

**Closing symposium
on the Amur Okhotsk Project
2005-2009**

Date: January 19-20, 2010

Place: Research Institute for Humanity and Nature

457-4 Motoyama Kamigamo, Kita-ku, Kyoto 603-8047, Japan

Organization: Research Institute for Humanity and Nature

Program

January 19 (Tuesday)

10:00-10:05

Opening address

Makoto Taniguchi (Program Director of Circulation Domain, RIHN)

10:05-10:30

What was the Amur Okhotsk Project ? –Retrospect and prospect-

Takayuki Shiraiwa (Project Leader: RIHN)

Session 1: Iron transport and phytoplankton production in the Sea of Okhotsk and its surrounding area (Chair: Takeshi Nakatsuka)

10:30-10:40

Outline of the research

Takeshi Nakatsuka (Nagoya University)

10:40-11:00

Impact of sea ice production and its recent reduction on overturning and material circulation in the Okhotsk Sea and North Pacific

Kay I. Ohshima (ILTS, Hokkaido University)

11:00-11:30

The oceanic iron supply mechanisms supporting spring phytoplankton bloom in the Oyashio region, western subarctic Pacific

Jun Nishioka (ILTS, Hokkaido University)

11:30-11:50

Primary productivity and photosynthetic physiology of phytoplankton in the Sea of Okhotsk and the Oyashio region of the NW Pacific

Koji Suzuki (EES, Hokkaido University)

11:50-12:10

Phytoplankton growth and microzooplankton grazing rates in the Sea of Okhotsk during summer

Hongbin Liu (Hong Kong University of Science and Technology)

12:10-12:30

General discussion

12:30-13:30 **Lunch break**

Session 2: Iron transport in the Amur River (Chair: Seiya Nagao)

13:30-14:00

Hydrological, geological and geochemical features of the Amur River system
Alexey Makhinov (IWEB/FEBRAS)

14:00-14:30

Monitoring studies on chemical components in the Amur River waters
Elena Ivanova (ROSHYDROMET)

14:30-14:50

Biogeochemical behavior of iron in the Lower Amur River and Amur Liman
Seiya Nagao (Kanazawa University)

14:50-15:00

General discussion

15:00-15:30 **Coffee break**

Session 3: Iron dynamics in the Amur River basin (Chair: Hideaki Shibata)

15:30-15:40

Outline of the research
Hideaki Shibata (Hokkaido University)

15:40-16:00

Iron dynamics in forest ecosystems: effects of topography and vegetation type
Xu Xiaoni (Anhui University), Hideaki Shibata (Hokkaido University) and Shi Fuchen (Nankai University)

16:00-16:20

Hydrological analysis of dissolved iron transport in a watershed in Russia
Vladimir Shamov and Svetlana Levshina (IWEP/FEBRAS)

16:20-16:40

Concentration and species of dissolved iron in waters and its transportation in Sanjiang Plain, China
Yan Baixing (NEIGAE/CAS), Munioki Yoh (Tokyo University of Agriculture), Zhang Bai, Pan Xiaofeng (NEIGAE/CAS)

16:40-17:00

Soil chemical evidence for dissolved Fe transport and the impact of land use change
Chen Xin, Chi Guangyu, Huang Bin (IAE/CAS), M. Kawahigashi (Nihon University), Y. Shi (IAE/CAS), Yan Baixing (NEIGAE/CAS), Takeo Onishi (Gifu Univ.) and Muneoki Yoh (Tokyo University of Agriculture)

17:00-17:20

Wetlands as the source of dissolved iron and the impact of land use change
Muneoki Yoh, Guo Yingyu, Baku Ohji (Tokyo University of Agriculture), Takeo Onishi (Gifu University), Kotaro Yamagata (Joetsu Univ. of Education), Wang Dexuan, Yan Baixing (NEIGAE/CAS), Vladimir Shamov (IWEP/FEBRAS)

17:20-17:40

General discussion

19:00-20:30

Banquet at Kyoto Garden Palace (<http://www.hotelgp-kyoto.com/>)

605, Tatsumae-cho, Shimochojamachi Agaru, Karasuma Dori,
Kamigyō-ku, Kyoto Phone +81-75-411-0111

January 20 (Wednesday)

09:00-09:10

How is discharge of the Amur River determined ?

Yoshihiro Tachibana (Mie University)

Session 4: Land-use changes in the Amur River basin (Chair: Shigeo Haruyama)

09:10-09:30

Outline of the research

Shigeo Haruyama (Mie University)

09:30-09:50

Dynamics of forest and agricultural lands in the Amur River Basin according to
different sources of historical information

Sergey Ganzey (PIG/FEBRAS)

09:50-10:10

Geographical Information System for the Amur River basin

Victor Ermoshin (PIG/FEBRAS)

10:10-10:30

Land cover changes and their dynamics in the middle reaches of Amur river

Mizue Murooka (Hokkaido Abashiri Fisheries Experimental Station) and
Shigeo Haruyama (Mie University)

10:30-10:50

The influences of land-use changes on fluvial environment in the middle reach of Amur
River

Kotaro Yamagata (Joetsu University of Education)

10:50-11:10

General discussion

11:10-11:30

Coffee break

Session 5: Background of the land use changes in the Amur River basin (Chair: Hiroaki Kakizawa)

11:30-11:50

Outline of the research

Hiroaki Kakizawa (Hokkaido University)

11:50-12:10

Foreign trade relations between Russia, China and Japan as factor of land use/cover changes in the Amur River basin

Natalya Mishina (PIG/FEBRAS)

12:10-12:30

Temporal-spatial dynamics of human impacts on forests in Heilongjiang and Timber trade from RFE

Masanobu Yamane (Kanagawa Prefecture)

12:30-12:40

General discussion

12:40-13:40

Lunch break

Session 6: Atmospheric transport of iron to the northern North Pacific (Chair: Sumito Matoba)

13:40-14:10

Outline of the research

Sumito Matoba (ILTS, Hokkaido University) and Yaroslav Muravyev (IVS/FEBRAS)

14:10-14:30

Analyses of the mountain ice-cores for the reconstruction of atmospheric iron deposition
Hirotaka Sasaki (ILTS, Hokkaido University)

14:30-14:50

General discussion

14:50-15:10

Coffee break

Session 7: Modeling of the iron transport and ocean ecosystem (Chair: Takeo Onishi)

15:10-15:40

Modeling dissolved iron production and transport in the Amur River basin

Takeo Onishi (Gifu University)

15:40-16:00

Modeling intermediate water and iron in the Sea of Okhotsk and the northern North Pacific

Fumio Mitsudera (ILTS, Hokkaido University)

16:00-16:20

A lower trophic ecosystem model of Okhotsk Sea including iron effect

Michio Kishi (Hokkaido University), Hiroyuki Matsuda (Yokohama National University), Takeshi Okunishi (FRCGC), Yukiko Ono (Hokkaido University) and Toshihiko Yamashita (Tokyo Dietitian Academy)

16:20-16:40

General discussion

Session 8: Conservation of the giant fish-breeding forest (Chair: Takayuki Shiraiwa)

16:40-17:00

Conservation of the giant fish-breeding forest

Yasunori Hanamatsu (RIHN)

17:00-17:20

General discussion

Session 9: Conclusive discussion of the Amur Okhotsk Project (Chair: Takayuki Shiraiwa)

17:20-18:20 Discussion and conclusion by the all members

Closing of the Amur Okhotsk Project

18:20-18:30

Hideki Narita (Previous leader of the Amur Okhotsk Project)

Important notice:

There will be no official program in the night of January 20. Please enjoy Kyoto city and its culture. Those who attend the post symposium excursion need to finish their breakfast by 07:30 and be ready for the excursion in the morning of January 21. Please do not forget to check out the Kyoto Garden Palace. The bus starts from the hotel at 07:30.

Please contact Tamaki Kawaguchi or Takayuki Shiraiwa for more information.