



Third circular (<http://landslide.jp>)

## 5th International Symposium on Submarine Mass

### Movements and Their Consequences

(<http://landslide.jp>)

**Symposium: 24th (Mon) - 26th (Wed), October 2011**

**Field excursions: 23rd (Sun) and 27<sup>th</sup> (Thu)–28th (Fri), October 2011**

**Shirankaikan, Kyoto University, JAPAN**

This symposium is part of the International Geoscience Programme IGCP-585, also known as E-MARSHAL project (<http://www.igcp585.org>), a joint endeavor of UNESCO and the International Union of Geological Sciences. The main objective of this event is to bring a world-wide perspective of submarine mass movements and their consequences by assembling state-of-the-art contributions from international researchers of academic institutions and the offshore industry, and to stimulate the research in Asian countries. This symposium provides full coverage of the scientific and engineering aspects of this type of marine and coastal geo-hazards.

#### **(A) Invited Keynote Speakers:**

##### **1. Opening Keynote Speech:**

Kyoji Sassa (Executive Director of International Consortium on Landslides)

##### **2. Thematic Keynotes:**

a. Brandon Dugan (Rice University, USA):

*'A Review of Overpressure, Flow Focusing, and Slope Failure'*

b. Andrew Lin (National Central University, Taiwan):

*'Processes and products of flood-induced hyperpycnal flows vs. earthquake-triggered turbidity currents: Examples from Taiwan'*

c. Farrokh Nadim (Norwegian Geotechnical Institute, Norway):

*'Risk Assessment for Earthquake-Induced Submarine Slides'*

d. Gian Andrea Pini (University of Bologna, Italy):

*‘Sedimentary mélanges and fossil mass-transport complexes: a key for better understanding submarine mass movements?’*

e. Kenji Satake (University of Tokyo, Japan):

*‘Tsunamis Generated by Submarine Landslides’*

### **3. Introductory Note on IGCP585:**

Roger Urgeles (Institut de Ciències del Mar (ICM-CSIC))

#### **(B) Panel Discussions:**

**Panel discussion 1 (24<sup>th</sup>, Monday afternoon): “Post-Failure Dynamics of submarine landslides”.**

This panel discussion highlights the post-failure dynamics of submarine landslides, namely, the dynamics of submarine sediment gravity flows leading to redeposition.

#### **Panelists**

Shinji SASSA (**Port and Airport Research Institute**): Leader

Hajime NARUSE (Chiba University)

and others

**Panel Discussion 2 (25<sup>th</sup>, Tuesday afternoon): “The consequences of the M9.0 earthquake off Tohoku: the mechanism of the Tohoku Tsunami”.**

The massive M9.0 earthquake off Tohoku caused a devastating tsunami. In this panel discussion, specialists in various fields discuss the background and mechanism of Tohoku Tsunami.

#### **Panelists**

Kenji SATAKE (ERI, University of Tokyo): Leader

Philip WATTS (Applied Fluids Engineering, Inc.)

Kiichiro KAWAMURA (Fukada Geological Institute)

Toshitaka BABA (DONET, JAMSTEC)

**Panel Discussion 3 (26<sup>th</sup>, Wednesday morning): “Risk analysis and management: application of science and engineering for submarine landslide disaster prevention in offshore operations”.**

This panel focuses on the application of science and engineering for disaster prevention in offshore operations. To promote the discussion, a planned gas hydrate production test and future field development in the Nankai Trough area off Pacific coast of Japan will be introduced as an example. We invite panelists from various science and engineering fields such as survey, geotechnical engineering, and modelling.

**Panelists**

Koji YAMAMOTO (JOGMEC): Leader

Farrohk NADIM (NGI)

Kenichi SOGA (University of Cambridge)

and others

**(C) Conference Publication:**

The fourth edition of the 'Submarine Mass Movements and Their Consequences' series containing peer-reviewed manuscripts by symposium presenters will be published by Springer before the conference. and the book will be distributed to the conference participants upon registration..

For a glimpse of the fourth volume, please visit:

<http://www.igcp585.org/news-and-events/in-the-news/5thissmmtcbook>

**Awards:**

Two awards will be given to:

- The best paper published in the 4<sup>th</sup> volume of the "Submarine Mass Movements and Their Consequences" Book
- The best poster designed by student(s)

**(D) Abstract Submission for Poster Presentation:**

Please visit <http://landslide.jp> and **submit your less than 300 words abstract by 1st, September 2011.**

**(E) Conference Themes:**

- 1: Physical Properties of Sediments and Slope Stability Assessment
- 2: Seafloor Geomorphology for Trigger Mechanisms and Landslide Dynamics

- 3: Role of Fluid Flow in Slope Instability
- 4: Mechanics of Mass-Wasting in Subduction Margins
- 5: Post-Failure Dynamics
- 6: Landslide Generated Tsunamis
- 7: Witnessing and Quasi-Witnessing of Slope Failures
- 8: Architecture of Mass Transport Deposits / Complexes
- 9: Relevance of Natural Climate Change in Triggering Slope Failures

### **(F) Symposium Schedule**

23rd **(Sun)**: Pre-meeting field excursion (optional), and the icebreaker

Icebreaker; at University Cafe "Camphora" from 18:00

24th-26th **(Mon-Wed)**: Registration, keynote speeches, technical sessions, poster sessions, panel discussions

24th **(Mon)**: Dinner party

Dinner party: a Japanese traditional restaurant, Ganko from 18:00

27th **(Thu)**-28th **(Fri)**: Post-meeting field excursion (optional)

Coffees and lunches will be served (included in your registration).

Pre Excursion		DAY1	DAY2	DAY3	Post Excursion	
Oct.23th		Oct.24th	Oct.25th	Oct.26th	Oct.27th	Oct.28th
8:00	Optional One-day field trip: Recent on-land slides  a chartered bus departs from JR Kyoto Station  Back to Kyoto at 17:00	8:00	Registration			Optional two-day field trip to Boso: Pliocene submarine slides  move from Kyoto to Tokyo by Shinkansen, then chartered bus to Boso  Excursion  Move from Boso to Tokyo Sta  stay in Boso
		8:30	Opening / Logistics (Yamada, Y.)	Keynote Lecture (Pini, J.A.)	Keynote Lecture (Nadim, F.)	
			Introductory note (Roger, U.)	Session ACT	Session PPS	
			Opening Keynote lecture (Sassa, K.)			
			Session SGM			
			Coffee Break / Poster session			
			Session SGM	Session ACT / MCN	Session PPS	
					Panel Discussion 3: Risk	
			Lunch / Poster session			
			Keynote Lecture (Lee, A.)	Keynote Lecture (Satake, K.)	Keynote Lecture (Dugan, B.)	
			Session PFD	Session TNM / WTN	Session RFF	
			Coffee Break / Poster session			
			Session PFD	Session TNM / WTN	Session NCC	
			Panel Discussion 1: Dynamics	Panel Discussion 2: Tsunami	Discussion / Closing	
18:00	Ice Breaker & Registration	18:00	Banquet	IGCPS-585 Business meeting		
20:00	Cafeteria, Kyoto Univ		Japanese Restaurant "Ganko"			
			SGM: Seafloor geomorphology PFD: Post failure dynamics	ACT: Architecture MCN: Mechanics TNM: Tsunami WTN: Witnessing	PPS: Physical properties and slope stability RFF: Role of fluid flow NCC: Natural climate change	

The detailed program with oral/poster presentation schedule will be informed soon.

**(G) Official language:**

English

**(H) Field Excursions:**

**(1) Pre-meeting field excursion (Leader; Professor Shunji Yokoyama, Kochi University):**

One day field trip to visit Present/active Landslides in Kobe (23 October, 2011).

We will see ongoing landslide of Paleogene tuffaceous rocks (outcrops and topography), hot spring, countryside of Japan.

Tentative schedule: 8:00 Participants meet at JR Kyoto Station. 8:30 Depart Kyoto Station by bus, 11:00-15:00 Lunch and Field observation, 17:00 Arrive Kyoto

Fee: ~6000 yen including bus transport

**(2) Post-meeting field excursion (Leader; Dr. Yuzuru Yamaoto, IFREE, JAMSTEC):**

Two day field trip to Pleistocene Submarine Landslides in the Boso (27-28 October, 2011)

We will see a fossil example of submarine sliding within Late Pliocene to Pleistocene trench-slope cover sediments of the Chikura Group, Central Japan. This body formed on the seafloor by earthquake-induced liquefaction.

Tentative schedule:

27 Oct. 8:00 Participants meet at JR Kyoto Station, 8:30 Depart the Kyoto station of Shinkansen (Super express train), 11:00 Arrive at the Tokyo station and drive to the Boso by bus, Lunch, 13:00-17:00 Field observation (Stop 1: Submarine land slide associated with earthquake-induced liquefied sediment flow; Stop 2: chaotic rock body apparently due to methane explosion), 17:30 arrive at Hotel.

28 Oct. Field observation continues. The bus will then go to the Haneda International Airport and JR Tokyo station. End of the trip is around noon. To the Narita International Airport: about 2 hours by shuttle bus or train. To the Kansai International Airport: about 1 hour flight from the Haneda Airport, ~3 hours by the Shinkansen. The transportation after the trip is not included.

Fee: ~35000 yen

Further details will be directly given to participants.

## **(I) Registration**

**Registration Deadline: 1st September 2011**

Regular fee 65,000 Jpn yen (student 30,000 yen)

The registration form is on our website (<http://landslide.jp>). The fee includes the icebreaker, the official dinner party, lunch meals and one copy of the Springer book.

The registration desk will be opened during the icebreaker (Camphora) 18:00-20:00 on 23rd and at the conference venue (ShiranKaikan) from 8:00 on 24th - 26th October.

Cancellation policy: 50% refund on registration fee on all cancellations made before 1<sup>st</sup> September, 2011 (cancellations will still receive the book with the conference articles).

Please, for additional questions contact [info@landslide.jp](mailto:info@landslide.jp)

## **Support programs for participants from developing countries and for students/post-docs**

A limited number of support packages are available for participants from developing countries, students, and post-docs. The support programs consist of:

1. Discounted registration rate (Yen 30,000)
2. Accommodation in Kyoto free of charge during the meeting (4 nights).

To apply, visit <http://www.landslide.jp/student.shtml>.

### **Accommodation**

There are a number of hotels in Kyoto near the conference venue. Typical room rates range from 5000 yen to 50000 yen. Recommended hotels are listed on our website (<http://landslide.jp>). Please note that October is a popular season for tourists visiting Kyoto.

### **VISA application**

If you need an invitation letter for visa application, please contact us at [info@landslide.jp](mailto:info@landslide.jp).

### **(J) Climate and Travel Information**

See <http://www.kyoto.travel/>

### **(K) Company booth and panel**

Registration for companies and organizations is now open. The prices for booth and panel services are as follows

Booth: Yen 50,000 for 2 desks, 2 panels (180H x 90W cm/panel) and electric power. One person can enter the symposium venue. For conference materials, extra costs will be applied.

Panel: Yen 20,000 for 2 panels (180H x 90W cm/panel)

Please contact [info@landslide.jp](mailto:info@landslide.jp) for detailed information.

**(L) Conference venue**

**(a) Access from Airport to Kyoto Station**

From Narita Airport (NRT) or Kansai Airport (KIX) to Kyoto Station by **bus**

(<http://www.landslide.jp/access.shtml>)

From KIX to Kyoto Station by **train**

([http://www.kyoto-u.ac.jp/en/access/getting/getting\\_1.htm](http://www.kyoto-u.ac.jp/en/access/getting/getting_1.htm))

**(b) Access from Kyoto Station to Icebreaker (Camphora)**

See “Main Campus >> Map” in

[http://www.kyoto-u.ac.jp/en/access/getting/getting\\_1.htm](http://www.kyoto-u.ac.jp/en/access/getting/getting_1.htm)

“Café-Restaurant “Camphora” is just next to the “Main Gate”:

<http://www.kyoto-u.ac.jp/en/access/campus/main.htm>

**(c) Access from Kyoto Station to the Conference venue (ShiranKaikan)**

See “Faculty of Medicine Campus / Faculty of Pharmaceutical Science Campus >>

Map1” in [http://www.kyoto-u.ac.jp/en/access/getting/getting\\_1.htm](http://www.kyoto-u.ac.jp/en/access/getting/getting_1.htm)

“Shiran Kaikan” is at the top of the map in

<http://www.kyoto-u.ac.jp/en/access/campus/medicine.htm>

Detailed location maps are also available from [http:// www.landslide.jp/location.shtml](http://www.landslide.jp/location.shtml)





Location of Kyoto Station, Conference venue, Icebreaker's place and Dinner party's place (red stars).



Location of Conference venue and Icebreaker's place (red stars) with major bus stops (blue circle).

### Bus route search system

The basic information on the Kyoto public transportation system (incl. bus map) can be found in:

<http://www.city.kyoto.jp/koho/eng/access/transport.html>

You can find how to get to the venue by bus from your hotel on this website

<http://www.kyotocitybusguide.net/search/>

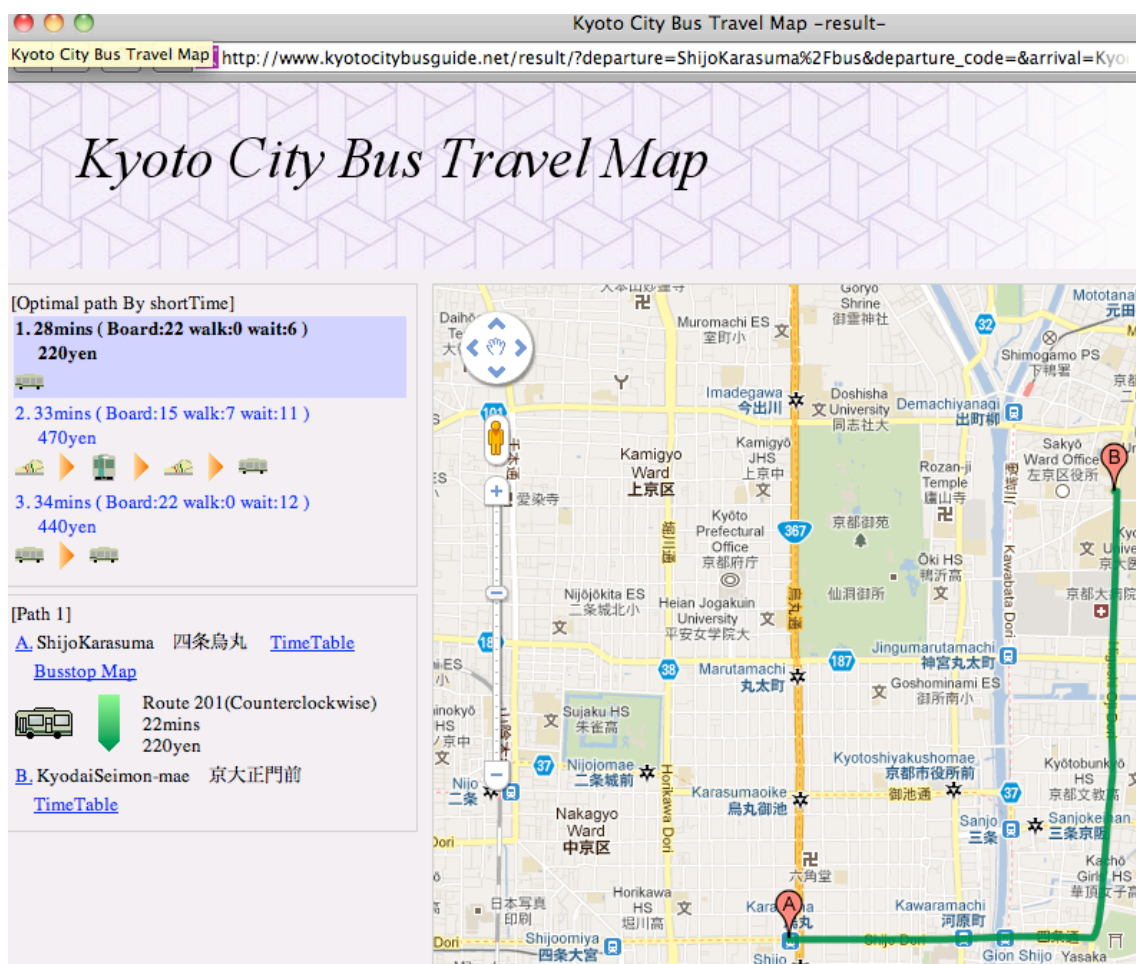
- 1) Click the website above.
- 2) Choose your location of departure (a blank below "From")

- 3) Choose your destination (a blank below “To”) ((The conference place is “KyodaiSeimon-mae/bus”).
- 4) Choose the date
- 5) Click “route search”

**For example;** if you stay around Shijo-Karasuma, get on Bus #201 according to the following information:

**Search result**

(([http://www.kyotocitybusguide.net/result/?departure=ShijoKarasuma%2Fbus&departure\\_code=&arrival=KyodaiSeimon-mae%2Fbus&departure\\_code=&calendar=08%2F07%2F2011&priority=shortTime&submit=route+search](http://www.kyotocitybusguide.net/result/?departure=ShijoKarasuma%2Fbus&departure_code=&arrival=KyodaiSeimon-mae%2Fbus&departure_code=&calendar=08%2F07%2F2011&priority=shortTime&submit=route+search)))



The detailed bust stop location at Shijo-Karasuma area is:

<http://www.kyotocitybusguide.net/result/image/busMap/42794.jpg>



## **(M) Contact**

[info@landslide.jp](mailto:info@landslide.jp)

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### **Organizing committee:**

Yasuhiro YAMADA (Chair; Kyoto University),  
Kiichiro KAWAMURA (Secretary; Fukada Geological Institute)  
Yasutaka IKEDA (University of Tokyo)  
Juichiro ASHI (Atmosphere and Ocean Research Institute, University of Tokyo)  
Ken IKEHARA (AIST, Geological Survey of Japan),  
Katsumi KAMEMURA (Fukada Geological Institute)  
Toshiya KANAMATSU (IFREE, JAMSTEC)  
Arito SAKAGUCHI (IFREE, JAMSTEC)  
Shinji SASSA (Port and Airport Research Institute)  
Takae TAKAGI (Fukada Geological Institute)  
Takeshi TSUJI (Kyoto University),  
Koji YAMAMOTO (JOGMEC)  
Yuzuru YAMAMOTO (IFREE, JAMSTEC)

### **International Advisory board:**

Roger URGELES (Institute of Marine Sciences (CISC), Spain)  
David MOSHER (Natural Resources Canada - Geological Survey of Canada, Canada)  
Jason CHAYTOR (USGS - Woods Hole, USA)  
Michael STRASSER (Geological Institute, ETH Zurich, Switzerland)  
Jacques LOCAT (Laval University, Canada)  
Norio OYAGI (Fukada Geological Institute, Japan)  
Kyoji SASSA (Kyoto University, Japan)

### **Symposium Supporters:**

- ◇ IGCP project 585 (Grants for budget associated with our symposium)
- ◇ International Union of Geological Sciences
- ◇ UNESCO
- ◇ Integrated Ocean Drilling Program- Management International (IODP-MI) (Grants for budget associated with our symposium)
- ◇ J-DESC (Grants for budget associated with our symposium)
- ◇ Geological Society of Japan (Co-hosting)
- ◇ Society of Exploration Geophysicists of Japan
- ◇ The Japanese Geotechnical Society
- ◇ Japan Association for Quaternary Research
- ◇ The Sedimentological Society of Japan (Grants for budget associated with our symposium)
- ◇ Japan Society of Engineering Geology

- ✧ Japan Society for Active Fault Studies
- ✧ The Japan Landslide Society
- ✧ Seismological Society of Japan
- ✧ Japan Society of Civil Engineers
- ✧ Japanese Committee for Rock Mechanics
- ✧ Tokyo Geographical Society (Grants for budget associated with our symposium)
- ✧ Inoue Foundation (Grants for budget associated with our symposium)
- ✧ Kyoto University (Grants for budget associated with our symposium)
- ✧ Super Deep KAIKO Drilling "KANAME"

Further announcements on the symposium will be circulated via the website <http://landslide.jp>. Contact address "info@landslide.jp".

## Invitation Message and Statement from IGCP-585 Chairs,

Dear colleagues,

Preparations for the upcoming [5th International Symposium on Submarine Mass Movements and Their Consequences](#) (5thISSMMTC) to be held in Kyoto, Japan, October 24 - 26, 2011, are well advanced. After the M9.0 earthquake and tsunami on March 11, 2011, with its disastrous consequences, in particular leakage at the nuclear power plants, we, together with the local organizers, have closely reviewed the situation in Japan with regard to potential consequences for our symposium. Our conclusion, given the present situation, is that **there are no safety concerns in Kyoto** and this situation is unlikely to change. Kyoto is far from any contaminated locations in NE Japan. The Symposium will be held as planned, therefore. Neither has the post-cruise field trip site in the greater Tokyo area shown any concern with respect to monitored nuclear radiation measurements. These data will continuously be evaluated during the next months and prior to the field trip to ensure safety of all participants. We fully trust our Japanese colleagues to keep us apprised of the situation. Travel alerts issued by the US Bureau of Consular affairs (link [here](#)) indicate also that there are no health concerns outside a 50 mile radius of the Fukushima Daiichi nuclear power plant, and that the situation is evolving in the good direction. Official reports from the main European countries provide information along the same lines. The German embassy in Tokyo provides information [here](#), information by the French Ministry of foreign affairs can be found [here](#), and the UK foreign and commonwealth office issues travel advice to Japan [here](#).

By having the 5th ISSMMTC in Kyoto this year, we show our solidarity and respect with the Japan Earth Science community. The conference will include various themes in relation to submarine landslides, such as process understanding, gas hydrates, earthquakes, new tools and techniques, hazard and risk estimation and relation to climate change that will be led by keynote lectures from the most prominent scientists in our community. In addition we will have our panel debates in various “hot topics” of submarine landslide research, including a panel discussion on the relation of our research to lessons learned/to be learned from the great 2011 Tohoku-oki earthquake. We expect this discussion will contribute to significant knowledge transfer in the various themes proposed by the conference. We also hope that this will be an important opportunity for exciting new ventures in “Submarine Landslides Research”. Finally, we'd like to remind you that Poster session participation is still open for the symposium.

We hope to meet you all in Kyoto!

[IGCP-585](#) chairs

Roger Urgeles, CSIC, Barcelona, Spain

David Mosher, GSC, Halifax, Canada

Jason Chaytor, USGS, Woods Hole, USA

Michael Strasser, ETH, Zurich, Switzerland