

# AASPP at Misasa

Geochemistry of the Lake Nyos gas disaster,  
Cameroon Volcanic Line-Rift Valley volcanoes  
and the underlying mantle



## Magmatic gases, their trip from the mantle to the surface of the Earth

JSPS Asia-Africa Science Platform Program  
International Seminar AASPP-Misasa

**27 February 2006, Misasa, Japan**

Sponsored by:

Japan Society for the Promotion of Science (JSPS)

Institute for Study of the Earth's Interior, Okayama University (ISEI)

Organized by:

Minoru Kusakabe (ISEI), and

Shigeru Yamashita (ISEI)

### Third Circular

14 February 2006

#### PROGRAM

#### SESSION PRTOCOL

#### LOCAL TRANSPORTATION

#### GENERAL INFORMATION

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## PROGRAM

### OVERVIEW

Monday 27 February 2006, Hotel Blanc Art Misasa

08:00 Registration desk opens.

09:00-10:25 Oral session (Main Hall)

10:25-10:50 Coffee break

10:50-12:05 Oral session (Main Hall)

12:05-13:30 Lunch (Dining Room, 2<sup>nd</sup> Floor)

13:30-14:45 Oral session (Main Hall)

14:45-15:05 Coffee break

15:05-17:00 Oral session (Main Hall)

17:00-17:15 Coffee break

17:15-19:00 Poster session (Small Hall)

19:30-21:30 Banquet (Main Hall)

ORAL SESSION (MAIN HALL)  
Monday 27 February, 09:00-17:00

Chair: Yamashita, S.

09:00 Kusakabe, M.

*Opening: JSPS's Asia-Africa Science Platform Program.*

09:10 **01.** Varekamp, J.C.

*The salt of the earth: origin and fluxes of volcanic Cl.*

09:35 **02.** Taran, Y.

*Nitrogen and Argon in volcanic and hydrothermal fluids. Implications for the volatile budget in subduction zones.*

10:00 **03.** Notsu, K.

*"Visible degassing vs. invisible degassing" during magmatic evolution.*

10:25 Coffee break

Chair: Taran, Y.

10:50 **04.** Shinohara, H. & Witter, J.

*Magmatic degassing during mild-Strombolian activity of Villarrica volcano, Chile.*

11:15 **05.** Saito, G.

*Magma degassing of Satsuma-Iwojima volcano: constraints from melt inclusions, petrology and volcanic gases.*

11:40 **06.** Delmelle, P., Allen, A.G., Delfosse, T., Gauthier, P-J., Lewicki, J.L., Mather, T.A., McGonigle, A.J.S., Oppenheimer, C., Pyle, D.M., Stix, J. & William-Jones, G.

*Ten years of degassing at Masaya volcano, Nicaragua: what have we learned?*

12:05 Lunch (Dining Room, 2<sup>nd</sup> floor)

Chair: Shinohara, H.

13:30 **07.** Bernard, A., Mazot, A., Barbier, B. & Huda, H.

*The monitoring of volcanic lakes in Indonesia: from ground to space measurements.*

13:55 **08.** Ohba, T., Nakamura, K., Ohwada, M., Hirabayashi, J. & Nogami, K.

*Volcanic hydrothermal system of Mt. Kusatsu-Shirane, Japan hosting the active crater lake Yugama.*

14:20 **09.** van Bergen, M., Sumarti, S. & Martinez, M.

*Crater lakes and the transfer of mantle-derived volatiles to the human environment.*

14:45 Coffee break

Chair: Kusakabe, M.

- 15:05 **10.** Yokoyama, T., Aka, F., Kusakabe, M. & Nakamura, E.  
*Melting processes beneath Mt. Cameroon: constraints from U-Th-Ra and Sr-Nd-Pb isotope systematic.*
- 15:30 **11.** Aka, F.T., Yokoyama, T., Kusakabe, M. & Nakamura, E.  
*The age of Lake Nyos, Cameroon, using U-Th-Ra disequilibria.*
- 15:55 **12.** Tanyileke, G.  
*The rationale for degassing Lakes Nyos and Monoun.*
- 16:20 **13.** Kusakabe, M.  
*35 years of diversity -stable isotope geochemistry, volcano-fluid interaction, and geochemistry linked to mitigation of natural disasters-*

## POSTER SESSION (SMALL HALL)

Monday 27 February, 17:15-19:00

- P01** Ngako, V., Njonfang, E., Aka, T.F., Affaton, P. & Metuk Nnange, J.  
*The north - south Paleozoic to Quaternary trend of alkaline magmatism from Niger-Nigeria to Cameroon: complex interaction between hotspots and Precambrian faults.*
- P02** Gemechu, M., Kobayashi, K. & Nakamura, E.  
*Mineralogy and geochemistry of mantle derived xenoliths and host rocks from Ethiopia.*
- P03** Kabeto, K. & Nakamura, E.  
*Petrogenetic study of high-Ti Ethiopian flood basalt province: case study from Maichew area.*
- P04** Bizuneh, T.D., Kobayashi, K. & Nakamura, E.  
*Petrogenetic study of Cenozoic volcanism in Yabello and Amaro regions, Southern Ethiopia.*
- P05** Yoshida, Y.  
*Construction of rafts for Nyos-Monoun Degassing Project.*
- P06** Nagao, K., Kusakabe, M., Yoshida, Y. & Tanyileke, G.  
*Magmatic noble gases in the crater lakes Nyos and Monoun.*
- P07** Goto, S.  
*The mask culture of Cameroon: a case study of Nkambe, Cameroon highlands.*
- P08** Sano, Y., Takahata, N. & Seno, T.  
*Geographical distribution of  $^3\text{He}/^4\text{He}$  ratios in the Chugoku district, Southwestern Japan.*
- P09** Ohwada, M., Kazahaya, K., Itoh, J., Takahashi, M., Morikawa, N., Takahashi, H.A., Inamura, A., Nakama, A., Handa, H., Yasuhara, M. & Tsukamoto, H.  
*Geochemical study on groundwater and thermal water in and around Iwate volcano, Japan: dispersion feature of magmatic volatiles through the groundwater flow system.*

- P10** Ishibashi, J., Seguchi, M., Ogawa, K., Nakaseama, M., Yamanaka, T. & Kusakabe, M.  
*Hydrothermal circulation within modern sediment layer in a shallow submarine volcano, Wakamiko crater, south Kyushu, Japan.*
- P11** Takano, B. & Nakamura, K.  
*Geochemical characterization of subaqueous molten Sulfur at active crater lakes.*
- P12** Tsunogai, U., Komatsu, D.D., Ijiri, A. & Nakagawa, F.  
*Carbon and oxygen isotopic equilibrium in fumarolic CO: applications for remote temperature measurements.*
- P13** Bhalla, P., Holtz, F., Linnen, R.L., Behrens, H. & Diedrich, O.  
*Effect of T, fO<sub>2</sub>, volatiles and composition on the solubility of cassiterite (SnO<sub>2</sub>) in evolved granites.*
- P14** Yamashita, S.  
*Energetic property of magma degassing: a thermodynamic model.*
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## CONFERENCE BANQUET

Monday 27 February, 19:30-21:30

Main Hall, Hotel Blanc Art Misasa

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## SESSION PROTOCOL

### Oral session

The oral session will be held in the Main Hall (4<sup>th</sup> floor, approx. 100 seats) in Hotel Blanc Art Misasa. You are requested to use a PC projector (connector: D-sub mini 15 pin) for PowerPoint presentation. A PC notebook computer for PowerPoint presentation will be available. If you wish to use this computer please come to the registration desk with your PowerPoint file (in either CD or USB flash memory) before 8:30 AM. If you wish to use your own computer for presentation please contact our staff in advance at the registration desk.

### Poster session

The posters will be displayed in the Small Hall next to the main hall where oral session is held. The maximum poster size is 90 cm (width) x 180 cm (height). Push-pins will be available at the registration desk. The posters can be put up in the morning before the oral session starts at 9:00 AM. Remove your poster after the core time (19:00).

## LOCAL TRANSPORTATION

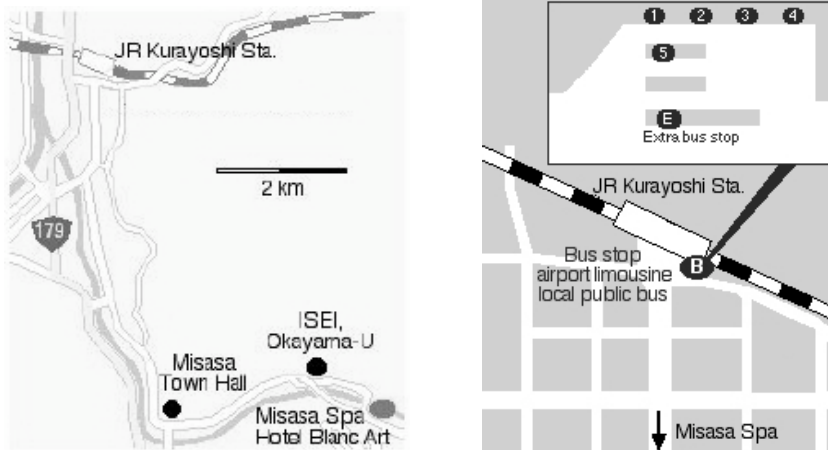
**Free-of-charge bus:** The Organizers will provide a free-of-charge bus service connecting the conference site and JR Kurayoshi Station in the morning and evening of Monday 27 February. The time table is given below.

JR Kurayoshi Sta., extra bus stop	Kurayoshi City Hotel	ISEI Entrance	Conference Site, Blanc Art Misasa
07:50	07:55	08:05	08:10
08:15	08:20	08:30	08:35
Conference Site, Blanc Art Misasa	ISEI Entrance	Kurayoshi City Hotel	JR Kurayoshi Sta., extra bus stop
21:45	21:50	22:00	22:05
22:00	22:05	22:15	22:20

**Public bus service:** Public buses for Misasa-Spa leave from JR Kurayoshi Station (bus spot #3), daily at 07:41, 08:35, 09:18, 09:45; 10:15, 10:55, 12:35, 13:05, 13:55, 14:42, 15:20, 16:30, 17:45, 18:10, 18:14, and 19:10. Public buses for JR Kurayoshi Station leave at the Misasa Spa bus stop, daily at 06:46, 08:33, 09:00, 09:38, 10:20, 11:05, 12:00, 13:09, 14:24, 14:36, 15:33, 16:27, 17:00, and 18:37.

**Taxi:** Our staff at the registration desk can arrange a taxi if you wish to go to your hotel in Kurayoshi.

**Conference site:** Hotel Blanc Art Misasa, - Address: Misasa 388-1, Misasa, Tottori 682-0123, Tel: 0858-43-2211



## GENERAL INFORMATION

### Registration desk

The registration desk will be open from 16:30 to 18:00 on Sunday (26 February), and from 08:00 to 19:00 on Monday (27 February) at Hotel Blanc Art Misasa, the conference site (4<sup>th</sup> floor). You are requested to pay the registration fee at the registration desk. **Note that only Japanese yen in cash is acceptable.** You will receive a name badge, abstract volume etc. at the registration desk.

### Catering

All costs for the following catering are included in your full registration fee.

**Refreshments:** Coffee, tee and doughnut will be offered at the conference site.

**Lunch:** Japanese-style lunch boxes are offered at the dining room in the conference site (2<sup>nd</sup> floor).

**Banquet:** The conference banquet will be held in the evening of 27 February, from 19:30 to 21:30, at the main hall in the conference site (4<sup>th</sup> floor).

### Currency exchange

Overseas participants are strongly recommended to exchange your currency into Japanese yen at the International Narita-Tokyo or Osaka-Kansai Airport. There are no international currency exchange facilities in Misasa. Please also note that ATMs at Japanese banks do not accept credit cards issued in other countries.

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International Seminar AASPP-Misasa  
<http://www.misasa.okayama-u.ac.jp/AASPP/>

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