20D INTERNATIONAL WORKSHOP ON

ADVANCED SEISMOLOGY, SEISMIC HAZARDS AND EARTHQUAKE ENGINEERING: THEORY, SIMULATION & OBSERVATIONS

Organized By National Institute of Technology, Agartala

DECEMBER 12-16, 2020







CHIEF PATRON
PROF. H.K. SHARMA
DIRECTOR, NIT AGARTALA



CHIEF GUEST
PROF. HARSH K. GUPTA, PADMASHRI
PRESIDENT, GEOLOGICAL SOCIETY OF INDIA
MEMBER, ATOMIC ENERGY
REGULATORY BOARD, INDIA



GUEST OF HONOUR

PROF. RUBEN TATEVOSYAN

HEAD, SEISMOLOGY LAB., IPE, MOSCOW

VICE PRESIDENT, ASC









Advanced Seismology, Seismic Hazards & Earthquake Engineering: Theory, Simulation & Observations



(ASSHEE-2020)

National Institute of Technology Agartala, Tripura
December 12-16, 2020

About ASSHEE

The ASSHEE (Advanced Seismology, Seismic Hazards & Earthquake Engineering) title for an *International Workshop* was formulated in 2019 by NIT-Agartala through an international collaboration with Russia, Finland and Italy. The ASSHEE 2019, the first International Workshop, December 12-17, 2019 achieved an overwhelming success from the students, young scientists/engineers and professionals not only in Asiatic countries (like India, Nepal, Bhutan, Bangladesh, Sri Lanka and Iran), ASEAN countries (like Vietnam, Malaysia and Indonesia) and African country like Nigeria, but also in developed countries, like Russia, Finland, Italy and Japan. The ASSHEE is now a *phenomenal international platform* to exchange knowledge, expertise and experience for benefit to the society, particularly to the young students /researchers in the field of Earth Sciences, Earthquake Engineering, Civil Engineering and Seismic Hazard Mitigation.

Advanced Seismology, Seismic Hazards and Earthquake Engineering come under a group of young and growing Science & Technology where much advanced research and experience are needed for Civil Engineering construction in urban development, nuclear power plant, hydroelectric projects etc. Myriad of devastating earthquake events all around the globe during the known last few centuries, affecting the mankind and the nature at times, made the scope of development and advancement of knowledge & technology to safe guard loss of lives and property destruction. The ASSHEE is one of such forums that provides an excellent international platform to exchange knowledge, expertise, experience and new information on advanced technologies in these fields. Scientists, researchers, students, experienced industry engineers and professionals from all around the world come under one banner to unfurl their top notch proficiency and experience on the ASSHEE advancements and various ways to deal with the seismic hazards in the development of earthquake resilient society.

An insuppressible urge to gain knowledge and experience from the eminent speakers made the ASSHEE 2020 to happen even in this pandemic year of Covid-19. In order to maintain the ongoing norms of social distancing, the ASSHEE-2020, the 2nd International Workshop, December 12-16, 2020 will be conducted through a Webinar, and we welcome all vibrant young students, researchers, academicians and industry professionals to register immediately to join the event and render it to be another successful event with a different experience!



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Programme Schedule

December 12 (Day 1):				
Inaugural Session (12:00 – 12:30 hours IST)				
Inaugural Song by Ms. Ipsita Mukherjee				
Prof. H. K. Sharma (Chief Patron)	Inaugural Speech			
Prof. Ruben Tatevosyan (Guest of Honour)	Motivational Speech			
Prof. Harsh K. Gupta (Chief Guest)	Motivational Speech			
Dr. J. R. Kayal (Co-Convenor)	Vote of Thanks			
	Technical Session I			
	(12:30 - 13:30 hours IST)			
Prof. Harsh K. Gupta (Atomic Energy Regulatory Board)	Lecture on: Developing an Earthquake resilient society			
	BREAK			
Technical Session II				
(13:45 - 14:45 hours IST)				
Dr. Debarghya Chakraborty (IIT Kharagpur)	Lecture on: Application of Computational Geomechanics for Seismic Analysis of Different Geotechnical Systems			

December 13 (Day 2):				
Technical Session III				
(11:00 - 12:00 hours IST)				
Dr. Surendra Nadh Somala (IIT Hyderabad)	Lecture on: Seismic fragility and earthquake loss assessment			
Technical Session IV				
(12:10 - 13:10 hours IST)				
Prof. Ruben Tatevosyan Prof. Vera Bykova (IPE, Russia)	Lecture on: Current practice of seismic hazard assessment			
	LUNCH BREAK			
Technical Session V				
(13:30 – 14:30 hours IST)				
Prof. Antonella Peresan	Lecture on: New insights on the structure of earthquake clusters and			
(OGS, Italy)	background seismicity.			



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	December 14 (Day 3):		
		Technical Session VI	
	(10:00 – 11:00 hours IST)		
	Prof. Jim Mori (Kyoto University, Japan)	Lecture on: Seismological Aspects of the Great 2011 Tohoku, Japan Earthquake.	
Technical Session VII (11:10 - 12:10 hours IST)			
	Dr. J. R. Kayal (Rtd. Dy. Director, GSI)	Lecture on: Seismological Data Analysis and Interpretation: Large SCR earthquakes in India.	
	Technical Session VIII (12:20 - 13:20 hours IST)		
	Dr. Devajit Hazarika (Scientist, WIHG, Dehradun)	Lecture on: Receiver function analysis and its application for imaging subsurface structure of the Earth	

December 15 (Day 4)		
	Technical Session IX	
(11:00 - 12:00 hours IST)		
Dr. Raghu Kanth STG (IIT Madras)	Lecture on: Probabilistic Seismic Hazard Map of India	
	Technical Session X	
	(12:10 - 13:10 hours IST)	
LUNCH BREAK		
Prof. Mehdi ZARE (HEES and Academy of Sciences, Iran)	Lecture on: The Importance of Seismic Gaps and Clusters in Seismic Hazard Analysis	
	Technical Session XI	
(13:30 - 14:30 hours IST)		
Dr. Santanu Baruah (NEIST, Jorhat, Assam)	Lecture on: Waveform Modelling for Fault Plane Solutions	



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December 16 (Day 5) Technical Session XII			
Dr. Sujit Dasgupta	Lecture on: Geological Faults and Notes on Seismic Hazard		
(Ex-Deputy Director General, GSI)			
	Technical Session XIII		
(11:10- 12:10 hours IST)			
Dr. Rajib Saha	Lecture on: Earthquake Engineering		
(Professor, NIT Agartala)			
	LUNCH BREAK		
	Technical Session XIV		
	(12:30- 13:30 hours IST)		
Dr. Uma Ghosh	Lecture on: Probabilistic Assessment of Earthquake Hazard and Estimation		
(Siddhinath Mahavidyalaya, WB)	of Parameters for recurrence Models of earthquake.		
	Technical Session XV		
(13:40- 14:40 hours IST)			
Dr. Sima Ghosh	Lecture on: Seismic Stability of Slopes		
(HOD, Civil, NIT Agartala)			
Conclud	Concluding, Interacting & Valedictory Session		
(14:45– 15:00 hours IST)			

Registration Link: https://forms.gle/omDwmhD3kcf3W1fH7

Organizing Committee

Prof. H. K. SHARMA Chief Patron

Prof. R.P. SHARMA Organizing Patron

Dr. SIMA GHOSH Convenor

Prof. J. R. KAYAL
Co- Convenor

Mr. SUMAN DEB Technical Advisor

Student Members

SUMAN HAZARI Ph.D Scholar AVIK PAUL Ph.D Scholar ARIJIT SAHA Ph.D Scholar

MD. SULTAN HUSSAIN M.Tech Student ABHILEEN CHATTERJEE M.Tech Student PRITAM DEBNATH
M.Tech Student