Symposium on **"Preparing for earthquakes and cascading hazards"**

Hosted by National Graduate Institute for Policy Studies (GRIPS) and Building Research Institute (BRI)

Overview:

While technological developments related to earthquake-resistant construction of buildings as well as urban and architectural fire prevention have been promoted for a long time, in the 2011 Great East Japan Earthquake there were many buildings where it became difficult to continue business even though there was little structural damage, and buildings where fire safety issues arose due to damaged fireproof partitions and sprinkler equipment. Also, various issues became apparent, such as damage from subsidence, large-scale fires caused by tsunamis, multiple outbreaks of fires in the capital region which was far removed from the epicenter, and the materialization of commuters who were unable to return home from work. Endeavoring toward not just a reduction in building structural damage but also the assurance of business and residential continuity and maintenance of fire safety is not only an important issue for Japan, where the occurrence of the Tokyo Inland Earthquake and the Nankai Trough Earthquake are anticipated in the near future, but also a common issue for countries where earthquakes occur starting with Southeast Asia and China, in which urbanization is rapidly progressing. This symposium will introduce the latest research results including examples from overseas and will consider the shape that policies should take for reducing damage from earthquakes and cascading hazards such as fires.

Date and time: Friday, November 11, 2016 3:00pm – 6:00pm Open from 2:30pm
Venue: Sokairo Hall, 1st Floor of GRIPS (See map below) (Max. 300 persons)
Language: Japanese/English (simultaneous translation provided)
Hosted by: National Graduate Institute for Policy Studies, Building Research Institute
Supported by: The Japan Building Disaster Prevention Association, Japan Association for Fire Science and Engineering

Program:

3:00-3:10pm Greetings by host
Hitoshi IEDA Professor, GRIPS; Professor-emeritus, University of Tokyo
Yasuo OKUDA Director, Dept. of Structural Engineering, BRI

3:10-5:50pm Presentations
Moderator: **Mamoru KOHNO**: Professor, Tokyo University of Science

Tatsuya IWAMI (Senior Research Engineer, Dept. of Housing and Urban Planning, BRI)
"Summary of the damages by recent earthquakes and post-earthquake fires under the strong wind"

Mike Stannard (Chief Engineer, Ministry of Business, Innovation & Employment, New Zealand)
"Direction for mitigating the consequences of earthquake and cascading hazards in New Zealand"

Tomohisa MUKAI (Senior Research Engineer, Dept. of Structural Engineering, BRI)
"Development of performance based seismic design for new buildings with post-earthquake functional use - Utilizing a lesson learnt from the Great East Japan Earthquake"

Brian Meacham (Associate Professor, Worcester Polytechnic Institute)
"Post-Earthquake Fire Performance of Buildings: Outcomes from Full-Scale Experiments of Reinforced Concrete and Cold-Formed Steel (CFS) Panel Constructed Building Specimens Subjected to Ground Motion Tests Followed by Compartment Fires"

Junichi SUZUKI (Senior Researcher, Fire Standards Div., NILIM)
"Development of an evaluation method for buildings' principal elements during/after an earthquake fire"

5:50-6:00pm Concluding remarks

Access to GRIPS
(7-22-1 Roppongi, Minato-ku, Tokyo)

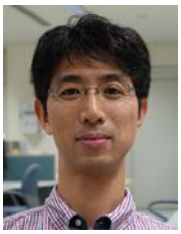
Free of charge (Pre-registration required)
Contact: Institute of International Harmonization for Building and Housing (IIBH) (E-mail: grips@iibh.org)

Profile of Moderator and Presenters

Mamoru KOHNO

Professor, Tokyo University of Science

BS. Eng., MS. Eng. Kyoto University, Dr. Eng. Nagoya University. He has more than 30 years of professional career at Nagoya University, BRI, NILIM and current position at TUS which he joined in 2009. His research area includes structural reliability, performance-based fire safety standards, and post-earthquake fire safety issues of high-rise apartment buildings.



Tatsuya IWAMI

Senior Research Engineers, Dept. of Housing and Urban Planning, BRI

Tatsuya Iwami received a master's degree of Engineering from Kobe University in 1997. He has researched a modeling and risk analysis of city fire since 1997 at Building Research Institute and National Institute for Land and Infrastructure Management. He is a staff of Dept. of Housing and Urban Planning, BRI, JAPAN.

Mike Stannard

Chief Engineer, Ministry of Business, Innovation & Employment

BE (Civil), MBA, FIPENZ. Mike has extensive New Zealand and international experience in building regulation, and engineering, construction, and quality management. He has been the Ministry's lead for technical work relating to the Canterbury earthquake recovery and implementing lessons across New Zealand.

Tomohisa MUKAI

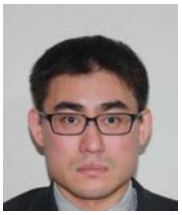
Senior Research Engineer, Dept. of Structural Engineering, BRI

Dr. Mukai received his Ph.D. in Faculty of Science and Engineering from Tokyo University of Science in 2003, M.S. from Tokyo University of Science in 1999. His research focus on the performance based seismic design for buildings. He is a staff of Dept. of Structural Engineering, Building Research Institute, JAPAN.

Brian Meacham

Associate Professor, Worcester Polytechnic Institute

BS.EE and MS.FPE, Worcester Polytechnic Institute, PhD in Risk & Regulatory Policy, Clark University. Brian has over 30 years of professional experience. Prior to joining WPI in 2008 his positions included Principal at Arup, Technical Director Society of Fire Protection Engineers (SFPE), and fire safety engineer in the USA and Europe.



Junichi SUZUKI

Senior Researcher, Fire Standards Div., NILIM

Jun-ichi Suzuki received a doctorate in Eng. in 2007 from Tokyo University of Science. He has researched structural fire safety for 15 years. He joined Dept. of Fire Engineering, Building Research Institute, Japan in 2010. He has worked for NILIM since 2014 and been involved in amendments to fire safety regulations.