

**Program of
the 4th KAGI21 International Symposium**

Kyoto University Clock Tower, International Conference Room (I&II)
December 2, 2006 Public Lecture
December 4-5, 2006 Symposium

Public Lectures

Chair: Shigeo Yoden

December 2 (Saturday)

14:00-16:30 Shukuro Manabe (Princeton University)
 Fujio Masuda (Doshisha University)

Symposium

December 4 (Monday)

9:10 - 9:40 Registration

Opening & General Session

Chair: Shigeo Yoden, James Mori

9:40 - 9:50 James Mori (Kyoto University)
 Introduction

9:50 - 10:20 Shigeo Yoden (Leader of KAGI21, Kyoto University)
 Activity report of KAGI21

10:20 - 10:40 Coffee break

10:40 - 11:20 <G1> Marvin Geller (State University of New York at Stony Brook)
 “Solar UV variations and changes in climate”

11:20 - 12:00 <G2> Stefan Nielson (Istituto Nazionale di Geofisica e Vulcanologia)
 “Frictional melt on earthquake faults: field, lab and theory”

12:00 - 14:00 Lunch/Posters (Photo)

Session I: Atmosphere-Ocean Variations in the Tropics

Chair: Masato Shiotani, Toshihiko Iyemori

14:00 - 14:40 <I-1> Robert Vincent (University of Adelaide)

“Gravity wave coupling between the lower and upper atmosphere in the tropics”

14:40 - 15:20 <I-2> Justin Small (IPRC, University of Hawaii)

“Regional coupled ocean-atmosphere modeling at the International Pacific Research Center”

15:20 - 15:40 Coffee break

15:40 - 16:00 <I-3> Yoichi Ishikawa (Kyoto University)

“Simulation of air-sea interaction processes associated with the tropical convective clouds using a high-resolution coupled model”

16:00 - 16:20 <I-4> Akinori Saito (Kyoto University)

“Active plasma structures in the equatorial and mid-latitude ionosphere”

16:20 - 16:40 <I-5> Hitoshi Mukougawa (Kyoto University)

“Predictability of tropical intraseasonal oscillation examined by the JMA ensemble prediction system”

16:40 - 17:00 <I-6> Takahiro Tagami (Kyoto University)

“An overview of the new KAGI-J3b project on the paleoclimate study using Indonesian speleothems”

17:00 - 18:00 Posters

19:00 - Reception (Kyou dai-kaikan, Room 101)

December 5 (Tuesday)

Session II: Subduction Zones

Chair: Toshihiko Shimamoto, Keiji Takemura

09:30 - 10:10 <II-1> John Eichelberger (University of Alaska Fairbanks)

“Where are the magma chambers?”

10:10 - 10:50 <II-2> Kazuro Hirahara (Kyoto University)

“Quasi-static simulation of earthquake cycles along the Nankai Trough in southwest Japan with the Earth Simulator: Implications for occurrence of giant earthquakes”

10:50 - 11:10 Coffee break

11:10 - 11:30 <II-3> Shinji Ohsawa (Kyoto University)

“Geochemical features of the dehydrated fluid from the subducting hydrous oceanic plate inferred from chemical and isotopic signatures of strongly mineralized waters emerging in fore-arc regions of convergent plate boundaries”

11:30 - 11:50 <II-4> Tomoyuki Shibata (Kyoto University)

“The along arc variations of Sr, Nd and Pb isotopic and trace element compositions for Quaternary volcanics from Kyushu, Japan: Implication for the change of chemical characteristics of supercritical fluid”

11:50 - 12:10 <II-5> Ichiro Kawasaki (Kyoto University)

“Relative locations of asperities, aftershocks, slow slip events and deep low frequency tremors: A clue for understanding subduction zone dynamics”

12:10 - 12:30 <II-6> Toshihiko Shimamoto (Kyoto University)

“Fault mechanics and earthquake mechanisms: Taiwan, Chelungpu to subduction zones”

12:30 - 14:00 Lunch/Posters

Session III: 2004 Sumatra Earthquake

Chair: James Mori, Masaaki Obata

14:00 – 14:40 <III-1> Sri Widiyantoro (Institut Teknologi Bandung)

“Structure of the Sumatra subduction zone from P- and S-wave tomography”

14:40 - 15:20 <III-2> Yi-Ben Tsai (Pacific Gas and Electric Company)

“Variations in the ionosphere and groundwater levels caused by the 2004 Sumatra earthquake”

15:20 - 15:40 Coffee break

15:40 - 16:00 <III-3> Jim Mori (Kyoto University)

“The July 17, 2006 West Java tsunami earthquake”

16:00 - 16:20 <III-4> Hideaki Hayakawa (Kyoto University)

“Observation of the Earth free oscillations excited by the 2004 Sumatra-Andaman earthquake with the Kamioka laser strainmeters”

16:20 - 16:40 <III-5> Yasuyuki Kano (Kyoto University)

“Local slip event associated with the Sumatra earthquake detected by pore pressure measurement in the Kamioka mine”

16:40 - 17:00 <III-6> Toshihiko Iyemori (Kyoto University)

“Ionospheric dynamo caused by lower atmospheric disturbances”

17:00 - 17:10 Break

Summary

Chair: James Mori

17:10 - 17:30 Comments

Syukuro Manabe (Princeton University)

Houtze Xu (Chinese Academy of Science)

Shigeo Yoden (Kyoto University)