



Center for Atmospheric and Climate Sciences  
Indian Institute of Technology Madras



सिंधु केंद्र  
प्राविष्टा

"Elevating Excellence,  
Inspiring Futures"



INDIAN INSTITUTE OF TECHNOLOGY MADRAS

## National Advanced Field Training Workshop

on

### Trans-Himalayan Geology at Ladakh



20<sup>th</sup> – 24<sup>th</sup> September, 2025

### Organized by

Sindhu Central University (SCU)

Khaltse, Union Territory of Ladakh - 194106

and

Center for Atmospheric and Climate Sciences (CACS)

Indian Institute of Technology Madras (IITM)

Chennai – 600 036.



SCU Transit Campus, Khaltse,  
UT Ladakh - 194106.

### Registration link

<https://forms.gle/ZKFJyJNEPfvAgnJb7>



Last Date for Registration: 30<sup>th</sup> Aug 2025

## Eligibility Criterion

We encourage the following categories working in the field of **Earth Science**, with **40 years and below age** to register for the workshop.

- Early Career Researchers
- Post Doctoral Fellows
- Senior Research Fellows

*\* Limited [Maximum 20] participants will be shortlisted based on their statement of purpose*

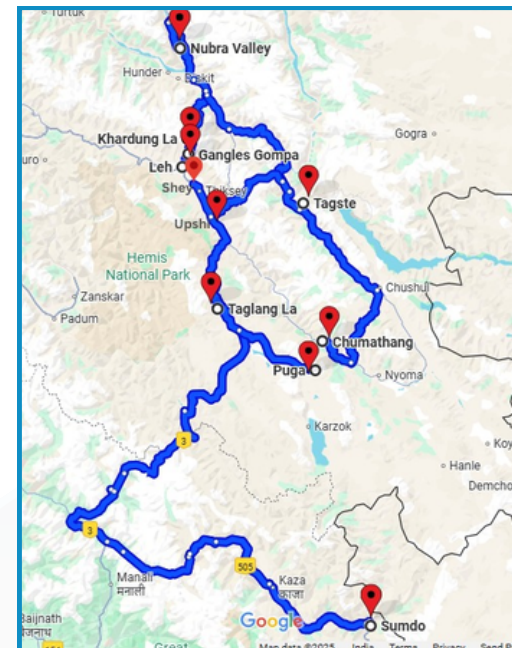
## Preamble

The majestic Ladakh **Trans-Himalaya** is a **high-altitude cold desert mountain** range that showcases remarkable geological and geomorphological features resulting from both endogenic and exogenic processes, which have shaped the current landscape of the region.

Nestled between the **Indus Suture Zone** and the **Shyok Suture Zone**, the Ladakh Batholith lies to the south of the Karakoram Mountain belt. Calc-alkaline multiple intrusions formed the Ladakh Batholith. The shallow to **deep magma chambers** are exposed at the **current erosional level**, allowing for observations of magma c processes and their products along the Leh-Khardung La road. The volcanic and volcano-sedimentary sequences typically visible along the route to Nubra Valley from Khardung highlight both **explosive and quiescent phases of volcanic activity**, where, in some places, they are synchronous with the deposit on of sediments.

## Transects Covered

Leh → Ganglas → Khardung La → Nubra → Tagste  
Chumathang → Sumdo → Puga Valley → Taglang La  
→ Upshi → Shey → Leh



The field workshop **aims** to immerse **young researchers** in the fascinating realm of **Earth Science**, igniting a keen interest in exploring the majestic Trans-Himalaya. Led by a distinguished group of **experts**, **participants** will embark on an enlightening **field training**, gaining **hands-on experience** and **invaluable insights**. This dynamic training opportunity promises to inspire a new generation of scholars eager to delve into the **mysteries** of the Trans-Himalaya and its **geological and geomorphic wonders**.

## Sindhu Central University

The Sindhu Central University (SCU) is established by an Act of Parliament, 2009 in the UT of Ladakh. The university will facilitate, promotion of avenues for higher education and research for the intellectual development of the people of entire UT of Ladakh and the whole of India.

This is the First Central University named after an ancient river the “Sindhu” and the first India’s trans-Himalayan Central University is the world’s highest university situated at an altitude of around 3500 meters above mean sea level.



The academic programs are mentored by IITs in achieving excellence, quality and relevance taking into the vision, mission & objectives laid therein.

The University will offer innovative programmes in varied disciplines, training and research with holistic & multi-disciplinary focus, research-based Master’s programmes. The University will be equipped for futuristic, technology enabled learning.

 [sindhucu.ac.in](http://sindhucu.ac.in)

## IIT Madras

The Indian Institute of Technology Madras is known both nationally and internationally for excellence in technical education, basic and applied research, innovation, entrepreneurship and industrial consultancy. A faculty of international



repute, a highly motivated and brilliant student community, excellent technical and supporting staff and an effective administration have all contributed to the pre-eminent status of IIT Madras. The Institute is proud to bear the laureate of being No.1 engineering university in India. More recently, IIT Madras has been given the title of Institute of Eminence.

 [www.iitm.ac.in](http://www.iitm.ac.in)

## CACS

Center for Atmospheric and Climate Sciences



At CACS, we unite science to gain deeper environmental insights through interdisciplinary research. Our work focusses on understanding chemical processes within the atmosphere and biosphere, with key investigations into

climate ocean, and atmospheric systems. By integrating laboratory experiments, fieldwork, and advanced models, we explore critical interactions that sustain life and influence climate. Our research also delves into the effects of pollution on human health, climate change, and ecosystems, providing valuable insights into environmental sustainability.

 [cacs.iitm.ac.in](http://cacs.iitm.ac.in)



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## Points for the Shortlisted Candidates

- Pay a registration fees of **INR 10,000** +18% GST before the given last date ( Not refundable)
- An **endorsement mail** from the applicant's institution / Immediate Supervisor must be submitted
- **Airfare** (from the nearest airport to the institution), shared **accommodation** (in Leh and SCU Transit Campus), food, local travel, registration kit, workshop charges and ground logistics shall be arranged in UT Ladakh from 19th to 25th September 2025 by **SCU** (Pre and post expenses of the mentioned dates shall be taken care by the individual)

### Convener

**Dr. Sachin S. Gunthe**  
Professor at IIT Madras  
Coordinator for CACS  
Faculty In-Charge at SCU

### Co - Conveners

**Dr. Santosh Kumar**  
Professor at Kumaun University, Nainital

**Dr. Prasanta Sanyal**  
Professor at IISER, Kolkata

### Contact Details

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