Ministry of Science & Technology, Ministry of Earth Sciences, Govt. of India

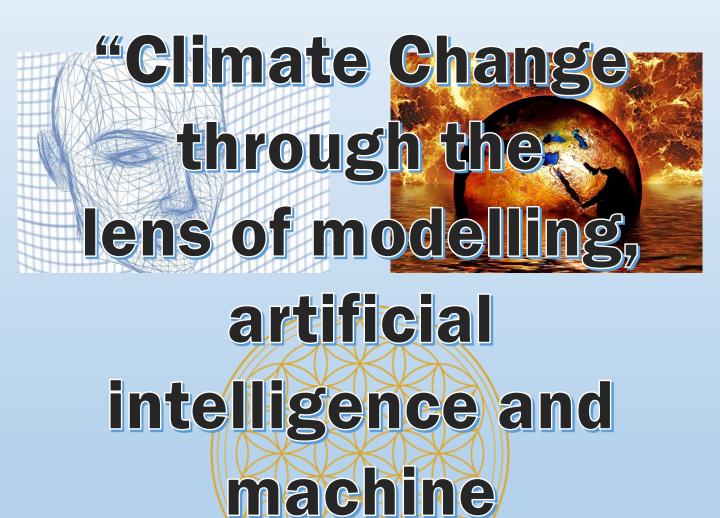


# Presents



# REGISTER AND LOGIN TO ATTEND i-CONNECT EVENTS ON www.iconnect75.com

iCEN - 56



learning"

BROCHURE

21<sup>st</sup> July 2022 10:00 am – 12:00pm

# I-CONNECT

#### ABOUT

- A series of iconic 75 Industry connect events intended to showcase the achievements in various S & T areas.
- The purpose is to forge partnerships between government and industries of focus areas and to draw upon the rich expertise and competence of leaders of both sectors who have significantly contributed to the economic growth of the Nation.
- Each event includes a variety of mega-industry programs such as conferences, fostering and of businesses technical exhibitions, B2B meetings, round table discussions, which would enable the etc. promotion.

 Providing a platform for interaction amongst important groups of technology experts, government leaders, academic scholars, industry captains, and start-ups.

**OBJECTIVES** 

- Reaching out to MSMEs and Startups in a consolidated manner with a focus on funding, technology development, an technology transfer.
- Preparation of white papers for thematic areas for collaborative research and technology development.
- Identification and establishment of Networks (Govt scheme, R&D setup, Industry, MSMEs, Startup, Academia) around focus areas.

# "Climate Change through the lens of modelling, artificial intelligence and machine learning"

#### ABOUT

The event focuses on understanding climate change through the lens of climate modelling, artificial intelligence and machine learning. Improving the representation of key physical processes and phenomena in climate models would be discussed.

#### OBJECTIVES

- Climate change modelling Earth System Models (ESM)
- Improve the representation of key physical processes in ESM
- Brainstorm techniques to supplement dynamical modelling efforts
- Computational facilities required for AI/ML in climate modelling

#### TOPICS TO BE COVERED

- Key scientific challenges in climate change modelling
- AI/ML & deep learning applications for ESMs
- Climate Downscaling
- GPU computing
- Crop mapping using AI and remote sensing for eco-agriculture and sustainability (CARES)

#### **SPEAKER PANEL**

	Dr. Ayantika Dey Choudhury Scientist E IITM Pune	Monsoon dynamics, climate change		
	Dr. Manmeet Singh Scientist C IITM Pune	Climate modelling, AI/ML approaches for weather and climate science, aerosols		
	Dr. Ankit Agarwal Assistant Professor IIT Roorkee	Extreme Events, Hydroclimatology, Complex Network		
	Dr. Manish Modani Principal Solution Architect NVIDIA	GPU computing, AI/ML, HPC		
	Dr. Adway Mitra Assistant Professor IIT Kharagpur	Downscaling using AI/ML methods		
DISCUSSION PANEL				

Dr. Swapna Panickal

Scientist E

IITM Pune

Dr. Saktivel Samy

Scientist F

NCPOR, Goa



Prof. Sridhar Balasubramanian Associate Professor IIT Bombay Dr. Praveen Pankajakshan VP Data Science & AI CropIn Technology Solutions

#### + 5 SPEAKERS

- Dr. Ayantika Dey Choudhury
- Dr. Manmeet Singh
- Dr. Ankit Agarwal
- Dr. Manish Modani
- Dr. Adway Mitra

# EVENT SCHEDULE

## Time: 10 am – 12 pm

SESSION	SPEAKER	ΤΟΡΙϹ	TIME	
Inaugural	Dr. R. Krishnan	Welcome Address	10:00-10:10	
Presentation	Dr. Ayantika Dey Choudhury	Process-based improvements in climate models	10:10-10:20	
	Dr. Manmeet Singh	Deep learning augmented numerical weather prediction	10:20-10:30	
	Dr. Ankit Agarwal	Network techniques for hydrological applications	10:30-10:40	
	Dr. Manish Modani	Use of GPU computing for AI/ML applications	10:40-10:50	
	Dr. Adway Mitra	Deep learning based regional downscaling	10:50-11:00	
Panelists	Dr. Swapna Panickal	Data science and statistics in meteorology, atmospheric science, water resources, oceanography and climate change.	11:00-11:50	
	Dr. Saktivel Sami			
	Prof. Sridhar Balasubramanian			
	Dr. Praveen Pankajakshan			
	+ 5 speakers			
Closing	Convener	Closing remarks and vote of thanks	11:50-12:00	

#### **CONTACT DETAILS**

#### **EVENT COORDINATIOR**

Dr. R. Krishnan, IITM Pune Email: krish@tropmet.res.in Ph No: +91-20-25904201

Dr. K C Gouda, CSIR Fourth Paradigm Institute (C-MMACS) Bangalore Email: kcgouda@csir4pi.in Ph No: +91-20-25904201

INDIAN INSTITUTE OF TROPICAL METEOROLOGY (IITM) An Autonomous Institute of the Ministry Of Earth Sciences , Govt. of India



Dr. Homi Bhabha Road, Pashan, Pune-411008 Tel: +91 (020) 25904200 Fax: +91 (020) 25865142



### SCAN QR FOR REGISTRATION



#### CSIR Fourth Paradigm Institute

(Formerly CSIR Centre for Mathematical Modelling and Computer Simulation)

A constituent laboratory of Council of Scientific & Industrial Research (CSIR). Ministry of Science and Technology, Government of India

NAL Belur campus, Bangalore - 560103 Tel: +91-80-2505 1921 Fax: +91-80-2522-0392

