

Joint Workshop

Indian Institute of Technology Bombay and Tohoku University



India – Japan Joint Research

on policy-making support framework for disaster risk reduction

and sustainable urban development

Session 1: Seismic risk aspect (13:30 – 14:30)

Seismic Resilience of Urban Buildings in India
 Prof. Ravi Sinha (Department of Civil Engineering, IIT Bombay)

GP-RSS

 Earthquake ground motion modeling in Tohoku region based on strong motion observation

Prof. Susumu Ohno (International Research Institute of Disaster Science, Tohoku University)

Seismic Risk Reduction using Base-Isolated Buildings
 Prof. Manish Kumar (Department of Civil Engineering, IIT Bombay)

<u>Session 2: Flood risk aspect (14:40 – 15:40)</u>

- Recent Developments in Urban Flood Resilience Measures in India Prof. Kapil Gupta (Department of Civil Engineering, IIT Bombay)
- Understanding Mumbai's flood hazard through satellite data and hydrological models Dr. Amalia Nafisah Rahmani Irawan (Green Goals Initiative, Tohoku University)
- Planning Large Water Infrastructure under Deep Uncertainties Prof. Riddhi Singh (Civil Engineering Department, IIT Bombay)

Session 3: Approaches for the joint research (15:50 – 17:30)

 Concepts for "Science-based policy-making support framework for DRR and sustainable urban development"

Prof. Kozo Nagami (Green Goals Initiative and Graduate School of Environmental Studies, Tohoku University)

- Risk Mapping using IPCC AR 5 framework (online)
 Prof. Trupti Mishra (Shailesh J Mehta School of Management, IIT Bombay)
- Sparse modeling based discrete spatial heterogeneity analysis
 Prof. Ryo Inoue (Graduate School of Information Sciences, Tohoku University)
- Impact of recurrent floods on the livelihoods of vulnerable people: Initial Findings from a Preliminary Community Survey in the Philippines
 Prof. Akiyuki Kawasaki (Institute for Future Initiatives and Dept. Civil Eng., Tokyo University)
- Communication science for disaster countermeasures promotion to individuals Prof. Yo Fukushima (International Research Institute of Disaster Science, Tohoku University)

Venue & Time January 17, 2025 (13:30 p.m. – 17:30 p.m.) Main conference room, 3rd floor, GSES main building AOBAYAMA CAMPUS TOHOKU









