

Interested participants need to follow these steps to complete the registration process.

- The participants should first register at https://mmc.ugc.ac.in/ using their email ID.
- 2. Use the Login credentials received over the registered Email Id to LOGIN as PARTICIPANT.
- 3. From the Dashboard click on "Apply for Guru Dakshata (Faculty Induction Programme) Refresher Course and Short Term Programme/ Faculty Development Programme"
- 4. Click on Apply for and Select "Short Term Programme/ Faculty Development Programme"
- Select Centre & Programme Date: IIT Dhanbad (ISM) (Jharkhand) (13/01/2025 - 18/01/2025) and Title "Online Short term Programme on Climate Change, Energy Resources and Natural Hazards ".
- Fill in the required details like *Your Subject Area Specialization; Year of Joining; Teaching Experience* and others
- Click on "Upload NOC" button and upload the NOC duly signed and approved by the Head of your Institution by clicking on the 'Choose File' Button.
- 8. Click on **Submit** button.
- Last date to register is 10.01.2025 but please register well in advance to avoid last minute rush and plan your travel accordingly.
- 10. The participants will get a confirmation Email after registration.

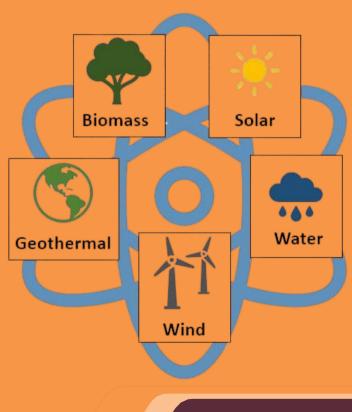
#### Eligibility Criteria for Participants

As per MMTTP Guidelines.

#### Programme Coordinators

Prof. Swarandeep Sahoo Course Coordinator Mob : 8762960598 Email : swarandeep@iitism.ac.in









SIX-DAY ONLINE SHORT TERM / FACULTY DEVELOPMENT PROGRAMME ON CLIMATE CHANGE, ENERGY RESOURCES

AND NATURAL HAZARDS

<u>JANUARY 13 – 18, 2025</u>

Under the aegis of

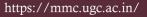
### MALAVIYA MISSION TEACHER TRAINING PROGRAMME (MMTTP)



Organized by



# Dept. of Applied Geophysics IIT(ISM) DHANBAD Dhanbsd-826004, Jharkhand, India



## About the STP

#### **Objective & Scope:**

1. Understand the fundamentals of climate change science.

2. Introduce national climate change initiatives and policies with current key issues.

3. Explain the expected consequences of climate change and the role of adaptation.

4. Formulate strategies for climate change mitigation and plausible actions in key sectors.

5. Discuss the main challenges and opportunities for climate change action.

Duration: 6 days

LAST DATE OF REGISTRATION JANUARY 10, 2025

#### Program Highlight

- Changes in climate system
- Impacts of climate change
- Mitigation of climate change
- Adaptation to climate change



#### Course Content

**Basics of Climate Change:** The Greenhouse Effect, Changes in the frequency, intensity, and duration of extreme weather events, Increases in ocean temperatures, sea level, and acidity, Melting of glaciers and sea ice.

**Causes of Climate Change:** Human Causes such as Greenhouse Gas Emissions, agriculture, road construction, and deforestation. Natural Causes such as Changes in the Earth's Orbit and Rotation, Variations in Solar Activity

**Impacts of Climate Change:** Climate change impacts our health, environment, and economy, Climate Change Indicators, Climate Change Impacts and Risk Analysis, National Missions on climate change.

Climate Change Adaptation: large-scale infrastructure changes, Reducing Waste

**Climate Change Mitigation:** Reducing Carbon Footprint, Planning for Climate Change



ONLINE



#### About the Institute



The Indian Institute of Technology (Indian School of Mines) constituted under the Institute of Technology Act, 1961, is Administered through IIT Council – the apex body, Gol for uniform and smooth governance of Pan-IIT in out country. The academic profile of the Institute changed over the time to keep abreast with technological challenges and societal aspirations. The Institute has been in service of the nation, contributing immensely to nation-building for almost a century.

At present, the Institute has 17 departments and several centres, which are equipped with all necessary infrastructure and worldclass faculties to undertake all kinds of fundamental and applied research problems. For further details, please visit: https://www.iitism.ac.in/

#### About the Departments

#### **Department of Applied Geophysics**

The Department of Applied Geophysics was established during the International Geophysical Year in 1957. Since then, it has emerged as one of the premier Geophysics Departments in the country imparting quality teaching and research. The department is wellequipped with state-of-the-art geophysical instruments encompassing mostly all geophysical disciplines. The department has a Seismological Observatory with a Broadband Recording facility and a number of laboratories, such as geophysical inversion, geophysical instrumentation, rock & petrophysics, seismic data processing, coal geophysics, global optimization & deep learning, remote sensing and gravity-magnetic. The department is involved in different cutting-edge research areas, and currently, it has an ambitious plan to establish a few new centres of excellence in areas of Resource of Unconventional Hydrocarbon, Mineral Exploration, AI and Automation for natural resource and sustainability, Natural hazards and Mitigation, Early-Warning Systems for Earthquake/Tsunami prediction, and Exploration of Groundwater.