Geoscience & Technology Division North East Institute of Science & Technology (Council of Scientific & Industrial Research) Jorhat, Assam, India





2nd International Virtual Workshop on Global Seismology & Tectonics

20-30th September 2021

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: 22nd July 2021 Registration Closes: 20th August 2021 Acceptance: 15th Sept. 2021 Inauguration: 20th Sept. 2021 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 2nd INTERNATIONAL VIRTUAL WORKSHOP on "Global Seismology & Tectonics" series targeting the geosciences students and community, during 20-30 September, 2021. The lecture sessions aim to impart important information on emergent and impending topics of Seismology and Tectonics,

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, Global Earthquake Model, Norwegian Seismic Array (NORSAR), National Center for Seismology, Geological Survey of India, Wadia Institute of Himalayan Geology, CSIR-National Geophysical Research Institute, CSIR – North East Institute of Science and Technology, University of Bristol, University of Malta, Australian National University, Tohoku University, King Abdullah University, University of Ljubljana, Boston College, Indian Institute of Technology – Guwahati and National Institute of Technology, Agartala, India.





SPEAKERS

Andrew J. Michael, USGS, USA



Collapsing Calderas and Aftershocks: When We Need to Include Clustering in Seismic Hazards Assessments?

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

B. L. N. Kennett, ANU, Australia



Characterising Earth Structure from Seismic Data

> 21st September @ 10:00 am IST 21st September @ 02:00 pm ACST 20th September @ 09:30 pm PDT 21st September @ 06:30 am CEST

Alan Kafka, Boston College, USA

Reflections on My Past Two Decades of Teaching "Geoscience and Public Policy", an Undergraduate Science Course for Non-Science Major

22nd September @ 09:30 am IST 22nd September @ 12:00 am EDT 21st September @ 09:00 pm PDT 22nd September @ 06:00 am CEST

Dapeng Zhao, Tohoku University, Japan



Seismic Anisotropy Tomography: New insight into Seismotectonics, Volcanism and Geodynamics

- 23rd September @ 10:00 am IST
- 23rd September @ 01:30 pm JST
- 22nd September @ 09:30 pm PDT 22nd September @ 06:30 am CEST

O. P. Mishra, Director, NCS (MoES), India

Seismic Microzonation: An efficient tool for earthquake risk resilient Structures

24th September @ 10:00 am IST 23rd September @ 09:30 pm PDT 24th September @ 06:30 am CEST

ACST: Australian Central Standard Time, CEST: Central European Summer Time, EDT: Eastern Daylight Time, IST: Indian Standard Time, JST: Japan Standard Time, MDT: Mountain Daylight Time, PDT: Pacific Daylight Time



Attenuation Characteristics and Seismicity Analysis for Himalayan Region

T. G. Sitharam, Director, IIT-G, India

20th September @ 07:00 pm IST 20th September @ 06:30 am PDT 20th September @ 03:30 pm CEST

David J. Wald, USGS, USA

An Overview of UGSC near-real time Earthquake information products

21st September @ 07:00 pm IST

21st September @ 07:30 am MDT

21st September @ 06:30 am PDT 21st September @ 03:30 pm CEST

Daniela Kühn, NORSAR, Norway

Probabilistic Moment Tensor Inversion: Examples from Europe

22nd September @ 07:00 pm IST 22nd September @ 06:30 am PDT 22nd September @ 03:30 pm CEST

Kendra Johnson, GEM Foundation, Italy

Introduction to Probabilistic Seismic Hazard Analysis (PSHA)

23rd September @ 07:00 pm IST 23rd September @ 06:30 am PDT 23rd September @ 03:30 pm CEST

Kendra Johnson & Shreyasvi Chandrasekhar GEM Foundation, Italy

Building a Probabilistic Seismic Hazard Analysis (PSHA) input model

24th September @ 07:00 pm IST 24th September @ 06:30 am PDT 24th September @ 03:30 pm CEST



Day # 3

Dav # 4

Day # 5

2nd International Virtual Workshop on Global Seismology & Tectonics



20-30th September 2021

Webinar Schedule

SPEAKERS

Sebastiano D'Amico, Univ. of Malta, Malta

Saurabh Baruah, CSIR-NEIST, India



Seismotectonics of the central Mediterranean area

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



Kinematics of Shillong Plateau & Eastern Himalava Region-the sites of Great earthquakes

25th September @ 07:00 pm IST 25th September @ 06:30 am PDT 25th September @ 03:30 pm CEST

Jure Žalohar, Univ. of Ljubljana, Slovenia



J. R. Kayal, GSI, India

Recent Large and felt Earthquakes in Northeast India: Seismotectonics and **Precursor Appraisal**

26th September @ 10:00 am IST 25th September @ 09:30 pm PDT 26th September @ 06:30 am CEST

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



Lithospheric Structure of Himalayan Collision Zone

27th September @ 10:00 am IST 💾 26th September @ 09:30 pm PDT 27th September @ 06:30 am CEST

Sima Ghosh, NIT-Agartala, India



Recent Seismicity and Probability Assessment of Earthquake Occurrence in North East and Himalayan Region

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

Kalachand Sain, Director, WIHG, India



Day # 11

State-of-the-art Seismic Techniques for **Advanced Modeling and Interpretation: Solution to some Geoscientific Challenges**

29th September @ 10:00 am IST 💾 28th September @ 09:30 pm PDT 29th September @ 06:30 am CEST

Sarah E. Minson, USGS, USA

ACST: Australian Central Standard Time, CEST: Central European

Shaking is Almost Always a Surprise: The **Earthquakes That Produce Significant Ground Motion**

30th September @ 10:00 am IST 29th September @ 09:30 pm PDT 30th September @ 06:30 am CEST



The Omega-Theory and the timedependent earthquake forecasting

26th September @ 07:00 pm IST 26th September @ 06:30 am PDT 26th September @ 03:30 pm CEST

Md. F. Abdelwahed, KAU, Saudi Arabia



SGRAPH system for seismic waveform analysis and source parameters estimation: Review and case study

27th September @ 07:00 pm IST 💾 27th September @ 05:30 pm (Dubai) 27th September @ 06:30 am PDT 27th September @ 03:30 pm CEST

Marco Pagani, GEM Foundation, Italy



mmer Time, EDT: Eastern Daylight Time, IST: Indian Standard Time, JST: Japan Standard Time, MDT: Mountain Daylight Time, PDT: Pacific Daylight Time

Introduction to the OpenQuake Engine

28th September @ 07:00 pm IST 28th September @ 06:30 am PDT 28th September @ 03:30 pm CEST

Jo Gottsmann, University of Bristol, UK

New insights on the inner workings of volcanoes

29th September @ 07:00 pm IST 29th September @ 06:30 am PDT 29th September @ 03:30 pm CEST

Justin Rubinstein, USGS, USA

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

30th September @ 07:30 pm IST 🚻 30th September @ 07:00 am PDT 30th September @ 04:00 pm CEST

2nd International Virtual Workshop on Global Seismology & Tectonics 20-30th September 2021

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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 (<u>https://www.microsoft.com/en-in/microsoft-365/microsoft-teams/download-app</u>) 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.