

FINAL PROGRAM

Precambrian World 2009

March 3-12, 2009, Fukuoka, Japan

3-5 March 2009 (Tuesday through Thursday)

PRE-SYMPOSIUM FIELD TRIP

- ◆ Shimanto Belt (Cretaceous accretionary prism)
- ◆ Kochi Core Center (IODP core storage etc.)

6 March 2009 (Friday)

ICE BREAKER with POSTER SESSION

Nishijin Plaza, Fukuoka City, Fukuoka

16:00-18:00

7 March 2009 (Saturday)

SCIENTIFIC SESSION 1

Kitakyushu Museum, Kita-kyushu City, Fukuoka

8:50 to 16:20

8:50-9:00 **Welcoming Address**

Shoichi Kiyokawa

9:00-9:40 Keynote Paper

O01: Diverse Environments for the Evolution of Early Life, Pilbara Craton, Western Australia

Arthur Hickman

9:40-10:00

O02: Mesoarchean Hydrothermal Oceanic Floor Sedimentation: from DXCL Drilling Project of the 3.2 Ga Dixon Island Formation, Pilbara Australia

Shoichi Kiyokawa, Takashi Ito, Minoru Ikehara, Fumio Kitajima, Kosei E. Yamaguchi, Ryo Sakamoto and Yusuke Sukanuma

10:00-10:20 Invited Paper

O03: A Guided Tour through the Archean VMS Hydrothermal Alteration System at Panorama, Western Australia, with Particular Emphasis on the Reaction Zone

Carl W. Brauhart

10:20-10:40 Invited Paper

O04: Characteristics of Mesoarchean Seafloor in the Northwest Superior Province, Manitoba, Canada

Christian Bohm

10:40-11:00 Refreshment

11:00-11:40 Keynote Paper

O05: A 3.48 Ga Shallow-water Hydrothermal System at North Pole, Western Australia: Tectonics, Fluids, and Stromatolites

Martin J. Van Kranendonk, Pascal Philippot and Franco Pirajno

11:40-12:00

O06: Anomalous Fractionations of Sulfur Isotopes During Thermochemical Sulfate Reduction

Yumiko Watanabe, James Furquhar and Hiroshi Ohmoto

12:00-12:20

O07: UV Spectra and Photolysis of SO₂: Implications for Archean MIF-S Signatures

Hiroshi Naraoka and Simon R. Poulson

12:20-13:40 Lunch

13:40-14:20 Keynote Paper

O08: IODP and Precambrian Geology

Asahiko Taira

14:20-14:40

O09: Geochemistry of Hot Springs Related with Gigantic Caldera Activity in Kyushu Island

Jun-ichiro Ishibashi

14:40-15:00

O10: Hishikari Gold Deposit and Volcanism Related to Epithermal Mineralization In Kyushu, Japan

Koichiro Watanabe

15:00-15:20 Refreshment

15:20-15:40

O11: Marine Manganese Mineralization: Post-Jurassic Versus Precambrian Manganese Deposits

Takashi Ito

15:40-16:00 Invited Paper

O12: Metamorphic Lithology with and without Excess Argon

Tetsumaru Itaya

16:00-16:20

O13: The First Stage of Animal Evolution Stimulated by the Postglacial Development of Organic Carbon Reservoir

Akihiro Kano

17:00-18:00 SPECIAL EXCURSION

Yawata Works, Nippon Steel Corporation

19:00-21:00 OFFICIAL DINNER

Ohtani Kaikan

8 March 2009 (Sunday)

SCIENTIFIC SESSION 2

Nishijin Plaza, Fukuoka City, Fukuoka

9:00-9:40 Keynote Paper

O14: Ultramafics – Hydrothermalism – Hydrogenesis - HyperSLiME (UltraH³) Linkage: a Cradle for the Sustainable Most Ancient Microbial Ecosystem in the Earth

Ken Takai

9:40-10:00 Invited Paper

O15: Iron and its Significance to Early Life

Susan E. Childers

10:00-10:15

O16: A Process Forming Laminated Iron-Rich Deposits in a Hot Spring in Akita Prefecture, Japan

Chizuru Takashima, Tomoyo Okumura, Shin Nishida and Hiroko Koike

10:15-10:30

O17: In Situ Micro-FTIR Spectroscopic Characterization of Extant and Fossil Prokaryotes

Motoko Igisu, Yuichiro Ueno, Ken Takai, Satoru Nakashima and Shigenori Maruyama

10:30-10:50 Refreshment

10:50-11:30 Keynote Paper

O18: Hydrothermal Environments and Archean Life – Jacuzzi Paradise or Biased Preservation?

Wladyslaw Altermann

11:30-11:50

O19: Pseudo- and Dubio-Fossil Morphologies in Apex Chert

Daniele L. Pinti and Raymond Mineau

11:50-12:10

O20: Significance of Highly Elaborate Putative Microfossils in the Archean (>3.0 Ga) Sedimentary Succession at the Mount Goldsworthy and Mount Grant area, Pilbara Craton, Western Australia

Kenichiro Sugitani, Kathleen Grey, Koichi Mimura and Malcolm R. Walter

12:10-13:40 Lunch and Poster Session

13:40-14:00 Keynote Paper

O21: Two Distinct Types of Archean Crust

Martin J. Van Kranendonk and R. Hugh Smithies

14:00-14:20 Keynote Paper

O22: Origin of Birimian (~2.1 Ga) Mafic Rocks and Implications for Palaeoproterozoic Greenstone Belt Magmatism and Metallogeny

Frank K. Nyame

14:20-14:40

O23: The Origin of Spherulitic Iron-Oxides and Intergrown Carbonaceous Matter in The 2.9 Ga Bif (Bababudan Group, Dhawar Craton, India): Implications for Martian Surface Investigations

Beate Orberger, Christiane Wagner, Richard Wirth, Aurélie Noret, Marc Massault, Fabiana Rodrigues Ribeiro, M. Jayananda, Ko Hashizume, Eric Quirico, Gilles Montagnac and Virgile Rouchon

14:40-15:00

O24: Inter-Band Variations of Nitrogen, Iron and Argon Isotopic Compositions Observed in a 2.9 Ga Indian BIF

Ko Hashizume, Hodetoshi Soyama, Christophe Cloquet, Daniele L. Pinti, Virgile Rouchon, Beate Orberger and Mudlappa Jayananda

15:00-15:20

O25: Geological Records of Early Ecosystem in 3.8 Ga Banded Iron Formations at Isua Supracrustal Belt, Greenland

Takeshi Kakegawa

15:20-15:40 Refreshment

15:40-16:20 Keynote Paper

O26: Origin and Paleoenvironment Significance of Major Iron Formations at the Archean-Paleoproterozoic Boundary

Nicolas J. Beukes and Jens Gutzmer

16:20-16:40

O27: CO₂ Concentration of Fluid Inclusions in Hydrothermal Quartz: Evidence for Archean CO₂-Rich Seawater

Takazo Shibuya, Yuichiro Ueno, Tsuyoshi Komiya, Naohiro Yoshida and Shigenori Maruyama

16:40-17:00

O28: The Oldest Hematized Basalts: Implications for the Oxygenated Atmosphere More Than 2.76 Billion Years Ago

Katsuhiko Suzuki, Yasuhiro Kato, Kentaro Nakamura, Arthur H. Hickman, Munetomo Nedachi, Minoru Kusakabe, David C. Bevacqua and Hiroshi Ohmoto

17:00-17:20

O29: Laterite Formation in the Paleoproterozoic

Kosei E. Yamaguchi

17:20-17:25 Farewell Address

Shoichi Kiyokawa

POSTER SESSION

Nishijin Plaza, Fukuoka City, Fukuoka

P01: Study on Fluid Inclusion and Sulfur Isotope Geochemistry of Porphyry-Copper Deposits in the Waivaka Corridor Area, Namosi District, Viti Levu, Republic of Fiji Islands

Saori Egashira, Akira Imai, Takayuki Tanaka, Kentaro Masaki, Kentaro Yasunaga And Katsuhiko Maeda

P02: Microbial Diversity of a Shallow Marine Environment Undergoing Iron Deposition

Samir Abd El Fatah, Shoichi Kiyokawa and Susan Childers

P03: Carbon Isotope Geochemistry in the Dixon Island – Cleaverville Drilling Cores in the Pilbara Craton of Western Australia

Kentaro Hosoi, Minoru Ikehara, Shoichi Kiyokawa, Takashi Ito, Kosei E. Yamaguchi, Fumio Kitajima and Yusuke Sukanuma

P04: Hydrothermal Mineralization

Yahaya Katamba, Galiwango Johnson and Kabanyoro Christine

P05: The Precambrian Carbonaceous Matter From Western Australia

Fumio Kitajima, Naoki Takayanagi, Hiroshi Naraoka, Shoichi Kiyokawa, Kotoe Ikehara-Ohmori, Minoru Ikehara, Takashi Ito, Kosei E. Yamaguchi and Yusuke Sukanuma

P06: Changes of Carbon Cycle Across the PC/C Boundary Reflecting Biological Productivity and Redox Condition

Yoko Kunimitsu, Yosikazu Sambpei and Akihiro Kano

P07: Petrographical and Geochronological Characteristics of Vietnamese Metamorphic Rocks

Nobuhiko Nakano, Yasuhito Osanai, Masaaki Owada, Tomokazu Hokada, Yasutaka Hayasaka, Nguyen Thi Minh, Tatsuro Adachi and Tetsumaru Itaya

P08: Shallow-water Hydrothermal System in Nagahama Bay, Satsuma-Iwojima Island, Kagoshima; the Observation of Ferric Sediments and the Reddish Seawater

Tomomi Ninomiya, Shoichi Kiyokawa, Ryo Sakamoto, Kazumasa Oguri, Kosei E. Yamaguchi, Takashi Ito, Yusuke Sukanuma and Minoru Ikehara

P09: Pressure-Temperature-Fluid History of Hida Metamorphic Rocks in Odori-Gawa Area, Central Japan: Evidence of Prograde High-Pressure ($P > 0.9$ Gpa) Metamorphism

Yuki Nishimiya and Toshiaki Tsunogae

P10: Development of the Goto Submarine Canyon

Hisashi Oiwane, Satoshi Tohnai, Shoichi Kiyokawa, Yasuyuki Nakamura and Hidekazu Tokuyama

P11: Microbial Contribution to Lamina Formation in an Aragonite Travertine

Tomoyo Okumura, Fumito Shiraishi, Kise Yukimura, Tsuyoshi Naganuma, Chiduru Takashima, Shin Nishimura, Hiroko Koike and Akihiro Kano

P12: Macroscopic Differentiation of Metamorphic Processes in the Napier Complex, East Antarctica as a Final Event of Continent Collision during Archean

Yasuhito Osanai, Tsuyoshi Toyoshima, Masaaki Owada, Tomokazu Hokada, Toshiaki Tsunogae, Yoshifumi Nogi, Samuel Mukasa, Sung Hi Choi and Nobuhiko Nakano

P13: Possible Migration Front of Gas-Related Fluid Inferred from Interpretation on 3D-Seismic Data in the Eastern Nankai Trough

Hironori Otsuka, Sumito Morita, Manabu Tanahashi, Juichiro Ashi, Sadao Nagakubo and Tetsuya Fujii

P14: Characterization of Altered and Unaltered Volcanic Rocks along the Collision Zone between a Mobile Belt and Craton: a Southern African Scenario

H.M. Rajesh, Jens Gutzmer and Russell Bailie

P15: Mössbauer Spectroscopy Applied to Banded Iron Formations: Implications for the Determination of Fe-Bearing Compounds on the Martian Surface

Fabiana Rodrigues Ribeiro, Beate Orberger, Jorge Linares, Mammadou Bah Saliou II, Camila da Mota Carvalho, Carlos Rosiere, Axel Hofmann, Alina Trudyn, Ko Hashizume and Mudlappa Jayananda

P16: Microthermometry of Fluid Inclusions in 2.2Ga Hydrothermal Quartz: Implications for the Composition of Early Proterozoic Seawater

Takuya Saitou, Takazo Shibuya, Manabu Nishizawa, Kouki Kitajima, Tsuyoshi Komiya, Yuichiro Ueno and Shigenori Maruyama

P17: DXCL Drilling Project: Lithology and Stratigraphy of the 3.2ga Dixon Island Formation in the Drillcore DX

Ryo Sakamoto, Shoichi Kiyokawa, Takashi Ito, Minoru Ikehara, Fumio Kitajima, Hiroshi Naraoka, Kosei E. Yamaguchi, Yusuke Suganuma and Kentaro Hosoi

P18: High-Pressure and Ultrahigh-Temperature Metamorphism of the Northern Madurai Block in Karur District, Southern India

Hisako Shimizu, Toshiaki Tsunogae, Yohsuke Saitoh and M. Santosh

P19: Investigation of Autotrophic Bacteria and Oil-degrading Bacteria Inhabiting an Oil Reservoir for Microbial EOR without Injection of Organic Nnutrients

Yuichi Sugai, Machiko Oka and Kyuro Sasaki

P20: The Discovery of Mud Ridge in the Kumano Trough by Seismic Reflection Study

Kei Tanioka, Yasuyuki Nakamura, Ayanori Misawa and Juichiro Ashi

P21: Vertical-Axis Block Rotation by Reactivation of Pre-Existing Structures in Backarc Region: New Paleomagnetic Data in the Koshikijima Islands, the Northern Ryukyu Arc, Japan

Satoshi Tonai, Yusuke Suganuma and Juichiro Ashi

P22: High-Pressure and Ultrahigh-Temperature Metamorphism in Sapphirine Granulites from the Neoproterozoic Limpopo Belt, Southern Africa

Toshiaki Tsunogae and Dirk D. van Reenen

P23: Behavior of Dissolved Organic Matter through the Hydrothermal Circulation: Sediment-Hosted vs. Sediment-Starved Systems Associated with Arc-Backarc Systems

Toshiro Yamanaka, Hironori Akashi, Jun-Ichiro Ishibashi, Michinari Sunamura, Hiroyuki Kimura, Tomohiro Toki, Satoshi Nakagawa and Ken Takai

P24: Metamorphic Process and Geochronological Characters of Metamorphic Rocks From Sanjiang Region, SW China

Kazuhiro Yonemura, Yasuhito Osanai, Nobuhiko Nakano, Tatsuro Adachi, Masaaki Owada and Sotaro Baba

9-12 March 2009 (Monday through Thursday)

POST-SYMPOSIUM FIELD TRIP

- ◆ Satsuma Iwo Jima Island
- ◆ Aso and Kirishima volcanoes (active volcano and modern hydrothermal system)
- ◆ Hishikari Gold Mine (world-famous high-grade gold mine)