



Final Circular

International symposium on sediment disasters under the influence of climate change and tectonic activity (3rd)

Scheduled at 26th and 27th September, 2013

Venue: Disaster Prevention Research Institute, Kyoto University, Uji, Japan

Sponsored by Japan Society of Erosion Control Engineering

Website: <http://www.jsce.or.jp/event/symp/aps2013/index.html>

Aims & Scope:

Climate change and tectonic activity are globally known as causes of serious sediment disasters. Series of damages due to sediment disasters in Asian-Pacific region have been reported.. High and intense rainfall due to typhoon and cyclone increases the probability of localized deep seated landslides and debris flows. Large scale sediment disasters were also associated with earthquake and volcanic activity.

Scientists and land managers have to tackle the sediment disaster under influencing changes climate and tectonic activities. Some of geomorphic and hydrologic processes and magnitude of disasters are unexpectedly overwhelmed to our scientific knowledge, prediction ability, and mitigation techniques. Therefore, new scientific approaches and mitigation technologies should be developed for finding solutions in our land use planning and disaster prevention. Integration of the latest sciences and technology in both local and regional studies are required to prediction of sediment disasters and develop warning systems and countermeasures under the changing environment.

The aims of this symposium are to assemble and discuss the sediment dynamics under the influencing climate change and tectonic activities in Asia and Pacific region. We will share the scientific knowledge for understanding and predicting processes in various fields of hydrology, geomorphology, geology, meteorology, and hydraulics. We also integrate knowledge and perspectives for mitigation and countermeasures of erosion control. We invite papers from a broad range of disciplines that are interested in these perspectives in the Asia-Pacific region. Contributions of this symposium consist of keynote lectures by invited speakers and poster presentations of associate participants. The scientists, technicians and land managers who are interested in this symposium, especially in Pacific Rim countries, are welcome to participate and contribute to the symposium.



Key Topics of this symposium:

Field Observation, Analysis and Modeling of Sediment disasters and dynamics
Technical Countermeasures for Restoration and Prevention
Risk Management and Hazard Mapping
Concepts and Aspects of Watershed Conservation

Congress Language: English (no simultaneous interpretation)

Contact:

Prof. Takashi Yamada, the Secretary General
E-mail: t-yamada@bio.mie-u.ac.jp

Program:

26 September, 2013

9:00 Registration (-15:20)
10:00 Opening ceremony
 Keynote lectures
13:30-15:00 Poster session
15:20-16:20 Workshop
18:00-19:30 Welcome party

※16:20-17:20

[International seminar on sediment disasters caused by deep landslides](#)

Organized by Japan Science and Technology Agency CREST Project
"Development of innovative technologies to exploit groundwater resources in mountainous regions in order to achieve a sustainable supply of unpolluted high-quality water" Cosponsored by Japan Society of Erosion Control Engineering

27 September, 2013

8:00-17:00 One-day field trip n Rokko Mountain, Kobe
 Tentative itinerary
 08:00 JR Kyoto station
 09:30 Rokko Sabo Office, Ministry of Land, Infrastructure, Transport and Tourism
 10:30 Toga River
 12:00 Lunch at Rokko Garden Terrace
 13:30 Field observation site of Kyoto University
 15:00 Structural measures against debris flows
 16:30 JR Sumiyoshi station
 18:30 JR Kyoto station

Note: Organizing Committee recommends the participants to wear shoes for walking in the mountain trails.



I. Keynote lectures by invited speakers

“Towards an understanding of catchment-scale sediment dynamics connectivity in steep land systems”

Dr. Ian C. Fuller

Senior Lecturer Physical Geography Group, Institute of Agriculture & Environment, Massey University, New Zealand

~~“Prediction Models of the Hydrological and Basin Characteristics Effect on Reservoir Sedimentation for Water Management in Thailand”~~

~~Dr. Kosit Lorsirirat~~

~~Expert of Hydrology Royal Irrigation Department, Thailand~~

“Algorithms and Application of Topographic Restoration Method for Damaged Areas by Debris Flows Using Airborne LIDAR Data in Republic of Korea”

Dr. Kim Kyongha

Division of Forest Disaster Management, Korea Forest Research Institute, Republic of Korea

II. Poster session

Organizing committee is planning the award of the best and good poster prizes among all of the posters presented in the symposium. The participant can vote the best three posters.

Hydrology

Groundwater dynamics inferred from hydrological observations and geophysical surveys on a hillslope underlain by accretionary sedimentary rocks

Yosuke Yamakawa, Yuki Matsushi, Ken'ichirou Kosugi, Naoya Masaoka, Tetsushi Itokazu, Takahisa Mizuyama

Direct runoff characteristics in granite headwater catchments having different vegetation recovery conditions

Tetsushi ITOKAZU, Ken'ichirou KOSUGI, Yuichi ONDA, oichiro KURAJI, Nobuaki TANAKA, Taisei GOTO, Takeshi OHTA, Takahisa MIZUYAMA

The Role of Bedrock Groundwater in Runoff Generation in Granitic Headwater Catchments

Naoya Masaoka, Ken'ichirou Kosugi, Tetsushi Itokazu, Kohei Sugimoto, Masamitsu Fujimoto, Takahisa Mizuyama

Development of Innovative Technologies to Exploit Groundwater Resources in Mountainous Regions in Order to Mitigate Sediment Disasters as Well as to Achieve a Sustainable Supply of Unpolluted High-Quality Water

Ken'ichirou Kosugi, Masanori Katsuyama, Yuki Matsushi, Kimihito Nakamura, Takahiro Sayama, Masamitsu Fujimoto, Yosuke Yamakawa, Naoya Masaoka, and Tetsushi Itokazu

Evaluation of bedrock groundwater movement using tracer methods in a weathered granite hillslope



Masamitsu Fujimoto, Naoki Banba, Kenichirou Kosugi, Makoto Tani, Ryouichi Fukagawa

Hydrological responses to strip thinning and catchment scales in Japanese headwater basins

Bui Xuan Dung, Takashi Gomi, Yuichi Onda, Hiroaki Kato, Mario Hiraoka

RAINFALL CHARACTERISTICS OF PUTIH RIVER WATERSHED, FOR LAHAR FLOW DEVELOPMENT AT MT. MERAPI AREA

Djoko Legono, Yutaka Gonda, Adam Pamudji Rahardjo

Laboratory investigation of snowmelt behavior of pyroclastic flow

Takaaki Abe, Akashi Itoh, Atsuyoshi Miura

Landslide

The role of neotectonics in the process of slope instability in the Northeast of Algeria

Zakaria ZOUAK, Chaouki BENABBAS, Yacine BENZID, Rym AIT KAKI and Loubna CHEROUNA

A probabilistic approach for predicting landslide runout based on an inventory of snowmelt-induced landslide disasters in Japan

Takashi Kimura, Kazuhiro Hatada, Kiyoteru Maruyama, Tomoyuki Noro

Simulation of Sediment Disasters Due to Slope Failures and the Following Sediment Runoff

Chen-Yu CHEN, Masaharu FUJITA

Location and Distribution of Deep-seated Catastrophic Landslides and Gravitational Slope Deformation in Areas of Accretionary Sedimentary Rocks: an Attempt for Hazard Zoning using Topographic Signals

Yuki Matsushi, Masahiro Chigira, Yosuke Yamakawa, Ken'ichirou Kosugi

Examining the occurrence ages of deep catastrophic landslides using tephrochronological approaches

Kazutaka Aoto, Takashi Gomi, Marino Hiraoka, Tadanori Ishizuka, Morita Kouji, Isshiki Hiromitsu, Taro Uchida

A study on threshold rainfall for landslide early-warning in storms following major seismic disturbances

Yasuhiro NOMURA, Atsushi OKAMOTO, Kazumasa KURAMOTO, Hiroshi IKEDA

Emergency search for location of landslide dams by interpreting single artificial satellite high-resolution SAR image

Shinichiro Hayashi, Atsushi Okamoto, Masaki Mizuno, Takumi Sato, Takao Yamakoshi, Yoko Nakano, Hiroshi Yokota, Atsuo Noda, Kazuo Yoshikawa

Estimation of shallow landslides caused by heavy rainfall using two conceptual models

Yasuhiro Shuin, Ikumi Otsuka, Keigo Matsue, Kazuhiro Aruga, Toshiaki Tasaka, Norifumi Hotta"

Topographical effects on scale and susceptibility of earthquake induced landslides



*Nagazumi Takezawa, Taro Uchida, Tadanori Ishizuka, Shinichi Honma,
Yoko Kobayashi, Patrick Meunier*

Experiments of Landslide Dam Formed by Slope Failure

*Kun-Ting Chen, Yu-Shu Kuo, Chin-Min Chen, Chjeng-Lun Shieh,
Kuang-Jung Tsai*

Stream

STABILITY OF BANKS WITH NON-COHESIVE MATERIAL UNDER
UNSTEADY FLOW CONDITIONS

Ahmed Aly El-Dien, Hiroshi Takebayashi, Masaharu Fujita

Numerical Simulation for Collapse of Unsaturated Natural Dam by Overtopping
Water

*Fumiaki Akazawa, Akikazu Ikeda, Satoshi Hayami, Yoshifumi Satofuka,
Shusuke Miyata, Daizo Tsutsumi*

Estimation for socio-economic impact of sediment disaster by using evaluation
indexes regarding magnitude of sediment movement and level of damage in society

*Shin-ichiro Hayashi, Taro Uchida, Atsushi Okamoto, Nobutomo Osanai,
Chang-Woo LEE*

COEFFICIENT OF COHESIVE SEDIMENT ENTRAINMENT OF WONOGIRI
RESERVOIR DEPOSIT AS REVEALED BY LABORATORY EXPERIMENT

Adam Pamudji Rahardjo, Djoko Legono

DEBRIS FLOW AND FLASH FLOOD AT PUTIH RIVER AFTER THE 2010
ERUPTION OF MT.MERAPI, INDONESIA

*Yutaka GONDA, Djoko LEGONO, Bambang SUKATJA, Untung Budi
SANTOSA*

Impact of short-term temporal change in volcanic ash fall on rainfall threshold for
debris flow occurrence in Sakurajima, Japan

Hiroshi KISA, Takao YAMAKOSHI, Tadanori ISHIZUKA

Differences in source and particle size of suspended sediment by lithology

*Shigeru Mizugaki, Masahiro Maruyama, Kazuyoshi Watanabe, Hiroki Yabe,
Takaaki Abe, Satoshi Hamamoto"*

Hydrogeomorphic Processes and Sediment Yields in Headwater Catchments based
on Field Observation

*Marino Hiraoka, Takashi Gomi, Shigeru Mizugaki, Tomoki Oda, Shusuke
Miyata, Yoshimi Uchiyama*

River bed variation in the downstream of landslide dam

*Yu-Shiu CHEN, Chia-Hsing LIN, Po-Sheng WANG, Yuan-Jung TSAI,
Chejng-Lin SHIEH*

Instruction for authors: *The size of poster should be limited to 90 cm in width and
200 cm in height and put on the board from 9:30 to 12:30 on 26th September. Author(s)
should be in the front of the poster during the core time(14:00~14:50).*

Note: *Because the poster board will be cleared away after the International seminar,*



the authors should take away the poster, otherwise discarded.

III. Workshop “Advances in new investigation methodology on large scale sediment discharge”

This workshop will be composed of several Key topics presented by selected speakers and discussion by all in the attendance.

Workshop program

● Key topics

“Methodology for assessment of deep catastrophic landslide susceptibility”

Mr. Tadanori Ishizuka, Public Works Research Institute

“Research for improvement of the method to find deep seated landslide hazard area with airborne electromagnetic survey and airborne laser scanner”

Mr. Wataru Sakurai, Kii Mountain District Sabo Office, Kinki Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism,

“Developing methods for estimating the magnitude and frequency of deep catastrophic landslides”

Prof. Takashi Gomi, Tokyo University of Agriculture and Technology

● Discussion

Coordinator: Masaharu Fujita (Kyoto University, Japan)

Sub-Coordinator: Thomas Parkner (Tsukuba University, Japan)

Field trip “Preventing Disaster and Measurement System around Mt. Rokko”

Date: 27 September, 2013

Destination: Rokko Mountain Area and Sumiyoshi Watershed (Kobe, Hyogo)

Capacity: 20 persons (accept the first 20 persons)

Fee: 4,000 JPY (for bus and lunch)

Tentative time table 8:00- Kyoto (JR Kyoto Station)

>detail of meeting point will be informed at registration desk on Sep.26

10:00- Rokko Sabo Office

Toga River Park

Mt. Nishiotafuku

Ohtani Sabo Dam

15:40- JR Sumiyoshi Station

16:00- JR Shin-Kobe Station

17:00- Kyoto (JR Kyoto Station)



Note: The participants should be at the meeting place, Kyoto Station at 8:00 on 27th September, 2013. Further details will be provided at the symposium.

General Information

Venue:

Wood Composite Hall(HH), Research Institute for Sustainable Humanosphere,
Kyoto University
Gokasho, Uji City, Kyoto Prefecture, Japan
<http://www.rish.kyoto-u.ac.jp/images/ujimap.jpg>

Accommodation:

Please book your own accommodation by yourselves.

Registration Fee:

Regular Member	10,000 JPY
Student Member	5,000 JPY
Non member	18,000 JPY
Non member, Student	9,000 JPY

*Additional fee will be offered for welcome party and field trip.

<u>Additional fee:</u> Welcome Party	4,000JPY
Field trip	4,000 JPY (for bus and lunch)

We recommend the person who is not a member of JSECE to become a member before the registration of this symposium in order to save money. Annual fees for membership of JSECE are 7,000 JPY and 2,000 JPY for the regular and student member, respectively. Please see the JSECE website to become a member.

<http://www.jsece.or.jp/indexj.html>

Registration:

Registration is accepted by only online-registration available at the web site of this symposium from July 25, 2013

<https://www.heartland-iti.co.jp/sabo2013/>

Deadline of the registration is September 20th 2013

Attention: You need to complete registration by yourselves even if you have already submitted abstracts and obtained acceptance.

Registration fee includes admission to all technical sessions and a copy of the proceedings of abstracts. The fee must be paid by cash in Japanese Yen at the time of the registration on the day of the symposium.



Deadline and Milestone:

Submission of abstract	February 28 th 2013
Notification of abstract acceptance	March 31 st 2013
Submission of full-paper	August 31 st 2013
2 nd Circular (Program)	September 10 th 2013
End of Registration	September 20 th 2013
Submission of revised full-paper	November 30 th 2013
Publishing of papers	July 31 st 2014

Output of this symposium:

The editorial board plans to publish a special issue of the proceedings of this symposium via a peer review process in “*International Journal of Erosion Control Engineering*” after the symposium. Contributions from both keynote presentations and selected papers presented in poster session will be eligible for manuscript submission in this special issue. For detailed information of the Journal, Please see the journal web site at:

<http://www.jsece.or.jp/indexj.html>

Editorial Board:

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Co-sponsors:

Disaster Prevention Research Institute, Kyoto University
Japan Sabo Association
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Access map:

Further details will be provided in subsequent circulars, which will be distributed by a direct email or on the website of the JSECE (<http://www.jsece.or.jp/indexe.html>).

From Kyoto Station http://www.dpri.kyoto-u.ac.jp/web_e/contents/map_e.pdf

From Obaku Station http://www.dpri.kyoto-u.ac.jp/web_e/contents/obaku.jpg

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