



### 3<sup>rd</sup> International Virtual Workshop on Global Seismology & Tectonics

20-30<sup>th</sup> September 2022



#### Institute at a Glance:

North East Institute of Science and Technology (NEIST), Jorhat, Assam, a constituent establishment of Council of Scientific and Industrial Research (CSIR), New Delhi, has been engaged in multidisciplinary R&D work relevant to the country in general and North East of India (NE India) in particular. The Geoscience & Technology Division (GSTD) of CSIR-NEIST has been involved in monitoring the seismicity of NE India since 1982. Seismic hazard and vulnerability assessment of the populated cities and urban areas in NE India and propagating seismic hazard awareness have been some of the major programs of the division, apart from conducting geotechnical/geophysical consultancy services.

#### Workshop Info.

Registration Starts: 05<sup>th</sup> August 2022  
 Registration Closes: 20<sup>th</sup> August 2022  
 Acceptance: 15<sup>th</sup> Sept. 2022  
 Inauguration: 20<sup>th</sup> Sept. 2022  
 Time: 09:30 am IST, +5:30 hrs GMT  
 Registration Fee: Nil (Free)

#### Aim of the Virtual Workshop:

Due to several physical communication constraints brought about by the COVID-19 pandemic situation, the practice of disseminating knowledge and ideas through webinar, a live interactive event where attendees join via their desktop or mobile device over the internet, have significantly proliferated. While research activities, including research exchange and collaborations, during this unprecedented situation have decelerated, it is imperative to boost the morale of the students and researchers by providing opportunities to interact with eminent personalities of their research interest. In accordance with this, the Geoscience & Technology Division (GSTD) of CSIR-NEIST Jorhat would like to conduct the 3<sup>rd</sup> INTERNATIONAL VIRTUAL WORKSHOP on "Global Seismology & Tectonics" series targeting the geosciences students and community, during 20-30 September, 2022.

The lecture sessions aim to impart important information on emergent and impending topics of Seismology and Tectonics, involving case studies from seismically active zones of the world. The eminent keynote speakers of the workshop represent diverse geosciences forums and institutes or institutional departments across the world, including the United States Geological Survey, National Center for Seismology and Tohoku University.



#### Targeted Group

- Graduate/ Post Grad. Students
- Ph.D. Scholars
- Scientists Academician Researchers

#### Registration/Workshop Link

Registration Link for International Participants		Scan QR Code	
Registration Link for Indian Participants		Scan QR Code	



#### Contact

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20-30<sup>th</sup> September 2022



## Webinar Schedule

### Inauguration



20<sup>th</sup> September, 2022 @ 9:30-9:55 am IST (+5:30 GMT)

## SPEAKERS

**Shailesh Nayak, Director, NIAS, India**



A Scientific Drilling in Koyna: An Experiment to Understand Triggered Earthquakes

20<sup>th</sup> September @ 10:00 am IST  
19<sup>th</sup> September @ 09:30 pm PDT  
20<sup>th</sup> September @ 06:30 am CEST

**Abhijit Ghosh, Univ. of California, USA**



Structural Complexities Control Rupture of the Himalayan Megathrust

21<sup>st</sup> September @ 10:00 am IST  
20<sup>th</sup> September @ 09:30 pm PDT  
21<sup>st</sup> September @ 06:30 am CEST

**Jeanne Hardebeck, USGS, USA**



What causes Aftershocks?

22<sup>nd</sup> September @ 10:00 am IST  
22<sup>nd</sup> September @ 12:00 am EDT  
21<sup>st</sup> September @ 09:30 pm PDT  
22<sup>nd</sup> September @ 06:30 am CEST

**Dapeng Zhao, Tohoku University, Japan**



Seismic structure and dynamics of the Japan subduction zone

23<sup>rd</sup> September @ 10:00 am IST  
23<sup>rd</sup> September @ 01:30 pm JST  
22<sup>nd</sup> September @ 09:30 pm PDT  
23<sup>rd</sup> September @ 06:30 am CEST

**C. P. Rajendran, NIAS, Bengaluru**



The Medieval Pulse of Earthquakes in the Central Himalaya and the future seismic hazard in the region

24<sup>th</sup> September @ 09:00 am IST

**Sukanta Roy, Director, BGRL (MoES), India**



Deep drilling and downhole measurements/monitoring to understand earthquake processes

25<sup>th</sup> September @ 10:00 am IST  
24<sup>th</sup> September @ 09:30 pm PDT  
25<sup>th</sup> September @ 06:30 am CEST

**Margarita Segou, British Geol. Survey, UK**



The physics of earthquake interactions: Recent Advances Informed by Deep-Learning Catalogs

26<sup>th</sup> September @ 03:00 pm IST  
26<sup>th</sup> September @ 10:30 am BST

**Sumer Chopra, Director, ISR-Gujarat**



Seismicity in intraplate Gujarat region

27<sup>th</sup> September @ 10:00 am IST  
26<sup>th</sup> September @ 09:30 pm PDT  
27<sup>th</sup> September @ 06:30 am CEST

**Sridevi Jade, Head, CSIR-4PI, India**



GNSS based Geoscience Research in Indian Subcontinent

27<sup>th</sup> September @ 03:00 pm IST  
27<sup>th</sup> September @ 02:30 am PDT  
27<sup>th</sup> September @ 11:30 am CEST

**Justin Rubinsteine, USGS, USA**



Earthquakes in the Heartland: How Energy Production Causes Earthquakes in Unexpected Places

28<sup>th</sup> September @ 10:00 am IST  
27<sup>th</sup> September @ 09:30 pm PDT  
28<sup>th</sup> September @ 06:30 am CEST



## Webinar Schedule

### SPEAKERS

**Wiwit Suryanto, UGM, Indonesia**



Crustal Anisotropy of Sumatera from Harmonic Decomposition of Receiver Function

29<sup>th</sup> September @ 10:00 am IST  
29<sup>th</sup> September @ 11:30 am WIB



**Sagarika Mukhopadhyay, IIT-Roorkee, India**



3-D Seismic Velocity Structure of the Lithosphere and its Geodynamic Implications for the Western Himalayas, Western Himalayan Syntaxis, and Pamir-Hindu Kush Region

29<sup>st</sup> September @ 03:00 pm IST  
29<sup>st</sup> September @ 02:30 am PDT  
29<sup>st</sup> September @ 11:30 am CEST

Day # 10

Day # 10

**Julian J. Bommer, Imperial College London, UK**



Earthquake Hazard and Risk Analysis for Natural and Induced Seismicity: Towards Objective Assessments in the Face of Uncertainty

30<sup>th</sup> September @ 03:00 pm IST  
30<sup>th</sup> September @ 10:30 am BST

Day # 11

Day # 11

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**IIVWGST 2022**



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## Organizing Committee

### Patron



**G. Narahari Sastry**  
Director, CSIR-NEIST  
Govt. of India

### International Advisers



**Andrew J. Michael**  
United States Geological Survey  
USA



**Dapeng Zhao**  
Tohoku University  
Japan



**Alan L. Kafka**  
Boston College  
USA

### National Advisers



**H. K. Gupta**  
President, Geological Society of India



**V. M. Tiwari**  
Director, CSIR-NGRI



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Director, NCS-New Delhi



**K. Sain**  
Director, WIHG-Dehradun

### Session Chairperson



**J. R. Kayal**  
Former Dy. DG, GSI, India



**Wiwit Suryanto**  
Gadhja Madha University, Indonesia



**D. Hazarika**  
WIHG-Dehradun, India

### Convener



**Santanu Baruah**  
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## Organizing Committee

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CSIR-NEIST

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### Local Organizing Committee

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### Student Committee

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Zosangliana Ralte  
PUC-Mizoram



### GUIDELINES

- \* The virtual workshop, in the form of a series of lectures, will be held only via Microsoft Teams, an internet based visual communication platform.
- \* The participants are requested to download and install Microsoft (MS) Teams software (<https://www.microsoft.com/en-in/microsoft-365/microsoft-teams/download-app>) in their desktop or mobile devices.
- \* The participants are expected to mute their microphones and turn off their cameras during lectures by the speakers. They can be turned on only if direct interaction during Q&A session is desired.
- \* E-certificate shall be provided to registered participants upon request, if they have attended at least 80% of the virtual workshop.