

CITIES ON VOLCANOES 5 CONFERENCE

**COV5 News Letter**

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PREFACE

The **Cities and Volcanoes Commission** commends the outstanding efforts of the organising committee for the upcoming 5th Cities on Volcanoes Conference and welcomes participants from many countries. We are delighted to see the continuation of the Cities on Volcanoes meetings, building on the success of past conferences in Italy, New Zealand, USA and Ecuador. These conferences have successfully brought together researchers and practitioners and this meeting is set to continue this tradition. The management of volcanic risk can only be effectively achieved through partnership with communities and agencies that have a responsibility for public safety. This conference will further strengthen links between these groups and foster a mutual understanding of the issues faced by cities on volcanoes.

Dr. David Johnston (*Leader, Cities and Volcanoes Commission, IAVCEI*)



Unzen Volcano (from the conference site)

GREETINGS*Setsuya Nakada*

Chair, Organizing Committee/President, IAVCEI

On behalf of the Organizing committee, I would like to give you a hearty welcome.

This Cities on Volcanoes conference is the 5th meeting, which is organized by the Cities and Volcanoes Commission of IAVCEI (International Association of Volcanology and Chemistry of the Earth's Interior) every 2 years.

This meeting first held in Asia is receiving about 550 paper contributions and about 600 registered participants from about 38 countries around the world. Symposium of this meeting consists of three main parts; "Knowing volcanoes", "Volcanoes and Cities", and "Living with volcanoes". This time is characterized by participation of residents on volcanoes and by involvement of volcanic hazard effect on long-term facilities.

IAVCEI is a group of scientists who carry out researches related to volcanoes. In addition, the activity to reduce risks from volcanic eruptions and related phenomena is one of the main tasks of IAVCEI. Many active volcanoes in the world are distributed within developing countries, where many people are exposed daily to the threat from volcanic eruptions. At the point, indispensable are to monitor volcanic activities, to train young scientists in charge of the former, to hold good linkage between volcanologists, officials and communities during the volcanic crisis, and to educate local people on volcanic phenomena.

IAVCEI supports scientists from these countries to attend volcanological conferences and workshops like this time, distributes guidebooks and DVD for education, and promotes young scientists from there by giving the Award. Although IAVCEI membership brings some merits to each member, one of the most important effects to become the member is to indirectly contribute to reduction of volcanic disasters on the globe through the above activities. Please consider becoming a member in this chance.

Finally, I hope that discussion in this meeting becomes a starting point of next actions, such that this meeting results brought back to your home countries become effective for the activities to reduce volcanic disasters in future and to promote and develop volcanological researches.

Teijiro Yoshioka

Mayor, Shimabara

Ladies and Gentlemen,

Welcome to Shimabara. I would like to extend my warmest greetings to all of you.

Shimabara may be a small city of around 50,000, but it is a place of scenic beauty, with Mt. Heisei-Shinzan to the west and a view over the Ariake Sea to the east. Shimabara also has an historical background of Christianity from the early Edo Period in the 17th century. In fact, the Battle of Shimabara is well known in Japan as one of the largest revolts to arise out of religious oppression. We are far from what you would call urban, but the citizens of this city have been warmly looking forward to your participation in this congress for over a year.

Given our scenic beauty, history and kind-hearted people, I have high expectations of providing you with occasions for successful presentations and discussions on the world's latest volcanic and anti-disaster research results. I am also fully prepared to offer any

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assistance I can to make this happen.

It has been 67 years since Shimabara was given the status of a city, and this congress marks the first international meeting ever held here. We may not be perfect as a host. We do, however, hope you will be able to have thorough discussions while enjoying Japan and our city.

TOPICS

Session 1-1: Recent developments in volcano research

The session on recent developments in volcano research features a broad spectrum of interconnected topics ranging from subterranean processes to tephra ejection and distribution. The session begins with a plenary talk Monday morning by Dr. Bruce Houghton on diversity in volcanism. Oral presentations on Monday afternoon focus on observational, numerical and experimental studies of volcano seismicity, subvolcanic plumbing, magmatic processes and volcano degassing. Poster sessions on Monday and Tuesday focus on Unzen volcano, mass flow processes, gas-hydrothermal activity, tephra, geophysical studies, and eruption histories.

Session 3-1: Linkage for reducing volcanic risks: Cooperation and mutual support amongst researchers, administrators, mass media, inhabitants, local organization and volunteers

Volcanic crises require efficient teamwork among scientists, public officials, news media and citizens at risk to mitigate disasters. The session 3-1 plenary talk, by Hiromu Okada, will examine the risk mitigation strategy applied over more than a decade at Mt. Usu, which has been successful based on cooperative linkage among all of these agencies. The starting presentations discuss risk communication and the evident need for cooperation, followed by the role of communication - especially the media and internet. The second half of the session includes case studies focusing first on cooperation at national level and then on local initiatives. The session goal is to share lessons and success strategies for effective cooperation and support, and to discuss further improved approaches. Cases will be presented from Japan (Mts. Unzen, Usu, Iwate, Miyakejima), Italy, Colombia, Alaska, New Zealand, multi-national work in the Andes, Ecuador and Washington State. Poster presentations cover material from yet other countries and link into wider related aspects of volcano risk management.

Session 3-3: Community and volcanism – Archeological, tradition and recovery

This session widely covers ancient to recent traditions about volcanic activities and disasters, archeological and volcanological research results, and economic and psychological problems during volcanic crisis. Plenary talk by Kazuaki Itoh explains the importance of community's coexistence with volcanoes, learning from historical volcanic disasters in Japan. Geological and historical interpretations of volcanic disasters in Vanuatu, Japan, Iceland, Nicaragua and Philippines are introduced. A series of research results of archeological and volcanological project including disasters in Vesuvius (Italy) are displayed in posters. Researches on recovery processes from volcanic disasters in Japan, Iceland, New Zealand and Italy are one of important issues from this session. Communities on volcanoes and scientists have tried to form systems of their coexistence with volcanoes and to pass on the tradition to the next in Japan, Ecuador, Costa Rica and Philippines.

Thursday Nov 22, 2007 16:50-18:20

“Outreach Exchange” in Hall D immediately following end of session 3.2

The Cities and Volcanoes Commission sponsored “Outreach Exchange” is an informal gathering of COV5 participants who wish to share volcano education products and ideas. Bring recently developed posters, pamphlets, teaching activities, educational videos, webpage models, and school international pen-pal opportunities to the “Outreach Exchange.” Attendees have an opportunity for informal discussion, and some participants will receive approximately three minutes with microphone to speak more formally about their product. A laptop and computer projector will be available. Bring additional copies for distribution. Participants in the “Outreach Exchange” will leave with a broad assortment of fresh ideas to employ in their own communities. If you want to ensure a speaking spot at the “Outreach Exchange” contact Carolyn Driedger during the conference.

NEWS

New intra-meeting excursion B3: visit to Kita-Kamikoba "Teiten" (New!)

First 25 applicants are acceptable for each tour (free of charge)

Leader: Nobuo ANYOJI (Sabo Technical Center)

Date:

Tour 1 : Monday, November 19, 2 p.m. – 4 p.m.

Tour 2 : Thursday, November 22, 2 p.m. – 4 p.m.

Description:

We will visit Kita-Kamikoba "Teiten (observation point)" and a ruin of Farming Training Center damaged by pyroclastic flows on June 3, 1991, when 43 people lost their lives including Katia and Maurice Krafft, and Harry Glicken.

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And, then, we move to the south (Akamatsu Canyon) to visit the unmanned-construction work office for Sabo dams of a multilayer sediment control which are formed using sediments. This world's first unmanned-construction technique in volcanic fields was developed by Unzen Restoration Project Office.

Kita-Kamikoba is still off-limit area because Sabo construction is running in this area. Only people who participate this B3 excursion or the C1 excursion are permitted to visit "Teiten".

Please make reservation at the General Information desk.

COV5 special commercial flight: "Fly over Unzen Volcano!" (New!)

Date: Thursday, November 22, 10 a.m.- 3 p.m. First 30 applicants (10 flights) are acceptable.

A new tour of commercial flight using small helicopter (Robinson R44; 3 passengers) is added.

Helicopter will fly, as requested, over ruins of Kita-kamikoba, sabo dams in Mizunashi River and Heisei Shinzan (new lava dome). Although helicopter ride in the excursion B2 is free of charge, sights from windows are limited and noise from the rotor is terrible inside the CH-47 Chinook helicopter used in the excursion. If you want to take your own good views and photos, you should book this special flight. Estimated cost and flying time are 12,000 yen (cash only) per person and 15 min. Helicopter operator is the SGC Saga Aviation Co., Ltd. Please make reservation at the General Information before 1 p.m. on Wednesday, November 21. The flights are subject to be canceled in weather condition and few reservations.

INFORMATION

List of Errata

[Change of Program]

21a-O-03: *Presented by Franco Barberi*

21a-O-05: *Presented by Rebecca Patrick*

21a-O-16: Wally R. Johnson, Kila Mulina, Jonathan Kuduon, Herman Patia

"Comparative Assessment of Disaster Management Conditions at Lamington Volcano, Papua New Guinea, in 1951 and 2007: Case Study of a 'Score Card' Methodology" (*not confirmed*)

22-O-09: Grant Kaye, Jim W. Cole, Andrew King, David Johnston

"Riskscape: A New Tool for Volcanic Hazard Risk Assessment in New Zealand"

23-O-01: *(Plenary Talk) Peter Frenzen*

"Landuse and Emergency Response Planning: Lessons from Mount St Helens"

23-O-02: Armann Hoskuldsson, Thorvaldur Thordarsson

"Land Use and Planning on Heimaey, Vestmannaeyjar Arcipelago, S-Iceland"

31-O-08: *Presented by Fernando Munoz*

32-O-04: Anne Doherty, Edwin Bernbaum

"Mount Rainier-Fuji Sister Mountain Curriculum Project and Teacher Exchange Program"

32-P-01: Melanie J. Duncan, Catherine J. Lowe, Tom Mitchell, Richard E. A. Robertson

"Pre-eruption Volcanic Hazard Communication in the Caribbean: A Case Study of St. Vincent"

[Cancellation]

11-P-56, 57, 58	Orkun Erosy
11-P-97	Akhmad Zaennudin
11-P-108	Annamaria Vicari
11-P-135	Paolo Papale
11-P-146	Gilda Maria Currenti
11-P-155	Sarah M. Gordee
12-P-26	Estu KriswDear
12-P-29, 30	Ciro Del Negro
12-P-71	John Makario Londono
13-P-01	Julie Calkins
13-P-02	Hickson Catherine
13-P-03	Andrew J Sutton
21a-O16*	Herman Patia
22-O-09*	Ciro Del Negro
23-O-01*	Jim Kauahikaua
32-O-04*	A. Lesto Prabhancana Kusumo

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[Errata in program] (correct in Bold)(p. 5) Nov. 20 (Tue), Day 2 evening, Restaurant Morango, **Hotel Hakusan: 19:00-21:00, Meeting of Executive Committee of IAVCEI**(p. 5) Nov. 20 (Tue), Day 2 evening, Tsukumo Hotel: 18:30-20:00: **Joint Meeting of World Organization of Volcano Observatories (WOVO) and WOVOdat**. Organized by **W. Marzocchi, A. Tupper and F. Schwandner**(p. 17) **22-P-18:** MariaLuisa Carapezza, Franco Barberi, Jose Barrancos, Christian Fisher, Nemesio Perez, Massimo Ranaldi, **Tullio Ricci, Luca Tarchini, Konradin Weber**(p. 17) **23-P-04:** Relations Between the Change of Topography and the Change of NDVI after Recent Unzen **Eruption**(p. 20) **33-P-06:** Kazuhiko Takeuchi, Nobuo **Sugiyama**, Yoko Kano, Emilla Allevato, Gaetano Di Pasquale, Cohe Sugiyama(p. 28) **32-O-03** Sian **Crosweller**, Jenni Barclay, Peter Simmons, Richard Robertson, Irene Lorenzoni(p. 29) **In explanation of posters of 1-1, "eruption processes (148-159)" should be read as "eruption processes (125-158)".**(p. 41) **12-O-19 :** Shoji Matsubara, **Taichi Nakamura**, Masanobu Shimada, Yukinori Nakajima(p. 41) **12-O-20 :** Lucas Donny Setijadji, **Koichiro Watanabe**

Welcome to our city, Shimabara!

Events on site**Nozoki Karakuri**

(Peep gadget)

Nozoki Karakuri is a Japanese performing art peculiar to here from old times.

Date: Nov.19, 20, 22
12:10 p.m. - 13:10 p.m.

Place: public square in front of the entrance hall

Title: Heisei Shinzan Story,
etc...

Please come and experience the Japanese culture!
How about trying Japanese calligraphy ?



Date : Nov. 19. 2007 (Mon.)
Time : 12:00 – 15:30
Place: Room "E" at Fukko Arena

Events in downtown

For details, please ask at Tourism Desk near the entrance

■ Shopping districts (Yorozumachi, Ichibangai) will be lit up at night
■ Shopping hours extended for your pleasure (-8:00 p.m.).
■ The first public exhibition of **Nagaikaya Mizu Yashiki** Naqaikaya Mizu Yashiki, an old mansion with a spring built

During COV5, welcome events by Shimabara city people are held in all over the city.

in the Taisho era (1910's), will be open to the public for the first time but only in this time. Please enjoy the historical heritage of Shimabara. Don't miss out! (10:00 a.m.-9:00 p.m.)

■ **Yorozumachi Mizu Yashiki** is also exhibited during COV5. (-9:00 p.m.)

■ **Yatai, food stalls**, will also have their grand openings on the 19th (Mon.), 20th (Tue.), and 22nd (Thu.) 6:00 p.m.-. You will be able to enjoy Onsen-tofu (cooked in hot spring), teppanyaki, and Japanese noodles (udon, somen, etc.).

■ **Mochi pounding and distribution**

19th (Mon.), 20th (Tue.), and 22nd (Thu.). 7:00 p.m.-

Enjoy the unique experience of pounding mochi (rice-cake making), after which free samples will be distributed.

Those who are interested in Nagaikaya, Yatai and Mochi and need the free shuttle should ask your hotel's front desk. (TEL: Ichibangai office 63-2503)

■ **Blowfish Festival (blowfish is Shimabara's speciality)**

19th (Mon) 7:00 p.m.-

Singing and dancing on the Karaoke stage.

Ganba stew (blowfish stew) will be served to first 300 guests.

From Newsletter Editors

Welcome to Shimabara! I hope this Cities on Volcanoes 5 conference will be successful and enjoyable. In this News Letter, we will let you know useful information every day during this conference. *Shinji Takarada (Geological Survey of Japan, AIST)*

I'm pleased that you have come to the Cities on Volcano conference. In order to attain a success of this conference, I will try as much as I can, together with other staffs and participants. And, I hope that this COV5 News Letter is of interest to you and all go well for you in this conference. Kind regards. *Fukashi Maeno (University of Tokyo)*