



2012 AIT-NUS-ITB-KU JOINT SYMPOSIUM ON HUMAN SECURITY ENGINEERING

Theme

Establishing the discipline of Human Security Engineering and Broadening a Network for Human Security in Asian Megacities

Venue

Chaophya Park Hotel, Bangkok, Thailand

Date

November 19-20, 2012

Organized by:

**Asian Institute of Technology
National University of Singapore
Institute of Technology Bandung
Kyoto University**

Co-organized by:

AUN/SEED-Net

Supported by

Kyoto University Global COE "Global Center for Education and Research on Human Security Engineering for Asian Megacities"

ORGANIZERS

Asian Institute of Technology, Bangkok, Thailand
National University of Singapore, Singapore
Institute of Technology Bandung

Kyoto University, Japan
Kyoto University Global COE "Human Security Engineering for Asian Megacities"

BACKGROUND AND SCOPE

Fulfilling basic human needs and assuring the self-sustainable recovery from environmental pollution and disasters in Asian Megacities have been the major challenges for several decades, and the situation still needs more improvement. Against such a background, Kyoto University has launched a new Global Center of Excellence (GCOE) Program entitled "Global Center for Education and Research on Human Security Engineering for Asian Megacities" since 2008 fiscal year. The purpose of this GCOE program is to establish the discipline of "Urban Human Security Engineering" and to provide education for next-generation researchers and high-level practitioners for human security in Asia.

One of the characteristics of this GCOE program is to implement area-specific research and education. The program set up 7 overseas bases, and Asian Institute of Technology (AIT), National University of Singapore (NUS), and Institute of Technology Bandung are the overseas bases of this program.

The symposium aims to deepen the understanding of urban human security engineering and develop its policy and implementation. In addition, the symposium will contribute to strengthen a broad range of human security network between ASEAN countries through the distinguished speakers who are invited from the countries.

URBAN HUMAN SECURITY ENGINEERING

"Urban Human Security Engineering" is defined as a system of technologies (techniques) for designing and managing cities that enable their inhabitants to live under better public health conditions, and also live free from potential threats of large-scale disasters and environmental destruction. For establishing this discipline, four existing fields, i.e. urban governance, urban infrastructure management, health risk management, and disaster risk management, are integrated into one discipline. The program of the symposium will include four research fields which Human Security Engineering consists of.

OBJECTIVES

Key objectives of the conference are:

- To discuss the new discipline of Human Security

Engineering

- To broad a network for human security among not only Thailand and Japan, but also the other Asian Megacities
- To promote interaction between researchers and practitioners

Topics of interest in this AIT-NUS-ITB-KU Joint Symposium includes (but not limited to):

1. Urban Governance
2. Urban Infrastructure Asset Management
3. Environmental Accounting of Infrastructure Project
4. Urban Energy Security Engineering
5. Urban Food Security Engineering
6. Urban Transport and Logistics
7. Urban Disaster Prevention

WHO SHOULD ATTEND THE CONFERENCE?

We are pleased to welcome all of researches, practitioners, and students who are interested in Human Security Engineering.

LANGUAGE

The official language of the conference is English.

ORGANISING BODIES

The conference is jointly organized by Asian Institute of Technology, Institute of Technology Bandung, National University of Singapore, Kyoto University and the Global COE program "Global Center for Education and Research on Human Security Engineering for Asian Megacities"

ASIAN INSTITUTE OF TECHNOLOGY promotes technological change and sustainable development in the Asian-Pacific region through higher education, research and outreach. Established in Bangkok in 1959, AIT has become a leading regional postgraduate institution and is actively working with public and private sector partners throughout the region and with some of the top universities in the world.

NATIONAL UNIVERSITY OF SINGAPORE, starting out in 1905 as a small medical college, offers a global approach to education and research, with a focus on Asian perspectives and expertise. Its transformative education includes a broad-based curriculum underscored by multi-disciplinary courses and cross-

faculty enrichment, as well as special programs which allow students to realize their potential. Over 36,000 students from 100 countries further enrich the community with their diverse social and cultural perspectives, making campus life vibrant and exciting.

BANDUNG INSTITUTE OF TECHNOLOGY (Indonesian: Institut Teknologi Bandung, abbreviated as ITB) is a state, coeducational research university located in Bandung, Indonesia. Established in 1920, ITB is the oldest technology-oriented university in Indonesia. ITB set out a vision to be an institution of higher education and center of development for science, technology and art, who continuously strives for world excellence, reliability and respectability, and together with other respectable institutions of the nation leads the Indonesian society into unity, sovereignty and prosperity.

KYOTO UNIVERSITY was founded in 1897, the second university to be established in Japan. Known for its pioneering spirits and academic freedom, the university has produced five Nobel laureates and two Fields medalists.

Global COE(Centers of Excellence) Program, which has been carried out by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) , will provide funding support for establishing education and research centers that perform at the apex of global excellence to elevate the international competitiveness of the Japanese universities. The program will strengthen and enhance the education and research functions of graduate schools, to foster highly creative young researchers who will go on to become world leaders in their respective fields through experiencing and practicing research of the highest world standard.

CONFERENCE GOVERNORS

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Assist. Prof. Pham Huy Giao (AIT)
Assist. Prof. Kunnawee Kanitpong(AIT)
Dr. Lal Samarakoon (AIT)

KEYNOTE SPEAKERS

Prof. Wawan G.A. Kadir
(Vice Rector for Research and Innovation, ITB)

REGISTRATION (registration fee)

Please send your name and affiliation to Dr.Mamoru Yoshida, who is the general secretariat of this conference, by October 31th, 2012. All participants are free to attend the conference.

PAPER DEADLINE

The speakers are requested to write a paper with the template, which is downloadable from the conference website. The due date of paper submission is *October 30, 2011*. Please send a paper to Dr. Mamoru Yoshida, who is a general secretariat of this symposium.

CONFERENCE WEBSITE

<http://hse.gcoe.kyoto-u.ac.jp/anik12/hp/index.html>

CONFERENCE VENUE

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Map:



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Tentative Program

1st day (November 19th)

8:30-9:00	Registration	15:00-15:15	Coffee Break
9:00-9:20	Opening Remarks Hiroyasu Ohtsu(Kyoto University) Noppadol Phienwej (Asian Institute of Technology) Prayoon Shiowattana (Executive Director, AUN/SEED-Net Secretariat)	15:15-16:45	Session 3: Urban Infrastructure Management (2) -Transport Logistics System Session Chair: <i>Eiichi Taniguchi</i> (Kyoto University) - Rojee Pradhananga (Kyoto University) "Threshold distance for risk analysis in routing and scheduling of hazardous material" - Qiang Meng (National University of Singapore) "Nonlinear congestion pricing - Model development and distributed algorithm design" - Dr. Siradol Sirihara (Suranaree University of Technology) "Bangkok Mass Transit: Moving to a New Paradigm"
9:20-10:10	Keynote Speech Prof. Wawan G.A. Kadir (Vice Rector for Research and Innovation, ITB)		
10:10-10:30	Coffee Break		
10:30-12:00	Session 1: Urban Governance -Private Public Partnership for Infrastructures - -Session Chair: <i>Masamitsu Onishi</i> (Kyoto University) - Masamitsu Onishi (Kyoto University) "Is Public-Private Partnership a Financial Instrument?" - Khairuddin Abdul Rashid (International Islamic University Malaysia) "Public-Private Partnership in Malaysia" - Veerasak Likhitrungsilp (Chulalongkorn University) "Public-Private Partnership in Thailand"		
12:00-13:30	Lunch		
13:30-15:00	Session 2: Urban Infrastructure Management (1) -Infrastructure Asset Management Session Chair: <i>Hiroataka Kawano</i> (Kyoto University) - Chalermchai Wanichlamlert (SIIT, Thammasat University) "Thailand Standard for Durability Design considering Chloride Attack and Carbonation" - Takeshi Koike (Kyoto University) "Seismic risk management of urban lifelines" - Pakawat Sancharoen (SIIT, Thammasat University) "Current Problems and Practices of Infrastructure Maintenance in Thailand"		

2nd day (November 20th)

9:00- 10:30	Session 4: Urban Infrastructure Management (3) -Geotechnical Structure Management Session Chair: <i>Hiroyasu Ohtsu</i> (Kyoto University) - Hiroyasu Ohtsu (Kyoto University) "Filed Monitoring of Torrential Rainfall in Nakhon Nayoy, Thailand" - Noppadol Phienwej (Asian Institute of Technology) "TBA" - Suttisak Soralump (Kasetsart University) "TBA"	15:00-15:15	Coffee Break
10:30-10:45	Coffee Break	15:15- 16:45	Session 7: Disaster Risk Management - Disaster Prevention against Natural & Man-Made Hazards Session Chair: Junji Kiyono (Kyoto University) Assoc. Prof. Eiji Harada (Kyoto University) "Numerical Simulation for Evacuation Planning by DEM-base Crowd Behavior Simulator" Prof. Panitan Lukkunaprasit (Chulalongkorn University) "The effect of M6.8 24 March 2011 Tarlay Earthquake on structures in Northern Thailand" Prof. Junji Kiyono (Kyoto University) "Field Investigation of Earth Dam Failure in the 2011 off the Pacific Coast of Tohoku Earthquake"
10:45-12:15	Session 5: Urban Infrastructure Management (4) -Energy Supply Management Session Chair: <i>Yasuhiro Yamada</i> (Kyoto University) - Eko Widiyanto (Trisakti University) "Integrated approach to increase reserve, recovery factor and production of oil and gas" - Rachmat Sule (Institut Teknologi Bandung) "Development of Hard - and Software of Microseismic for Geothermal Exploration and Monitoring" - Yasuhiro Yamada (Kyoto University) "Uncertainties in shale gas exploration/production"	16:45-17:00	Closing Ceremony
12:15-13:30	Lunch		
13:30-15:00	Session 6: Urban Infrastructure Management (5) -Water Resource and Food Supply Management Session Chair: <i>Yasuto Tachikawa</i> (Kyoto University) -Yasuto Tachikawa (Kyoto University) "A rainfall-runoff simulation for the 2011 flood in Thailand and a direction of water resources prediction research under a changing climate" -Mukand S. Babel (Asian Institute of Technology) "Hydrological impact of biofuel production: A case study of the Khlong Phlo Watershed in Thailand" -Sucharit Koontanakulvong (Chulalongkorn University) "Sukhothai Flood Risk Management under changing climate"		