Joint Workshop :

International Workshop of Japan Association for Earthquake Engineering on the Effects of Surface Geology on Strong Ground Motion (JAEE-ESGWS)

and

10th International Workshop on Seismic Microzoning and Risk Reduction (10th IWSMRR)

- Toward a Resilient Society against Earthquake -

September 24 (JAEE-ESGWS) and 25 (10th IWSMRR), 2013

National Graduate Institute for Policy Studies, Tokyo, Japan

Organizers

Japan Association for Earthquake Engineering (JAEE) National Graduate Institute for Policy Studies (GRIPS) Building Research Institute, Japan (BRI)



# International Workshop of Japan Association for Earthquake Engineering on the Effects of Surface Geology on Strong Ground Motion

This Workshop is aimed to summerize recent studies on the 2011 Tohoku earthquake in terms of strong ground motion and to exchange the ideas and to share the current status of the ESG (the Effects of Surface Geology) research and other related subjects.

- Date: September 24, 2013 (Tue.) 10:00-17:30

- Venue: Sokairo-Hall, National Graduate Institute for Policy Studies, Roppongi, Tokyo

### - Organization

- Organizers

Japan Association for Earthquake Engineering (JAEE) National Graduate Institute for Policy Studies (GRIPS) Building Research Institute, Japan (BRI)

- Supporting Organizers

<u>Seismological Society of Japan</u> <u>Architectual Institute of Japan</u> <u>Japan Society of Civil Engineers</u> <u>Society of Exploration Geophysicists of Japan</u> <u>The Japanese Geotechnical Society</u> <u>Japan Society of Engineering Geology</u>

- How to register: Please send an e-mail to JAEE Office: office@general.jaee.gr.jp
- Fee: 5,000 JPY (Member of JAEE), 10,000 JPY (Non-member of JAEE), 2,000 JPY (Student)
- Joint Banquet: Sep. 24, 2013 (Tue.) in the evening at the same venue.

# Program

10:00-10:10 Opening Remarks

Prof. Hiroaki Yamanaka, Tokyo Institute of Technology

Senior Prof. Tasuo Oyama, Vice-President, National Graduate Institute for Policy Stiduies

### 10:10-11:50 Morning Session

- Dr. Hiroe Miyake, Earthquake Research Institute, Univ. of Tokyo: **"An overview of the 2011 Tohoku earthquake** rupture models"
- Dr. Toshimi Satoh, Shimizu Corporation: "Interpretation of the cause of high acceleration ground motions during the 2011 Tohoku earthquake"
- Prof. Susumu Ohno, International Research Institute for Disaster Science, Tohoku Univ.: "Evaluation of the 2011 Tohoku earthquake ground motions by Ground Motion Prediction Equations in Japan"
- Dr. Hidenori Kawabe, Reactor Research Institute, Kyoto Univ.: "Long period ground motion simulation of the 2011 Tohoku earthquake"

13:30-15:10 Afternoon Session 1

- Prof. Oguz Ozel, Istanbul University (Turkey): **"Earthquake vulnerability of Istanbul and related** international projects"
- Prof. Tomotaka Iwata, Disaster Prevention Research Institute, Kyoto Univ.: "Comprehensive research on the Uemachi fault system: Study on long term evaluation and strong ground motion estimation"
- Dr. Julie Regnier, CETE Méditerrannée LRPC de Nice (France): "Project PRENOLIN : A benchmark on 1-D numerical simulation for non-linear site response analysis"
- Prof. Ralph Archuleta and Jamison H. Steidl, University of California, Santa Barbara (U.S.A.): "Insights into the effect of local site conditions from geotechnical borehole arrays"

#### 15:20-17:25 Afternoon Session 2

- Dr. Cecile Cornou, Institut des Sciences de la Terre, Grenoble (France): **"Spatial variability of ground motion** over short distance"
- Prof. Francisco Jose Sanchez-Sesma, Instituto de Ingenieria, Universidad Nacional Autonoma de Mexico (Mexico): "A theory of spectral ratios based on the diffuse field assumption"
- Dr. Shigeki Senna, National Institute of Earth Science and Disaster Prevention: "Modeling of the subsurface structure from the seismic bedrock to the ground surface for a broadband strong motion evaluation"
- Prof. Misko Cubrinovski, University of Canterbury (New Zealand): "Effects of alluvial deposits on the ground motions and damage in the 2010-2011 Christchurch (New Zealand) Earthquakes"
- Prof. Kuo-Liang WEN, National Center of Research on Earthquake Engineering (Taiwan): " Site and basin effects study in Taiwan"

17:25-17:30 Closing Remark

Prof. Hiroshi Kawase, Kyoto Univ.

# 10th International Workshop on Seismic Microzoning and Risk Reduction

This Workshop is aimed to exchange the ideas and experiences on Engineering Seismology, Earthquake Engineering, Seismic Hazard and Risk Assessment, Earthquake Disaster Mitigation and Management and other related subjects applicable in urban area among seismologists, engineers, disaster mitigation planners, decision makers as well as representatives of the private sector through the discussion of methodologies and results.

- Date: September 25, 2013 (Wed.) 09:30-17:30
- Venue: Meeting Room 1A/1B, National Graduate Institute for Policy Studies, Roppongi, Tokyo
- Organization

 Organizers

 National Graduate Institute for Policy Studies (GRIPS) Building Research Institute, Japan (BRI) Japan Association for Earthquake Engineering (JAEE)

 Supporting Organizers

 Seismological Society of Japan
 Architectual Institute of Japan
 Japan Society of Civil Engineers
 The Japanese Geotechnical Society
 The Japan Society of Mechanical Engineers
 Society of Exploration Geophysicists of Japan
 Japanese Society for Active Fault Studies
 Institute of Social Safety Science
 Japan Society for Natural Disaster Science

- How to register: Please send an e-mail to Concierge Desk: 10iwsmrr@kenken.go.jp
- Fee: 3,000 JPY
- Further Information: "<u>http://www.jaee.gr.jp/jp/event/10th-iwsmrr-second-circular/</u>"

## Program

09:30-09:40 Opening Remarks

Prof. Takahisa Enomoto (Kanagawa Univ.) Dr. Toshiaki Yokoi (IISEE, Building Research Institute)

#### 09:40-12:10 Morning Session

- Prof. Kojiro Irikura, Aichi Institute of Technology: "Some features of strong ground motions and structural damage during the 2011 Mw 9.0 Off the Pacific Coast of Tohoku Earthquake"
- Prof. Masato Motosaka, International Research Institute for Disaster Science, Tohoku Univ.: "Site specific ground motion characteristics and building damage in Sendai area during the 2011 Tohoku earthquake"
- Dr. Yoshinobu Tsuji, International Institute of Seismology and Earthquake Engineering, Building Research Institute : "Heights Distribution and Damage of the Tsunami of the 2011 off the Pacific Coast of Tohoku Earthquake on the north part of the Sanriku Coast"
- Prof. Manuel Navarro, Universidad de Almeria, Spain: "Analysis of site effects, building response and damage distribution observed due the 2011 Lorca destructive Earthquake"
- Dr. Toshihide Kashima, International Institute of Seismology and Earthquake Engineering, Building Research Institute: **"Dynamic Behavior of Buildings based on Strong Motion Data during the 2011 Great East Japan Earthquake"**
- Dr. Kazuo Tani, National Research Institute for Earth Science and Disaster Prevention: "Recommendations of the Japanese Geotechnical Society and New Qualification System of Geotechnical Engineers"

13:30–15:35 Afternoon Session 1

- Prof. Shoichi Ando, National Graduate Institute for Policy Studies: "Disaster Management in Japan related to Earthquake Hazard Risk Management"
- Prof. Mario Gustavo Ordaz Schroeder, Instituto de Ingenieria, Universidad Nacional Autonoma de Mexico (Mexico): "Improved financial management of Mexico's Natural Disasters Fund using advanced risk-estimation tools"
- Dr. Bartolome Bautista, Deputy Director of Philippine Institute of Volcanology and Seismology (Philippine): **"Refinement of the Source Parameters of the 1948 M8.1 Panay Island Earthquake"**
- Mr. Hideaki Fujiyama, Cabinet Office, Government of Japan: **"The Damage Estimation on the Nankai Trough** Megathrust Earthquake"
- Prof. Kuo-Liang WEN, National Center of Research on Earthquake Engineering (Taiwan): "Microzonation Study in the Hanoi, Vietnam"

15:45-17:25 Afternoon Session 2

- Mr. Masaki Nakamura, Seismological and Volcanological Department, Japan Meteorological Agency: "Information on long-period ground motion of the Japan Meteorological Agency"
- Dr. Ken Hatayama, National Research Institute for Fire and Disaster: "Sloshing Damage to Oil Storage Tanks due to Long-Period Strong Ground Motions during the 2011 Tohoku, Japan Earthquake"
- Dr. Julie Regnier, CETE Méditerrannée LRPC de Nice (France): "Assessing Nonlinear Behavior of Soils in Seismic Site Response: Statistical Analysis on KiK-net Strong-Motion Data"
- Prof. Kazuo Seo, Miyagi Univ. of Education: "THE 2011 TSUNAMI AND SCHOOLS IN DAMAGED AREAS What We Have Learned Through Regional Evacuation Activities from the Tsunami Disaster -"

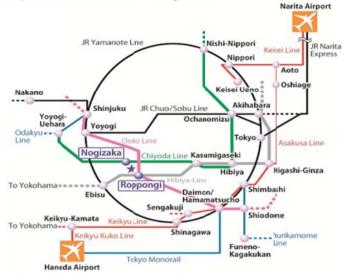
17:25–17:30 Closing Remark

Prof. Manuel Navarro, Universidad de Almeria, Spain

## Access and Maps

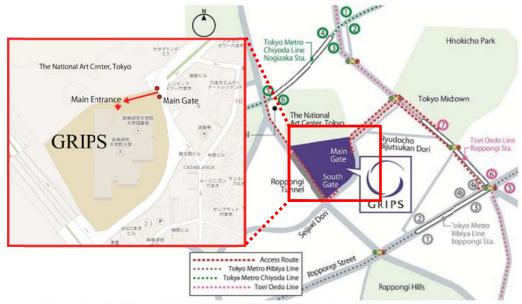
### Getting to GRIPS

The GRIPS building is located right in the center of Tokyo with convenient access by public transport. Both Nogizaka station on the Chiyoda line and Roppongi station on the Oedo and Hibiya line are within 10 minutes walking distance.



### Access by Public Transport

From Narita Airport to Roppongi via Tokyo by Narita Express: 1 hour 30 minutes From Narita Airport to Roppongi via Nippori by Skyliner: 1 hour 15 minutes From Haneda Airport to Roppongi by Tokyo Monorail: 40 minutes From Tokyo to Roppongi: 17 minutes



From exit no. 7 at Roppongi station on the Toei Oedo Line: 5 minutes walk From exit no. 4a at Roppongi station on the Tokyo Metro Hibiya Line: 10 minutes walk From exit no. 5 at Nogizaka station on the Tokyo Metro Chiyoda Line: 6 minutes walk

http://www.grips.ac.jp/en/about/access/