



Training Course on Earthquake Hazard and Risk

Assessment in East Asia

Oct. 1st – 5th, 2018

Institute of Earth Sciences, Academia Sinica, Taipei, Taiwan

Call for Participation

Deadline for submission of applications: August 31, 2018

Organized by

- Integrated Research on Disaster Risk International Centre of Excellence-Taipei (IRDR ICoE-Taipei)
- International Council for Science Regional Office for Asia and the Pacific (ICSU ROAP)
- Institute of Earth Sciences, Academia Sinica, Taiwan (AS)
- Taiwan Earthquake Model (TEM)/ Taiwan Earthquake Center (TEC)
- Earth Observatory of Singapore
- National Research Institute for Earth Science and Disaster Resilience, Japan
- National Center for Research on Earthquake Engineering, Taiwan
- National Science and Technology Center for Disaster Reduction, Taiwan
- Earthquake-Disaster & Risk Evaluation and Management Center (E-DREaM), National Central University, Taiwan
- Sinotech Engineering Consultants, Inc.

Background

East Asia is located at the western Pacific, where large and moderate size earthquakes frequently occurred and define the locations of active convergent plate boundary. Many large cities of East Asia, for example, Tokyo, Taipei, Manila, and Jakarta are located either on or near the active seismogenic zones, and exposed to high-to-severe seismic hazard and risk. It is extremely important for the people living in these countries and cities to understand the seismic hazard and risk they may confront. Taiwan is located at the middle of the western Pacific and had also experienced large to moderate size earthquakes in recent years, including 1999 M 7.6 Chi-Chi earthquake and 2016 M 6.5 Meinong earthquake. The Taiwan Earthquake Model (TEM) has been collaborating with Japan (NIED) and New Zealand (GNS), and also worked with Global Earthquake Model (GEM) for more than five years on the assessment of earthquake hazard and risk. In this training course, the ICoE-Taipei will cooperate with the TEM research group to invite experts as well as young scientists from Asian countries to share and discuss their experiences regarding to earthquake hazard and risk assessment.

Objectives

The IRDR ICoE-Taipei and its co-organizer, the team of TEM, will hold a training course on earthquake hazard and risk assessment of East Asia to encourage learning and exchange of ideas among Asian scientists. This training course will focus on all aspects of earthquake hazard and risk assessment, including seismic hazard and risk modeling, active fault source model, geodetic deformation model, ground motion prediction and scenarios and hazard and risk products. Both lecturers and scientists will share data/ studies, and experiences from earthquake hazard and risk management and relevant implementation. Exercises and group discussions will be planned to facilitate the communications among the participants.

To strengthen the outcomes of the training courses, "call-for-proposal" will be announced no later than 3-6 months after this training course. The trainees will be invited to submit landslide research proposals followed by a competitive reviewing process. Only limited numbers of proposals will be granted for one year. IRDR ICoE-Taipei and ICSU ROAP will review and announce results no later than 3 months after closing of the proposal submission. The grantees will be required to submit a report to IRDR ICoE-Taipei and ICSU ROAP no later than 3 months after the end of the executive period.

Training programs:

Training Course on Earthquake Hazard and Risk Assessment in East Asia		
	Morning	Afternoon
Meeting		
Day 1	Seismic Hazard, Active Fault, and Ground motion	
	Seismic hazard and risk model	<ul style="list-style-type: none"> ● Active Fault and Deformation Model ● Ground Motion Prediction and Scenarios
Day 2	Site effects, Multiple topics and Group discussion	
	<ul style="list-style-type: none"> ● Site effects ● Attendee presentations (posters) 	<ul style="list-style-type: none"> ● Attendee presentations ● Group discussion
Day 3	Seismic Hazard Calculation and Products, Conclusion	
	<ul style="list-style-type: none"> ● Near-fault issues on seismic hazard calculations ● Hazard & Risk products 	<ul style="list-style-type: none"> ● Group discussion ● Conclusion of each discussion group
Day 4	Real Case Studies and Experiences	
	Field Trip - Chi-Chi earthquake museum	
Day 5	Response and Implementation	
	Field Trip – National Science and Technology Center for Disaster Reduction, Taiwan	Group presentation and Closing Remark

Note: This is a draft program, and any current updates or revises shall be expected.

Location

The AI is mainly organized by Integrated Research on Disaster Risk International Centre of Excellence, Taipei (IRDR ICoE-Taipei), of the Academia Sinica in Taiwan in partnership with the team of TEM and ICSU ROAP. It will take place in the city of Taipei at the Academia Sinica. For more information about Taipei City, please visit <http://www.taipeitravel.net/en/>

Target Audience

Approximately 15-20 at the level of Master and PhD students, post-doc, and young-career candidates from academia, practitioner, and policy communities from East and Southeast Asia are expected. Participants are encouraged to bring specific issues or research ideas that will be further developed and nurtured based on systems thinking involving multiple disciplines and stakeholders. Participants will be required to bring a printed poster (A1 size, Portrait format) to share dataset, analyses, or problem they are working on.

Applying to Participate

Candidates from academia, practitioner, and policy communities from East and Southeast Asia are expected. Individuals who are interested to participate in the Landslide Risk Reduction Training School should complete the following items no later than August 31st, 2018.

- a) On-line application sheet
- b) Letter of application; see attached
- c) An updated full Curriculum Vitae with publication list

The documents (items b and c) should be submitted by email to ICSU ROAP at secretariat@icsu-asia-pacific.org no later than August 31st, 2018. Applications that are not received, in full or in part, by the deadline stipulated above will NOT be considered for participation.

Successful applicants will receive the following:

- Letter of Invitation: A formal letter of invitation from the host organization to participants to help obtain visas to attend the workshop. (The host organization will be NOT responsible for participants' visa acquirement. For Taiwan's Visa, please see <http://www.boca.gov.tw/np.asp?ctNode=776&mp=2>);
- Costs for 1) A round-trip economy class flight/ equivalent by the most direct route of applicants' work address 2) Accommodation 3) Breakfast/ Lunch and transportation during the AI period will be covered. Accommodation & transportation (airport pick-ups and field trip) will be arranged by National Central University and ICoE-Taipei. Other costs not mentioned above will not be covered by the organizers.

For More Information

Questions about the workshop or this Call for Participations may be directed to ICSU ROAP at secretariat@icsu-asia-pacific.org or visit the website: <http://www.icsu.org/asia-pacific>

Organizers

	Integrated Research on Disaster Risk (IRDR) Programme
	International Council for Science Regional Office for Asia and the Pacific (ICSU ROAP)
	IRDR International Centre of Excellence-Taipei (ICoE-Taipei)
	Institute of Earth Sciences, Academia Sinica, Taiwan (AS)
	Taiwan Earthquake Model (TEM)
	Earth Observatory of Singapore
	National Research Institute for Earth Science and Disaster Resilience, Japan
	National Center for Research on Earthquake Engineering, Taiwan
	National Science and Technology Center for Disaster Reduction, Taiwan



Earthquake-Disaster & Risk Evaluation and
Management Center (E-DREaM), National Central
University, Taiwan



Sinotech Engineering Consultants, Inc.