisticated equipment allowing startups to conduct in-depth research and development. Letting them explore novel ideas, refine concepts, and innovate without the prohibitive costs of purchasing or maintaining high-end instruments.

**Prototype Development:** Utilizing instrumentation facilities in University, it has enabled the creation and testing of prototypes. This iterative process is crucial for refining product designs and functionalities before entering the market.

**Reduced Financial Burden:** Startups can redirect their initial capital toward essential aspects like market research, talent acquisition, or marketing strategies, rather than investing heavily in costly equipment.

**Quality Testing:** Access to specialized instruments ensures thorough testing and quality control, enhancing the credibility and reliability of the products or services offered by startups.

**Accelerated Innovation:** By having access to cutting-edge technology, startups can expedite their innovation cycles, potentially leading to quicker development and introduction of market-ready solutions.

## About University of Ladakh

The University of Ladakh, established in 2019, was inaugurated by the Honorable Prime Minister Shri Narendra Modi on February 3, 2019. UoL offers 28 programs covering diverse fields such as Forensic Sciences, Geology, Social Work & Disability Action, Disaster Management, Space Sciences, Artificial Intelligence, and more. Additionally, the institution has set up multiple centers: Centre for Himalayan and Trans-Himalayan Studies, Biodiversity Research Centre, Centre for Space Science & Allied Disciplines, Tribal Research Centre.



Prof. S.K. MEHTA  
Hon'ble Vice Chancellor  
University of Ladakh



Dr. Riyaz M.K. Khan  
Coordinator PURSE Grant  
University of Ladakh

## Research Facilities at the University of Ladakh

The University of Ladakh laboratory encompasses multiple sections, such as an instrumentation laboratory and a wet laboratory. The laboratory features advanced scientific instruments and technology, offering students and researchers access to a diverse array of tools for experiments, analysis, and data collection. The laboratory is equipped with safety measures, it guarantees the safe and efficient conduct of experiments.

## About the Project CISIC

The University of Ladakh is implementing the 'Establishment of the Centralized Interdisciplinary Science Instrumentation Centre (CISIC)' project under the 'Promotion of University Research and Scientific Excellence'(PURSE) program by DST (Department of Science and Technology), Government of India. This project has led to the creation of a research hub equipped with advanced scientific tools, promoting interdisciplinary research and innovation across various scientific domains.



## Workshop on Cutting-Edge Scientific Instruments and Training on XRD, ICP-MS, BET & Multichannel Electrochemical Workstation

Organised by  
University of Ladakh

Under DST-PURSE Project :  
Establishment of Centralised  
Interdisciplinary Science Instrumentation  
Centre (CISIC)



Venue: Leh Campus, Taru  
University of Ladakh  
March 22<sup>nd</sup> & 23<sup>rd</sup>, 2024

Sponsored Under the Scheme  
"Promotion of University Research  
and Scientific Excellence"  
(PURSE), DST, GOI

## About the Workshop

The Workshop is aimed at providing information on the principles, instrumentation, and applications of advanced research equipments. The workshop includes lectures, live demonstrations, and sessions on Cutting-Edge Scientific Instruments and training on XRD, ICP-MS, Multichannel electrochemical workstation and BET equipment for researchers, scholars and students from different disciplines.

The training sessions will be conducted by experts possessing extensive experience in the operation and handling of these sophisticated instruments. Participants will acquire both theoretical knowledge and hands-on experience in utilizing this equipment. Furthermore, attendees of the workshop will be awarded certificates upon successful completion of the practical training sessions.

## Our Mission

The project "CISIC" mission to serve as a platform facilitating the advancement of research in academics, entrepreneurship, and innovation to address the evolving needs of society."

- Offering modular programs spanning from skill development to advanced research levels.
- Providing education and training in cutting-edge instrumentation technologies.
- To promote holistic development among our students.
- Extending our services to rural communities, industry professionals, and institutions dedicated to research and higher education.
- Collaborating with industries, educational institutions, and research organizations to provide training and research for sustainable social development.



## Instrument Schedule for Hands on Training workshop

Day 1  
March 22

Day 1  
March 22

Day 2  
March 23

Day 2  
March 23



X-ray diffraction (XRD)



Inductively coupled plasma mass spectrometry (ICP-MS)



Brunauer-Emmett-Teller (BET) surface area analysis



Multichannel electrochemical workstation



## Welcome on Board

### Contact Us

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## No Registration fee

## Registration is essential offline mode



Eligibility: M.Sc., PhD Students, PDF, RA, JRF, SRF, Young Scientists, Faculty Members, Students, Organizations.



## Important Dates

March 22<sup>nd</sup> & 23<sup>rd</sup>, 2024