



# TROPMET - 2024



## National Symposium

on

## Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context

10<sup>th</sup> - 12<sup>th</sup> December 2024

National Institute of Technology  
Rourkela,  
Rourkela, Odisha

Organised by

Indian Meteorological Society

Hosted by

Department of Earth and Atmospheric  
Sciences,  
National Institute of Technology  
Rourkela, Rourkela

TROPMET is a series of national conferences organized annually by the Indian Meteorological Society (IMS). This year TROPMET will be hosted at the National Institute of Technology (NIT) Rourkela, Rourkela, Odisha, from 10-12 December 2024. TROPMET series have received generous support from several government and private agencies in the past, and efforts are underway to seek their sponsorship this year. The TROPMET-2024 focuses on High Impact Weather and Climate Extremes over the Indian Subcontinent. Extreme weather and climate events have increased in frequency and severity due to human-caused climate change. Such extremes have far-reaching effects on many areas, including ecosystem damage, human health, and biodiversity. These extreme weather events affect both social and economic sectors, and society needs better risk assessments and earlier alerts for these high-impact weather extremes. TROPMET-2024 will provide an opportunity to exchange the ideas among various stakeholders. Keeping this in view, TROPMET-2024 deliberates on the following subthemes.

- In-situ and space-based observational and monitoring aspects of extreme weather and climate events
- Diagnostics and numerical modelling of extreme weather events over the Indian subcontinent
- Impact of land use and land cover changes on extreme weather and climate events
- Impact of large-scale climate modes on weather extremes (e.g., ENSO, IOD, MJO, etc.)
- Climate data analysis, assessments and projections
- Analysis and prediction of weather and climate extremes using AI/ML/DL techniques etc.
- Early warning systems, mitigation, preparedness and response actions for weather and climate extremes in disaster risk reduction
- Roles of oceanic and atmospheric processes in the development of weather and climate extremes
- Air Pollution Interactions with weather extremes
- Impact of weather extremes on Agriculture, livestock, fisheries including climate change and climate variability
- Attribution of weather extremes to climate change aspects
- Developments of innovative and indigenous met-sensors and ocean technologies

### CALL FOR PAPER AND ABSTRACT SUBMISSION

The original research papers from India and abroad, covering TROPMET-2024 theme/sub-themes are invited for presentation. Authors may submit abstracts not exceeding 300 words (template available at [www.tropmet2024.in](http://www.tropmet2024.in) website).

### IMPORTANT DATES

Abstract Submission Ends: 09<sup>th</sup> September 2024  
Intimation on Acceptance: 24<sup>th</sup> September 2024  
Confirmation of Participation: 7<sup>th</sup> October 2024  
Online Registration Starts: 7<sup>th</sup> October 2024  
Early Bird Registration Ends: 4<sup>th</sup> November 2024

### REGISTRATION FEES

CATEGORY	BY 04 <sup>th</sup> November 24	ON SPOT
IMS/OSI Members	₹ 3000/-	₹ 4000/-
Non-IMS/OSI Members	₹ 4000/-	₹ 5000/-
Scholars/Students	₹ 1000/-	₹ 1500/-
Post-Doctoral Researchers	₹ 2500/-	₹ 3000/-
Industry Exhibitions	₹ 100000/- onwards	
Associated Persons	₹ 1000/-	₹ 1500/-

The Registration Fee can be paid through multiple payment options such as net banking or UPI/bank drafts. There is no registration fee for Honorary Fellows and Fellows of the IMS.

### TRANSPORT AND ACCOMMODATION

TROPMET-2024 has limited resources for offering travel and accommodation support, and all participants are expected to secure support from their own sources. However, some support may be extended to a few case-to-case basis subject to the availability of resources, with priority given to IMS members with no affiliations and students without financial support.

Industry Presentation & Exhibition Special sessions are planned to provide a platform for industry/entrepreneurs. A presentation slot of 15 to 20 minutes duration will be allowed for selected industry/entrepreneurs. Provision is also made for vendors to exhibit their products and services.

**VENUE: National Institute of Technology Rourkela, Rourkela, Odisha, India.**

### LOCAL ORGANISING COMMITTEE

#### PATRON

Prof. K. Umamaheshwar Rao  
Director, NIT Rourkela

#### CHAIRMAN

Prof. Sk. Md. Equeenuddin  
NIT Rourkela

Dr. Naresh Krishna Vissa

Organizing Convener, NIT Rourkela

Dr. Bhisma Tyagi

Organizing Secretary, NIT Rourkela

Dr. Nagaraju Chilukoti

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