

New generation of geohazard mapping and strategy for its social application

Date: 12 Mar 2016 (09:30-18:30)

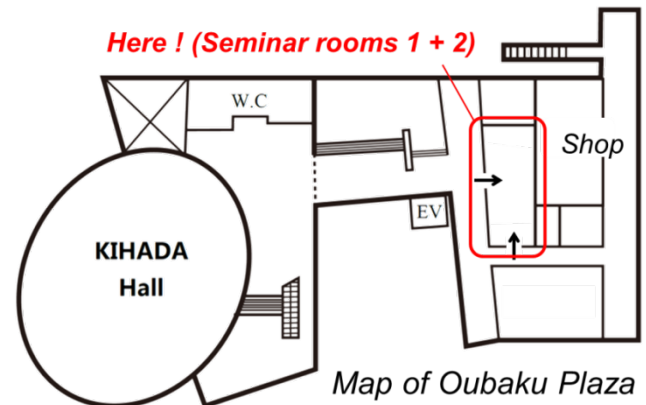
**Place: Uji Campus Oubaku plaza
Seminar rooms 1 + 2**

Key note lecture 14:00-14:30

Dr. Irasema Alcántara-Ayala

(National Autonomous University of Mexico, DPRI-KU)

Beyond hazard understanding: landslide risk perception in developing countries



Invited speakers

Dr. Nicola Casagli (University of Florence)

10:00-10:30 Landslide monitoring and rapid mapping

Dr. Michel Jaboyedoff (University of Lausanne)

10:30-11:00 The use of new data and techniques to characterize landslide geometry

Dr. Guangqi Chen (Kyushu University)

11:50-12:20 Hazard mapping of geodisaster chain initiated from earthquake-induced landslides

Dr. Masyhur Irsyam (Bandon Institute of Technology)

14:30-15:00 Mapping of earthquake risk for big cities in Indonesia

Dr. Katsuo Sasahara (Kochi University)

15:50-16:20 Combination of monitoring landslide movement to hazard map against landslide disasters

Dr. Naoki Sakai (National Research Institute for Earth Science and Disaster Prevention)

16:20-16:50 Experimental research on a heavy rainfall-induced shallow landslide by large-scale rainfall simulator

+ 6 speakers from DPRI-KU

(H. Tatano, M. Chigira, T. Kamai, S. Matsuura, H. Takebayashi, Y. Matsushi)

GADRI Geohazard Group Meeting 2016

New generation of geohazard mapping and strategy for its social application

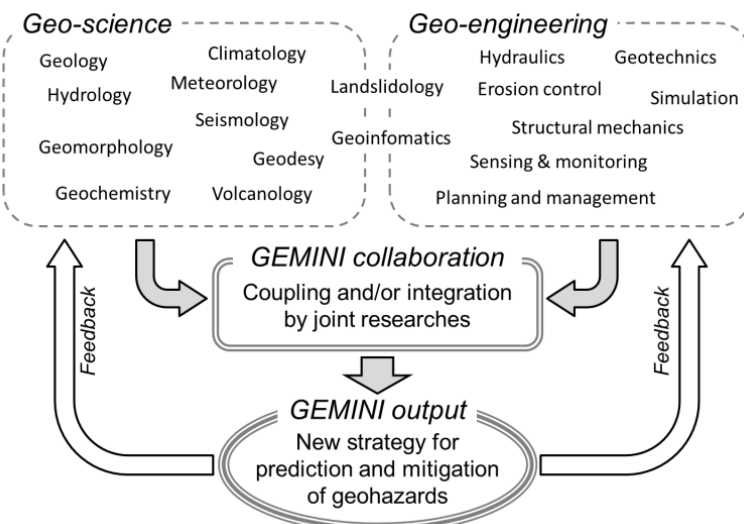
Date: 12 Mar 2016 09:30-18:30 (see timetable for detail)

Place: Oubaku plaza Seminar rooms 1 + 2 Kyoto Univ

The GADRI (Global Alliance of Disaster Research Institutes) geohazard group meeting provides the unique opportunity to discuss present status and future tasks for GEMINI* implementation (see below). One of the most important common strategy for geo-disaster mitigation is hazard mapping, thus we would like to start the discussion on the methodology of geohazard mapping and scope of social application of geohazard maps. Susceptible areas to geohazards are time varying due to the long-term phenomena such as regional tectonics and climate change, and also short-term processes such as precipitation and earthquake shaking. In other words, hazard mapping in the next generation could be made in conjunction with spatial and temporal prediction of geo-disaster. In this meeting, practically applied methodologies of hazard mapping will be presented and discussed, from which we will find our road map toward the most appropriate mapping of geohazards and social application of such hazard maps.

***GEMINI: Geohazard mitigation on the new innovation in science and engineering** (see Fig for the concept)

GEMINI is a project proposed by the GADRI Geohazard Group for developing, sharing, and generalizing the strategy for geohazard mitigation. The project unites updated scientific understanding of earth surface processes and latest technology in geotechnical engineering. In this approach, the inseparable *twins* of science and engineering collaborate tightly to create comprehensive way for spatial and temporal prediction of geohazards, risk assessment in potential sites of geo-disaster, and countermeasures against human, social and economic damages. Since geohazards have various aspects with varying phenomena, such as landslides, debris flow, soil erosion, liquefaction, settlement, in both natural and artificial geomaterials, their research approaches also varies in many scientific and engineering fields. This project searches new coupling of existing knowledge and techniques, and also explores implementation of new methodology for geohazard mitigation. Workshops held by the GADRI framework will help host occasion for discussion, establish the connection between researches and institutes, and promote joint researches for this GEMINI collaboration.



Points to be discussed today

- ✓ Gaps between science, engineering and society (or local community).
- ✓ How can we fill the gaps and make bridges for geo-disaster mitigation?
- ✓ Role of scientific, engineering and social researches.
- ✓ Toward risk map from hazard map.
- ✓ Application to developing regions.
- ✓ Direction and next steps of GEMINI.

New generation of geohazard mapping and strategy for its social application

12 Mar 2016 09:30-18:30

Oubaku plaza Seminar rooms 1 + 2

9:00	Reception open	20 min (= 15 min talk + 3-5 min Q&A) 30 min (= 25 min talk + 3-5 min Q&A)
9:30	Session 1 (Chairperson: M.Chigira)	
	Opening	Opening remark by Y. Matsushi
	Hirokazu Tatano (DPRI Kyoto University)	Framework of GADRI for corroborative projects
10:00	Nicola Casagli (Invited) (University of Florence)	Landslide monitoring and rapid mapping
10:30	Michel Jaboyedoff (Invited) (University of Lausanne)	The use of new data and techniques to characterize landslide geometry
11:00	Break	Session 2 (Chairperson: Y. Matsushi)
	Hiroshi Takebayashi (DPRI Kyoto University)	Numerical simulation software of debris/mud flow
11:30	Gonghui Wang (DPRI Kyoto University)	Predicting the aerial extent of fluidized landslides
12:00	Guangqi Chen (Invited) (Kyushu Univ)	Hazard mapping of geodisaster chain initialed from earthquake-induced landslides
12:30	Photo session	Take a group photo of all attendance at outside of the seminar room
13:00	Lunch	
13:30		
14:00	Session 3 (Chairperson: T. Tobita)	
	Irasema Alcántara-Ayala (National Autonomous University of Mexico, DPRI Kyoto University)	Keynote lecture Beyond hazard understanding: landslide risk perception in developing countries
14:30	Masyhur Irsyam (Invited) (Bandon Institute of Technology)	Mapping of earthquake risk for big cities in Indonesia
15:00	Toshitaka Kamai (DPRI Kyoto University)	Landslides in urban residential slopes induced by strong earthquakes in Japan
15:30	Masahiro Chigira (DPRI Kyoto University)	Hazard mapping of earthquake-induced landslides of pyroclastic fall deposits
	Break	Session 4 (Chairperson: G. Wang)
16:00	Katsuo Sasahara (Invited) (Kochi University)	Combination of monitoring landslide movement to hazard map against landslide disasters
16:30	Naoki Sakai (Invited) (National Research Institute for Earth Science and Disaster Prevention)	Experimental research on a heavy rainfall-induced shallow landslide by large-scale rainfall simulator
17:00	Sumio Matsuura (DPRI Kyoto University)	Forest effects on sediment-related disasters and adaptation to climate change
	Yuki Matsushi (DPRI Kyoto University)	4 D-hazard mapping for shallow landslides by heavy rainfall
17:30	Break	
18:00	Discussion	# Gaps between science, engineering and society. # How can we fill the gaps and make bridges for disaster mitigation? # Toward risk map from hazard map.
	Wrap-up and closing	# Direction and next steps of GEMINI.
18:30		