

International Symposium on the Restoration Program from Giant Earthquakes and Tsunamis

January 22-24, 2008
Royal Phuket City Hotel, Phuket, Thailand
Phuket Ballroom 2

Program

===January 21 (Monday), 2008===

18:00 – 20:00 Registration

===January 22 (Tuesday), 2008===

08:30 – 17:00 Registration

Opening Ceremony

09:00 – 09:05	Opening	Teruyuki Kato
09:05 – 09:10	Opening address	Goro Watanabe , Senior specialist, MEXT, Japan
09:10 – 09:15	Welcome address	Tri Augkaradacha , Vice-Governor of Phuket, Thailand
09:15 – 09:20	Congratulatory address	Ko Ikejima , Director, JSPS Bangkok Office, Japan
09:20 – 09:30	Opening remarks	Teruyuki Kato
09:30 – 10:10	[K-1] Keynote lecture (1)	Seree Supharatid Recent progress in tsunami disaster management in Thailand

Coffee break

Session 1-1 : Giant earthquakes and tsunamis around the Indian Ocean – present, past and future

Chairperson: C.P. Rajendran

10:25 – 10:40	[S1-1-1] D. H. Natawidjaja, K. Sieh and A. Meltzner The 2007 megathrust earthquakes and their predecessors in west Sumatra, Indonesia, and anticipation of the next larger event
10:40 – 10:55	[S1-1-2] T. T. Aung, K. Satake, Y. Okamura, M. Shishikura, W. Swe, H. Saw, T. L. Swe, S. T. Tun and T. Aung Geologic evidence for great Holocene earthquakes off Myanmar
10:55 – 11:10	[S1-1-3] W. Swe and S. T. Tun Marine terraces along the Myanmar coast

- 11:10—11:25 [S1-1-4] **M. Thein** and **T. Lwin Swe**
Earthquake and tsunami hazard potential along the Myanmar coastal areas
- 11:25—11:40 [S1-1-5] **T. Myint**, **S. T. Tun** and **T. L. Swe**
Current research projects on earthquake and tsunami studies in Myanmar: A progress report
- 11:40—11:55 [S1-1-6] **T. Lwin**
Are we really facing a threat from a damaging strong earthquake? Myanmar Perspectives and her preparedness

Lunch

Session 1-2 : Giant earthquakes and tsunamis around the Indian Ocean – present, past and future – continue

Chairperson: K. Satake

- 13:15—13:30 [S1-2-1] **C.P. Rajendran**, **K. Rajendran**, **T. Machado**, **S. Srinivasalu**, **P. Aravazhi**, **M. G. Thakkar**
The previous Indian Ocean tsunamis: Evidence from the Indian Coast and the Andaman-Nicobar Islands
- 13:30—13:45 [S1-2-2] **J. N. Malik**, **M. Shishikura**, **T. Echigo**, **Y. Ikeda**, **K. Satake**, **H. Kayanne**, **S. R. Basir**, **G. K. Chakraborty**
Evidence of paleo-earthquakes: Paleoseismological investigations in Andaman Islands
- 13:45—14:00 [S1-2-3] **H. Kayanne**, **Y. Ikeda**, **T. Echigo**, **M. Shishikura**, **K. Satake**, **J. N. Malik**, **S. R. Basir**, **G. K. Chakraborty**
Past giant earthquakes inferred from uplifted fossil microatolls at Interview Island, northwest Andaman Islands
- 14:00—14:15 [S1-2-4] **T. Kato**
Post-seismic crustal movement derived from GPS measurements due to the 2004 Sumatra-Andaman earthquake
- 14:15—14:30 [S1-2-5] **C.D. Reddy**, **S. K. Prajapati**, **T. Kato**
Viscoelastic modelling of postseismic response due to 2004 Sumatra-Andaman earthquake: Contribution from low viscosity lithosphere
- 14:30—14:45 [S1-2-6] **H. Z. Abidin**, **I. Malra**, **H. Andreas**, **I. Meilano**, **F. Kimata**, **T. Ito**, **Y. Ohta**, **Agustan**, **D. Sugiyanto**
Post-seismic phase duration of the 2004 Sumatra-Andaman earthquake as estimated from GPS continuous data
- 14:45—15:00 [S1-2-7] **T. Ito**, **Agustan**, **I. Meilano**, **T. Tabei**, **F. Kimata**
The construction of new dense GPS observation network: AGNeSS (Aceh GPS Network for Sumatran Fault System)
- 15:00—15:15 [S1-2-8] **H. Z. Abidin**, **H. Andreas**, **T. Kato**, **T. Ito**, **I. Meilano**, **F. Kimata**, **H. Harjono**
Crustal deformation studies in Java (Indonesia) using GPS

Coffee break

Chairperson: D. H. Natawidjaja

- 15:30—15:45 [S1-2-9] **P. Banerjee**
India plate motion defined from 10 years of GPS data
- 15:45—16:00 [S1-2-10] **M. Imoto, N. Yamamoto**
Premonitory changes in seismicity prior to the December 26, 2004 Sumatra earthquake
- 16:00—16:15 [S1-2-11] **S. Matsumura**
Seismic activity change preceding the Sumatra great earthquake series, 2004 M9.0, 2005 M8.6, and 2007 M8.5
- 16:15—16:30 [S1-2-12] **Y. Sawada, S. Limpisawad and S. Thammavitwas**
Local seismic activity in north-west of Gulf of Thailand
- 16:30—16:45 [S1-2-13] **Y. Yoshida**
The rupture process of giant earthquakes viewing from strainmeter data obtained by JMA
- 16:45—17:00 [S1-2-14] **H. Matsumoto, Y. Tanioka, Y. Nishimura, Y. Tsuji, Y. Namegaya, T. Nakasu, S. Iwasaki**
Tide gauge records collected in the Indian Ocean – Its history and archives –
- 17:00—17:15 [S1-2-15] **S. Han and S. T. Tun**
Proposed geophysical observation along the Indo-Myanmar tectonic boundary
- 17:30—19:00 Welcome cocktail party
- 19:00—21:00 Business meeting: Preparatory meeting for the report to SCA
[Invited people only] at Siera Room (Room for Conference Secretariat)

===January 23, 2008 (Wednesday)===

- 08:00—17:00 Registration

Session 2-1 : Hazards due to earthquakes and tsunamis**Chairperson: H. Iemura**

- 08:30—08:45 [S2-1-1] **M. Umitsu, M. Takahashi**
Geo-environmental features in the damages of the 2004 Indian Ocean tsunami in and around Banda Aceh, Indonesia
- 08:45—09:00 [S2-1-2] **Agussalim, S. Unjoh, T. Sugimoto, Amir Azan, Said, D**
Behavior of Damaged Bridges Caused by December 2004 Tsunami Along West Coast of Aceh Province
- 09:00—09:15 [S2-1-3] **T. L. Lau, P. Lukkunaprasit, A. Ruangrassamee, T. Ohmachi**
Performance of bridges with solid and perforated parapets in resisting tsunami attacks
- 09:15—09:30 [S2-1-4] **M. H. Pradono, H. Iemura, T. Yasuda**
Experiments of tsunami force on bridges and reductions by mangroves
- 09:30—09:45 [S2-1-5] **T. Hiraishi, H. Kazuto and E. Saitoh**
Experimental study on impulsive force of drift body due to tsunami flow
- 09:45—10:00 [S2-1-6] **G. Shoji, T. Moriyama**

Tsunami wave load acting to a road structure

Coffee break

10:15–10:30 [S2-1-7] **P. Lukkunaprasit, C. Chintanapakdee, N. Thanasisathit**
Calibration of tsunami loading on a damaged building

10:30–10:45 [S2-1-8] **Y. Ono**
SPH simulation for modeling tsunami force acting on structures

Session 2-2 : Restoration from earthquake and tsunami disasters and planning

Chairperson: P. Lukkunaprasit

10:45–11:00 [S2-2-1] **O. Murao, H. Nakazato, K. Sugiyasu**
Recovery curves for housing reconstruction in Sri Lanka after the 2004 Indian Ocean tsunami

11:00–11:15 [S2-2-2] **S. Takada, Y. Kuwata and A. Pinta**
Lifeline reconstruction planning after earthquake and tsunami disaster

11:15–11:30 [S2-2-3] **Y. Kuwata, S. Takada**
Business restoration related to lifeline after tsunami disaster

11:30–11:45 [S2-2-4] **Y. Karatani and C. Piyathamrongchai**
Fact-finding research concerning the tourism industry losses by Indian Ocean tsunami and the rehabilitation/reconstruction process in southern Thailand

11:45–12:00 [S2-2-5] **M. Aman Yaman, Y. Abubakar, T. Saidi**
Recovery program of agricultural sector after tsunami disaster in Aceh, Indonesia

Lunch

Session 2-3 : Restoration from earthquake and tsunami disasters and planning – continue

Chairperson: K. Yamaoka

13:15–13:30 [S2-3-1] **M. Riyaz, K.-H. Park**
‘Safer Island Concept’ developed after the 2004 Indian Ocean tsunami: A case study of Maldives

13:30–13:45 [S2-3-2] **S. H. Thaw and H. M. Oo**
Disaster response strategy due to earthquake and tsunami in Myanmar

13:45–14:00 [S2-3-3] **I. Riyanto, D. Sudiana**
[Withdrawn] Mapping of flood potential areas in greater Jakarta area using satellite imagery

14:00–14:15 [S2-3-4] **H. Latief, P. Yushahnonta, K. Wikantika, H. P. Rahayu, H. Sunendar, A. R. Gusman**
Risk assessment as last mile-evacuation for Padang City, West Sumatera, Indonesia

14:15–14:30 [S2-3-5] **M. Nazar, U. Budiman, and M. Dirhamsyah**
Aceh government disaster risk reduction strategy

14:30–14:45 [S2-3-6] **I. V. Edirisinghe**
Some comments on post-tsunami restoration programme in Galle district in Sri Lanka with special reference to the city of Galle

Session 2-4 : Community preparedness and education**Chairperson: H. Latief**

- 14:45—15:00 [S2-4-1] **Febrin A. I.**
Disaster community preparedness in West Sumatra
- 15:00—15:15 [S2-4-2] **H. Iemura, M. H. Pradono, Agussalim b. H., T. Jauhari, and M. Sugimoto**
Construction of tsunami memorial poles for hazard data dissemination and education
- Coffee break
- 15:30—15:45 [S2-4-3] **H. Kimura**
How to organize the training materials of tsunami disaster mitigation system for Indian Ocean countries based on Japanese experience
- 15:45—16:00 [S2-4-4] **H. Nakanishi**
How to organize the training materials of tsunami disaster mitigation system for Indian Ocean countries from gender and socially vulnerable people's perspective
- 16:00—16:15 [S2-4-5] **K. Suzuki, S. Tanaka**
School disaster education for tsunami-affected children in Indonesia
- 16:15—16:30 [S2-4-6] **A. Siripong**
Educations for disaster risk reduction in Thailand
- 16:30—16:45 [S2-4-7] **K. Yamaoka, K. Tanaka, H. Tsuji, T. Kato, S. Suhara, A. Onishi, M. Harada, Y. Miyauchi, and K. Doi**
Education on earthquake and tsunami disaster for international students in Japan
- 16:45—17:00 [S2-4-8] **M. Satomura, M. Koyama, N. Ikegaya**
Educational program and preparedness for the earthquake hazards in Shizuoka University
- 17:00—17:15 [S2-4-9] **Y. Goto, Y. Ogawa, T. Komura**
Tsunami disaster reduction education using town watching and moving tsunami evacuation animation – Trial in Banda Aceh –
- 17:30—20:30 Short tour to the Patong beach and dinner

===January 24, 2008 (Thursday)===

08:30—16:00 Registration

Chairperson: S. Supharatid

- 09:00—09:40 [K-2] Keynote lecture (2) **Harsh Gupta**
India's initiative in mitigation of tsunamis and storm surges

Session 3-1: Tsunamis – their hazards, modeling, monitoring and warning09:40—09:55 [S3-1-1] **F. Imamura**

- 09:55—10:10 Tsunami information and evacuation in the recent tsunamis
[S3-1-2] **I. Suresh**, **S. Neetu**, **R. Shankar**, **D. Shankar**, **S. S. C. Shenoi**, **S. R. Shetye**, **D. Sundar**, **B. Nagarajan** and **R. Sharma**
The delayed waves of the 1945 Makran tsunami
- 10:10—10:25 [S3-1-3] **Y. Tsuji**
Secondary tsunamis induced by submarine slope slumping triggered by earthquakes in tropical countries
- Coffee break
- 10:40—10:55 [S3-1-4] **P. Prakhammintara**, **F. Imamura**
The correlation between tsunami run-up height and coastal characteristics index of Phang-Nga and Phuket Provinces Thailand
- 10:55—11:10 [S3-1-5] **S. Y. Teh**, **H. L. Koh**, **M. I. Izani** and **H. L. Lee**
Modeling tsunami runup by moving boundary
- 11:10—11:25 [S3-1-6] **W. Kanbua**, **S. Chuai-aree**
Tsunami propagation prediction by SiTProS model
- 11:25—11:40 [S3-1-7] **H. L. Koh**, **S. Y. Teh**, **M. I. Izani** and **H. L. Lee**
Simulation of Andaman tsunami for northwest Malaysia
- 11:40—11:55 [S3-1-8] **K. Hirata**
Should the effect of earthquake rupture propagation be included in tsunami forecast/warning systems?

Lunch

Session 3-2: Tsunamis – their hazards, modeling, monitoring and warning – continue

Chairperson: **F. Imamura**

- 13:15—13:30 [S3-2-1] **S. Prachuab**
National earthquake monitoring for tsunami early warning in Thailand
- 13:30—13:45 [S3-2-2] **M. Srivichai**, **S. Supratid**, **F. Imamura**
Web based online tsunami warning for Thailand Andaman coastline
- 13:45—14:00 [S3-2-3] **Pariatmono**
Developing an effective tsunami early-warning system in Indonesia
- 14:00—14:15 [S3-2-4] **T. Nagai**, **K. Shimizu**
Basic design of Japanese nationwide GPS buoy network with multi-purpose offshore observation system
- 14:15—14:30 [S3-2-5] **J. M. Montoya Rodríguez**, **M. Ortiz Figueroa**
Nationwide network for local tsunami monitoring in the Pacific Ocean coast of Mexico
- 14:30—14:45 [S3-2-6] **Y. Hasegawa**, **O. Kamigaichi**, **S. Tsukada**, **Y. Nishimae**, **T. Kuwayama**, **Y. Igarashi**
For establishment of appropriate criteria for tsunami warning

Coffee break

- 15:00—15:40 [K-3] Keynote lecture (3) **E. Bernard**
The tsunami-resilient community

Moderator: T. Kato and other four conveners

15:40–16:30 General discussion and adoption of resolution

16:30–16:45 Closing ceremony

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- Poster [P-1] **S. Fujino**, H. Naruse, D. Matsumoto, T. Jarupongsakul, A. Sphawajruksakul, N. Sakakura
Sand sheets of pre-2004 tsunamis on Phra Thong Island, Phang Nga Province, southwestern Thailand
- Poster [P-2] **H. H. Aung**
Studies and constant observations of potential source areas for future earthquakes in Myanmar
- Poster [P-3] **A. S. Antonyan**
Development of structural features for earthquake early warning systems
- Poster [P-4] **Y. Ohta**, K. Takatsuka, S. Miura and T. Sato
Seismic and Tsunami wave detection of the 2004 Sumatra Andaman earthquake by high-rate kinematic GPS analysis
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===January 25, 2008 (Friday)===

09:00–17:00 Field excursion to Khao Lak

Khao Lak field trip

(January 25, 2008)

Khao Lak is one of Thailand's most peaceful resort destinations located 100 km north of Phuket. The area is a 25-km long coastline with much shallower beach. Khao Lak has everything from five-star luxury hotels to low cost hotels. In addition, it is the nearest point from the mainland to the Similan islands which is a world-class diving spot. The area was hardest hit by the 2004 Indian Ocean tsunami, resulting in more than 4,000 deaths. Many hotels & resorts were seriously damaged and most of coastal landscape, i.e. beaches, resorts and vegetation was completely stripped back by the power of tsunami.



Until recently, Khao Lak has made a remarkable recovery with newly refurbished hotels providing a quantity and quality of accommodation never seen before in this area. The first tsunami evacuation building was also constructed here.

(Draft) Schedule

09.00 - 10.30	Leave the hotel and travel to Khao Lak
10.30 - 11.30	Sight seeing nearby coastline, hotels and resorts
11.30 - 12.30	Visit Ban Bang Niang (Tsunami monument and evacuation building)
12.30 - 14.00	Lunch
14.00 - 15.30	Visit Ban Nam Kem (Temporary houses, Tsunami memorial park)
15.30 - 17.00	Return to the hotel via Phuket Airport at 16:30