

9th CUEE and 4th ACEE Joint Conference

9th International Conference on  
Urban Earthquake Engineering  
&  
4th Asia Conference on  
Earthquake Engineering

March 6-8, 2012

In commemoration of the First Anniversary of  
the 2011 Tohoku Pacific Earthquake



Conference Venue

Tokyo Institute of Technology,  
O-okayama Campus, Tokyo, Japan

Organizer

Center for Urban Earthquake Engineering (CUEE)  
<http://www.cuee.titech.ac.jp/conf/>

Welcome Message

It is our great pleasure to invite you to this specially coordinated event that combines two major international conferences on earthquake engineering: the 9th International Conference on Urban Earthquake Engineering (9th CUEE) and the 4th Asia Conference on Earthquake Engineering (4th ACEE).

The 9th CUEE is an integral part of the research activities of the Center for Urban Earthquake Engineering (CUEE), Tokyo Institute of Technology (Japan). CUEE is the Global Center of Excellence (COE) in the field of earthquake engineering, supported by the Japan Ministry of Education, Culture, Sports, Science and Technology. The CUEE Conference has been held annually since fiscal year 2003 under two consecutive COE programs. The current program aims not only to promote research on all aspects of mitigating the seismic mega-risk facing modern cities in earthquake regions throughout the world, but at the same time to form and encourage next-generation practitioners and researchers who themselves must develop new strategies and practices for seismic risk reduction. The conference will continue to stimulate intensive information dissemination and technology transfer, as well as to promote and maintain an international network directed toward nurturing young researchers through a sustained international collaborative effort.

The 4th ACEE Conference will comprise the Association of Structural Engineers of the Philippines Inc. (ASEP), the Asian Institute of Technology (AIT), and the Engineering Institute of Thailand (EIT). Since the 1st ACEE held in Manila, Philippines, in 2004, the conference has been addressing "Seismic Hazards and Damage Mitigation in the Asian Region", providing an excellent forum that brings together Asian researchers, professionals, engineers, scientists, and academics to promote and exchange new ideas and experiences in the broad fields of seismology, earthquake engineering, seismic risk and disaster mitigation.

The organizers of the 9th CUEE and 4th ACEE are excited by the opportunity to combine the two conferences. The Joint Conference will offer a platform not only sharing common interests and new information and technologies in the field of urban earthquake engineering but also one to disseminate research and educational outcomes and to implement a strengthened worldwide network for

earthquake engineering. The Conference is to feature state-of-the-art technical presentations on various themes relevant to urban earthquake engineering, followed by presentations in parallel sessions including a blind analysis contest of an E-defense shaking table test. Special sessions are also planned on recent earthquakes, including the **11th March 2011 Tohoku Pacific Earthquake** that resulted in catastrophic damage in northeast Japan and an estimated death toll of 20,000. This conference will also include, as always, Special Educational Sessions and Best Presentation Awards for Young Researchers. To facilitate conference participation of young researchers, post doctoral fellows and PhD students, travel grants will be available for some twenty individuals. Our hope is that the forthcoming conference will be an excellent opportunity for all of us dedicated to urban earthquake engineering.

Official Language

The official language of the conference is English.

Conference Venue

West Building No.9 at the O-okayama Campus,  
Tokyo Institute of Technology.

Fees for Registration and Others

**Full Registration:** JPY 20,000 (Including one copy of *Proceedings*, welcome party, lunches and beverages, and banquet)

**Standard Registration:** JPY 10,000 (Including one copy of *Proceedings*, welcome party, lunches and beverages)

**Student Registration:** JPY 6,000 (Includes one copy of *Proceedings*, welcome party, lunches and beverages: Pre-registered full-time students only)

**Free Registration:** *Gratis* (With one copy of *Proceedings*, available for those not submitting papers and special invitees only)

**Banquet:** Formal dinner, entertainment, and speeches on March 8th at Meguro Gajoen, Meguro Ward, Tokyo, Japan

## Conference Topics

**Lessons Learnt:** post-earthquake reconnaissance; lessons from recent earthquakes and tsunamis including **the Tohoku Pacific Earthquake**

**Engineering Seismology:** seismicity, ground and site effects, and seismic hazard analysis

**Tsunamis:** hazard assessment, earthquake sources, wave propagation, impact, and early warning

**Geotechnical Engineering:** foundations, ground-failure, liquefaction, and underground structures

**Structural Engineering:** materials, structural systems and elements, structural response, evaluation and retrofit of buildings, bridges, industrial facilities, heritage buildings, and special structures

**Response Records:** actual responses of buildings, bridges, dams, and other structures during recent earthquakes

**Advanced Technologies:** base isolation systems, passive energy dissipation, semi-active structural control, smart materials and structures, and health monitoring

**Lifeline Systems:** design and analysis, network assessment, mitigation, components and systems

**Non-Structural Components and Contents:** modeling, control and mitigation strategies

**New Design Criteria and Methods:** seismic codes and standards, as well as applications

**Earthquake Engineering Practice:** recent projects, design, and construction

**Earthquake Loss Estimation:** vulnerability analysis, risk assessment and management

**Multihazards:** Expanding earthquake technologies to the protection of infrastructure systems against multiple hazards

**Information and Computing Technology:** simulation, modeling, earthquake wave generation, computer graphics, database information, GIS

**Socio-economic Issues:** loss assessment, risk, seismic awareness, preparedness, and education

**Human Behavior:** egress management, human modeling, recovery methods

**Blind Analysis Contest:** Numerical prediction of shaking table test results for 5-story steel frame (with and without base isolation)

**Others:** earthquake-induced fire; early warning systems; earthquake prediction; post-quake reconstruction; seismic behavior of non-engineered structures

## 11th March 2011 Tohoku Pacific Earthquake

Special sessions and lectures on **the 2011 Tohoku Pacific Earthquake** are planned in commemoration of its first anniversary, together with a one- or two-day post conference tour to the tsunami affected area. **Further information will be posted on our conference web site.**

## Call for Papers

Prospective authors are invited to submit abstracts of about 200 words. Submission of all abstracts should be completed on the conference website.

### Deadlines

Submission of abstracts:	November 15, 2011
Notification of abstract acceptance:	November 30, 2011
Submission of final paper:	December 31, 2011
Registration:	December 31, 2011

### Publication of Proceedings

Papers presented in the conference will be published in the *Proceedings of the 9th CUEE & 4th ACEE Joint Conference.*

### Blind Analysis Contest

For the third time, a blind analysis contest for an E-defense steel building shaking table test is planned. Anyone interested in numerical prediction should check the following link on our website for further details <<http://www.cuee.titech.ac.jp/contest/>>. **Winners of the contests will receive a travel grant to attend the joint conference.**

### Travel Support for Young Researchers

Eligibility funding is available permitting **Travel Awards** for up to some twenty (20) individuals. PhD students, early-career academics, and early-career professionals studying or working at our collaborating institutions are all eligible.

**All grants assume full participation in the joint conference and the presentation of an approved paper at one of the sessions.**

Anyone interested in obtaining one of these grants should register for travel support through our web page after first submitting a full paper.

### Best Presentation Awards for Young Researchers

Best Presentation Awards for Young Researchers will be conferred. The Organizing Committee will select the best presentations as judged from the quality and interest of research demonstrated, and the ability of the presenter to explain and answer questions about the material. Winners of the awards will be announced during the Closing Session on March 8th.

## Joint Conference Sponsors & Organizer

### Sponsors

Global COE Program “International Urban Earthquake Engineering Center for Mitigating Seismic Mega Risk”  
Association of Structural Engineers of the Philippines Inc. (ASEP)  
Asian Institute of Technology (AIT)  
Engineering Institute of Thailand (EIT)  
Pacific Earthquake Engineering Research Center (PEER)

### Organizer

Center for Urban Earthquake Engineering (CUEE), Tokyo Tech

### Inquiries

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### Conference Web Site

<http://www.cuee.titech.ac.jp/conf/>

This website is to be constructed and continuously updated with the latest conference information. **Submission of abstracts/papers as well as conference registration should be made through this web**

