

Monday, 20 February 2012

Mombetsu Arts & Culture Center

Place: 1F Garinko

9:00	<p>【OPENING ADDRESS】</p> <p>Yoshikazu Miyakawa (Mayor, City of Mombetsu) and Yutaka Nagata (Okhotsk Sea & Cold Ocean Res. Association)</p> <p>【K: SPECIAL LECTURES】 Chair: Yutaka Nagata (Mar. Inform. Res. Center)</p>
9:10	<p>K-1 Legends of tsunamis handed down in the tradition of Ainu - Sea waves of the tsunami of the 1611 Kaicho Earthquake went upstream along Saru River up to Ninatsumi Fort, Nifudani, Biratori Town, Hidaka Province, Hiokkaido Yoshinobu Tsuji (Univ. Tokyo)</p>
10:40	<p>BREAK</p>
10:50	<p>K-2 Primary production in a changing Arctic Ocean Vera Alexander (Univ. Alaska, Fairbanks, USA)</p>
11:20	<p>K-3 New Arctic research project and sea ice research ◇Hiroyuki Enomoto, Takashi Yamanouchi (Natl. Inst. Polar Res.) Tetsuo Ohata (JAMSTEC) and Yuji Kodama (Natl. Inst. Polar Res.)</p>
12:00	<p>LUNCH</p>
13:00	<p>【ON NORTHERN PEOPLE】 <i>(in Japanese language only)</i></p>
13:10	<p>I . Paleoenvironment of the Ainu era -The existence of the Little Ice Age in Hokkaido- Yuji Soeda (Historical Museum of Hokkaido)</p>
14:40	<p>II . The Okhotsk Culture as people of the north sea in ancient times Kazutoshi Sato (Mombetsu Municipal Museum)</p>
16:00	<p>• The documentary film of the Antarctic Expedition Party organized by Shirase</p> <p>【K: SPECIAL LECTURES】 <i>(in Japanese language only)</i></p> <p>K-4 That's the Antarctica! Masafumi Sasaki (Kitami Inst. Tech./ JARE Club)</p>
18:30	<p>WHITE CONCERT < OKHOTSK SEA ICE MUSEUM></p>

12:00	LUNCH
13:30	【WORKSHOP: OIL POLLUTION IN THE SEA OF OKHOTSK】 <i>(in Japanese language only)</i> =Prepare for the oil spill assuming the worst case= Chair : Masato Ito (OEPN) OPENING ADDRESS Satoshi Ono (President of OEPN) W-1 The activities of Okhotsk Environmental Protection Net Satoshi Ono (OEPN) W-2 Sakhalin- II Project Oleg Sapozhnikov and Evgenia Oleinikova (Sakhalin Energy, Russia) W-3 What to do if unexpected oil spill happen in Mombetsu? Kazuhiro Ohdate (Mombetsu Kaihatsu Club)
	BREAK
	W-4 Oil spill in 2011 and the Great East Japan Earthquake Kuniaki Sasaki (Oil Pollution Consulting) W-5 Challenges in responding to oil spills in the Great East Japan Earthquake Shintaro Goto (Rissho Univ.)
18:30	WHITE CONCERT < OKHOTSK SEA ICE MUSEUM>

12:00	LUNCH
	【A : SEA ICE OF THE OKHOTSK AND ARCTIC SEAS, OCEANOGRAPHY, MONITORING AND MODELING】 Chair: Shotaro Uto (Natl. Maritime Res. Inst.)
13:00	A-1 Prediction of the Okhotsk sea ice by high-resolution model ◇Takashi Noda, Noriaki Kimura (Univ. Tokyo), Yasushi Fujiyoshi (Hokkaido Univ.) and Hajime Yamaguchi (Univ. Tokyo)
13:20	A-2 GIMS - Technology for the classification and qualitative interpretation of the data of remote sensing for sea surface ◇Ferdenant Mkrтчyan and S. M. Shapovalov (Inst. Radioengineering & Electronics, Russia)
13:40	A-3 Computer simulation in pattern formation of frost flower at coastal area ◇Toshihiko Ishiyama and Toshiyuki Takagi (Kushiro Natl. College Tech.)
14:00	BREAK
	Chair: Humio Mitsudera (Hokkaido Univ.)
14:10	A-4 Monthly variations of oceanographic conditions and water mass distributions off the eastern Pacific coast of Hokkaido, Japan ◇Akira Kusaka (Natl. Fish. Res. Inst., FRA), Tomonori Azumaya and Yasuhiro Kawasaki (Hokkaido Natl. Fish. Res. Inst., FRA)
14:30	A-5 Seawater temperature observed at nineteen monitoring stations around the coastal area of Hokkaido, Japan ◇Yasunori Watanabe, Shigeto Kogarumai, Kei Sasaki, Yasuhiro Kawasaki and Daiji Kitagawa (Hokkaido Natl. Fish. Res. Inst., FRA)
14:50	A-6 Sea ice thickness measurement with EM induction instrument in Chukchi Sea and Beaufort Sea ◇Chun-Ju Lee and Seong-Yeob Jeong (Maritime & Ocean Engineering Res. Inst., Korea)
15:10	A-7 Analysis of ice drift buoy data from the Sea of Okhotsk ◇Matti Leppäranta (Dept. Physics, Univ. Helsinki, Finland), Kunio Shirasawa (Hokkaido Univ.) Annu Oikkonen (Dept. Physics, Univ. Helsinki, Finland) and Yasushi Fukamachi (Hokkaido Univ.)
15:30	BREAK
	Chair: Yasushi Fujiyoshi (Hokkaido Univ.)
15:40	A-8 Seasonal cycle and variability of Arctic sea ice ◇Hiroyuki Enomoto (Natl. Inst. Polar Res.), Kazutaka Tateyama, Yasuhiro Tanaka, Hiroki Shibata, Nuerasimuguli Alimasi, Fumiaki Nakamura and Shuhei Takahashi (Kitami Inst. Tech.)
16:00	A-9 Prediction of summer sea-ice extent in the Arctic based on the analysis of the winter ice motion ◇Akira Nishimura, Hajime Yamaguchi and Noriaki Kimura (Univ. Tokyo)
16:20	A-10 A melt process of coastal sea ice in the Arctic Ocean using satellite images ◇Huaidong Jin, Noriaki Kimura and Hajime Yamaguchi (Univ. Tokyo)
16:40	A-11 Retrieval of high temporal and spatial distribution of sea ice velocity fields using Doppler Radar data ◇Yasushi Fujiyoshi, Koji Oosumi (Hokkaido Univ.) and Yoshinori Yamada (Meteorological Res. Inst.)
18:30	WHITE CONCERT < OKHOTSK SEA ICE MUSEUM >

	[K: KEYNOTE LECTURES] Chair: Hiroyuki Enomoto (Natl. Inst. Polar Res.)
9:00	K-5 Shift to renewable energies in Japanese Okhotsk region Masafumi Sasaki (Kitami Inst. Tech.)
10:30	BREAK
	[A : SEA ICE OF THE OKHOTSK AND ARCTIC SEAS, OCEANOGRAPHY, MONITORING AND MODELING]
10:40	A-12 Modeling of thermo-haline circulation of the Sea of Okhotsk and North Pacific ◇Junji Matsuda (Hokkaido Univ.), Yuichiro Sasajima (Mitsubishi Res. Inst., Inc.) Humio Mitsudera, Tomohiro Nakamura (Hokkaido Univ.) and Hiroyasu Hasumi (Univ. Tokyo)
11:00	A-13 High-resolution modeling of coastal circulations and Amur River outflow over the northwestern continental shelf of the Sea of Okhotsk ◇Humio Mitsudera (Hokkaido Univ.) and Ayumi Fujisaki (Univ. Michigan, USA)
11:20	A-14 Possible influence of snow and sea ice change on future climate in Hokkaido ◇Tomonori Sato and Shinji Matsumura (Hokkaido Univ.)
12:00	LUNCH
	[S : SPECIAL SESSION : NORTHERN SEA ROUTE] Chair: Hajime Yamaguchi (Univ. Tokyo)
13:00	S-1 Sea ice prediction and construction of ice navigation support system for the Arctic Sea Route ◇Hajime Yamaguchi and Noriaki Kimura (Univ. Tokyo)
13:25	S-2 Medium-range forecast of summer sea-ice extent in the Arctic using satellite data ◇Noriaki Kimura, Akira Nishimura and Hajime Yamaguchi (Univ. Tokyo)
13:50	S-3 Monitoring of sea-ice thickness on ice covered passages using satellite microwave sensors Kazutaka Tateyama (Kitami Inst. Tech.), ◇Hiroyuki Enomoto (Natl. Inst. Polar Res.) Toshiyuki Takagi (Kushiro Natl. College Tech.) and Hiroki Shibata (Kitami Inst. Tech.)
14:15	S-4 Pack ice routing with ant colony optimization using radar images ◇Toshiyuki Takagi (Kushiro Natl. College Tech.), Kazutaka Tateyama (Kitami Inst. Tech.) and Toshihiko Ishiyama (Kushiro Natl. College Tech.)
14:40	BREAK
	Chair: Noriaki Kimura (Univ. Tokyo)
14:50	S-5 Investigation on effect of route condition on ships for utilization of the Northern Sea Route ◇Toshihiro Ozeki (Hokkaido Univ. Education), Akihisa Konno (Kogakuin Univ.) and Satoru Adachi (Network of Snow and Ice Specialists)
15:15	S-6 Feasibility of Northern Sea Route based on the recent voyage ◇Natsuhiko Otsuka, Koh Izumiyama (North Japan Port Consultants Co. Ltd.), Hiroki Shibata (Kitami Inst. Tech.) and Masahiko Furuichi (Japan Internatl. Cooperation Agency)
15:40	S-7 ClassNK's approach to ship operation in Northern Sea Route - Development of guidelines for navigating ice-covered seas in Russian territorial waters - Kenshi Yoshimura, ◇Akira Teshima and Seiichi Gyobu (Nippon Kaiji Kyokai)
16:05	S-8 Statistical modeling of ice conditions in the Raahelighthouse area, Gulf of Bothnia ◇Alexander T. Bekker, Olga A. Sabodash, Roman G. Kovalenko, Dmitriy S. Rusakov and Yulia A. Krikunova (Far Eastern Federal Univ., Russia)
16:30	S-9 Be gentle to the globe: For sound and sustainable Arctic shipping Hiromitsu Kitagawa (Ocean Policy Res. Foundation)
	[CLOSING ADDRESS]
18:30	DINNER PARTY FOR FRIENDSHIP BETWEEN SCIENTISTS & VOLUNTEERS <MOMBETSU CENTRAL HOTEL>

	<p>[B: OIL POLLUTION AND ENVIRONMENTAL PROTECTION] Chair: Natsuhiko Otsuka (North Japan Port Consultants Co. Ltd.)</p> <p>10:40 B-1 Feasibility of autochthonous bioaugmentation technologies for managing oil spills on the northern coasts of Hokkaido Naofumi Sakaguchi, Marina Takahashi (Hokkaido Univ.), Akio Ueno, Satoru Shimizu (Horonobe Res. Inst. for the Subsurface Environment), Masahiko Satô (Rishiri Town Museum) Kimihiko Maekawa (Aquaculture & Res. Inst. Saromako) and ◇Hidetoshi Okuyama (Hokkaido Univ.)</p> <p>11:00 B-2 Pollution transfer by oil encapsulation in ice - A case study in the Sea of Okhotsk - ◇Koh Izumiyama, Natsuhiko Otsuka (North Japan Port Consultants Co. Ltd.) and Kazutaka Tateyama (Kitami Inst. Tech.)</p> <p>11:20 B-3 Spatial simulation model of dynamics of the Arctic basin pollution V. F. Krapivin and ◇Ferdinant Mkrtychyan (Inst. Radioengineering & Electronics, Russia)</p> <p>11:40 B-4 Requirements for mechanical and environmental conditions on the winterization of materials and equipments of vessel intended for cold climate operation Jae-sung Kang, ◇Ho-keun Kang and Dae-heon Kim (Korean Register of Shipping, Korea)</p>
12:00	LUNCH
13:00	<p>[SYMPOSIUM FOR PUBLIC EDUCATION] <i>(in Japanese language only)</i> Active Participation in Public Educational Facilities and Museums</p> <ul style="list-style-type: none"> • Ingrowing and outgrowing museum: activities of a local museum dedicated to coal mine Takaori Ishikawa (Kushiro City Museum) • The approach to the school education of the Kushiro Children's Museum Kodomo Yugakukan Takashi Himono (Kushiro Children's Museum Kodomo Yugakukan) • Exhibit and experience of extreme climate - 'Deep Freezing Lab' - New exhibition at Nagoya City Science Museum Tetsuro Ozio (Nagoya City Sci. Museum) • The Junior staying training project by the Mombetsu Municipal Museum -Practical experience of natural history in the suburbs Mombetsu Kazutoshi Sato (Mombetsu Municipal Museum)
15:00	BREAK
15:10	<p>『Discussion』 Chair: Takashi Kuwahara and Hitomi Takagishi (Okhotsk Sea Ice Museum)</p> <p>Chisato Tamehiro (Okhotsk Youth's House) Akihisa Tada (Kitami Region Museum of Science, History and Art) Yoshifumi Matsumura (Engaru Archaeological Center) Hisao Mori (Shibetsu City Museum) Michiaki Miyashita (Mombetsu Junior High School) Yoshihito Ikeuchi (Mombetsu High School)</p>
18:30	DINNER PARTY FOR FRIENDSHIP BETWEEN SCIENTISTS & VOLUNTEERS <MOMBETSU CENTRAL HOTEL>

9:00	
12:00	LUNCH
13:00	<p>【C: BIOLOGY AND FISHERIES IN ICE-COVERED SEAS】 Chair: Hiroshi Sasaki (Senshu Univ. of Ishinomaki)</p> <p>C-1 Investigation of ice core samples from Antarctica: Connection between trace elements and heavy metal resistance genes ◇Rieko Ae, Torahiko Okubo, Yutaka Tamura (Rakuno Gakuen Univ.), Yoshinori Izuka, Tsutomu Uchida (Hokkaido Univ.), Koichiro Sera (Iwate Medical Univ.) and Jun Noda (Rakuno Gakuen Univ.)</p>
13:20	<p>C-2 Genomic analysis of microbes in sea ice from Antarctica and Okhotsk ◇Yasuko Hasegawa, Torahiko Okubo (Rakuno Gakuen Univ.), Shota Nakamura, Tetsuya Iida (Osaka Univ.), Takaaki Nakaya (Kyoto Prefectural Univ. of Medicine), Jun Noda, Yutaka Tamura and Katsuro Hagiwara (Rakuno Gakuen Univ.)</p>
13:40	<p>C-3 Photoacclimation determined by the electron transport rate in Photosystem II of ice algae in Saroma-ko Lagoon, Hokkaido ◇Kayoko Takimoto, Mitsuko Obata, Shozo Motokawa and Satoru Taguchi (Soka Univ.)</p>
14:00	<p>C-4 Temporal change of oceanographic environment in the coastal waters around Mombetsu during the sea-ice covered and sea-ice retreating periods, and influences on food condition of scallop - Results from the joint research of Hokkaido National Fisheries Research Institute and Mombetsu City ◇Hiromi Kasai (Hokkaido Natl. Fish. Res. Inst., FRA), Seiji Katakura (City of Mombetsu) Ryuichi Nagata (Okhotsk Garinko & Tower Co., Ltd.), Ikutaro Shimizu (Natl. Res. Inst. Fish. Sci., FRA) and Soshi Hamaoka (City of Mombetsu)</p>
14:20	BREAK
14:30	<p>Chair: Seiji Katakura (City of Mombetsu)</p> <p>C-5 The challenge of reconstruction faced by the domestic salmon industry after the Great East Japan Earthquake and Tsunami in 2011 ◇Ikutaro Shimizu, Katsuhiko Miki and Masahito Hirota (Natl. Res. Inst. Fish. Sci., FRA)</p>
14:50	<p>C-6 The reproductive biology of deep sea broadband thornyhead in Okhotsk Sea ◇Hajime Matsubara, Daisuke Iwata, Satomi Hirochika, Hiroko Suzuki, Misato Oda, Masaharu Shimizu, Hiroka Yoshikawa, Yuki Kubara, Kenichi Watanabe, Shigeru Shirai (Tokyo Univ. Agriculture), Takahiro Matsubara (Ehime Univ.), Ryuzo Yanagimachi (Univ. Hawaii)</p>
15:10	<p>C-7 Distribution of Steller's sea eagles and white-tailed eagles in relation to sea-ice distribution along the coast of Shiretoko Peninsula ◇Kei Matsumoto, Kazutaka Tateyama, Shuhei Takahashi (Kitami Inst. Tech.) Hiroyuki Enomoto (Natl. Inst. Polar Res.), Koji Ono (Kushiro Nature Conservation Office) and Kenichiro Shimatani (Inst. Statistical Mathematics)</p>
18:30	DINNER PARTY FOR FRIENDSHIP BETWEEN SCIENTISTS & VOLUNTEERS <MOMBETSU CENTRAL HOTEL>

9:00	<p>【M: WORKSHOP, FOREST-VILLAGE-SEA CHAIN STUDIES】 <i>(in Japanese language only)</i> Chair: Shuichi Tokusho (City of Mombetsu)</p> <p>M-1 The application of the forest biomass as an renewable energy Shoichi Ando (Sumitomo Forestry Wood Products Co., Ltd.)</p> <p>M-2 An advanced forestry in Europe Masatoshi Nakamura (City of Mombetsu)</p> <p>M-3 The forestry along the Okhotsk Sea coast of Hokkaido Misao Kumagai (Okhotsk General Subprefectural Bureau)</p>
12:00	LUNCH
13:00	<p>【M: OUR HOME OKHOTSK SEA】 <i>(in Japanese language only)</i></p> <p>『Part I -Nature and Industry』</p> <p>M-4 On the wild salmon and trout Yoshitaka Sasaki (Salmon & Freshwater Fish. Res. Inst)</p> <p>M-5 The cultivation project of corbicula Tomoharu Watanabe (Salmon & Freshwater Fish. Res. Inst)</p> <p>M-6 Hajime Matsubara (Tokyo Univ. Agriculture)</p>
15:00	BREAK
15:10	<p>『Part II -Recent Reports of Regional Study』 <i>(in Japanese language only)</i></p> <p>M-7 Satellite tracking of rehabilitated Spotted Seal pup Nao Takahashi (Hokkaido Univ.)</p> <p>「Reports of Okhotsk Tokkari Center」</p> <p>M-8 Relationship between weights of ringed seals <i>Phoca hispida</i> and water and air temperature and changes in physical conditions due to molting Relationship between abdominal circumferences of bearded seals <i>Erignathus barbatus</i> and water and air temperature and changes in physical conditions due to molting- 1 Nami Tomisawa and Yoshitsugu Hirosaki (Okhotsk Tokkari Center)</p> <p>M-9 Relationship between weight and food consumption and stool and urine conditions of ringed seals <i>Phoca hispida</i> Relationship between abdominal circumference and food consumption and stool and urine conditions of bearded seal <i>Erignathus barbatus</i>- 1 Natsuki Miyazawa and Yoshitsugu Hirosaki (Okhotsk Tokkari Center)</p> <p>M-10 Environment and change in physical conditions of spotted seals <i>Phoca largha</i> in molting period- 1 Maya Tatino and Yoshitsugu Hirosaki (Okhotsk Tokkari Center)</p> <p>M-11 Record of causes of death and disease conditions of all ringed seals <i>Phoca hispida</i> and ribbon seals <i>Phoca fasciata</i> kept in Okhotsk Tokkari Center and similarity in causes of death and disease conditions among those seals- 1 Masae Takaishi and Yoshitsugu Hirosaki (Okhotsk Tokkari Center)</p>

Poster Session

- P-1** Ichthyoplankton as an indicator of fish reproduction in Tatarskiy Strait (Japan Sea)
Olga N. Moukhametova (SakhNIRO, Russia)
- P-2** Interconnexion of phytobenthos and elements of morphological structure of underwater landscapes
Andrey A. Bobkov and Kirill M. Petrov (Saint-Petersburg State Univ., Russia)
- P-3** The degree of development and the validity of predictions TAC fish in the Far East Seas Russia
Gennady M. Gavrillov (TINRO-Centre, Russia)
- P-4** Variation paint *Lycodes Soldatovi* (Perciformes: Zoarcidae)
Oleg Z. Badaev (TINRO-Centre, Russia)
- P-5** Practical aspects of marine ecosystem services economic evaluation
Ekaterina V. Golovashchenko (TINRO-Centre, Russia)
- P-6** The composition, biomass, trophic status, and caloric content of jellyfish (Cnidaria) in the Pacific waters off Kurile Islands in summer
Konstantin Gorbatenko and Kseniya V. Radchenko (TINRO-Centre, Russia)
- P-7** Some features of biology and biochemical indicators of the pacific herring of the northern Okhotsk Sea at the various stages of ontogenesis
Konstantin Gorbatenko, I. V. Melnikov, I. A. Kadnikova, A. E. Lazhentsev and A. Pavlovsky (TINRO-Centre, Russia)
- P-8** Trophic position of the macrozoobenthos from the western Kamchatka shelf revealed from nitrogen and carbon stable isotope ratios
Konstantin Gorbatenko, V. A. Nadtochy and A. E. Lazhentsev (TINRO-Centre, Russia)
- P-9** Influence of cyclonic activity in the October-December on the ice cover in the Sea of Okhotsk in winter
Svetlana Yu. Glebova (TINRO-Centre, Russia)
- P-10** Variability of the geostrophical currents in the western Kamchatka region
Igor Zhigalov (TINRO-Centre, Russia)
- P-11** Sea Ice cover variability and change in the Tatar Strait
Elena I. Ustinova and Yury. D. Sorokin (TINRO-Centre, Russia)
- P-12** The spatio-temporal distributions of ice areas, ice volumes and ice areas (as a result of ice hummocking), according to ice thicknesses in Bering Sea
Nadezda M. Vakulskaya (I.II'ichev Pacific Oceanological Inst., Russia)
- P-13** The method of superlong-term forecasting of ice conditions of the Bering Sea
Antonina Polyakova (V.I.II'ichev Pacific Oceanological Inst., Russia)
- P-14** The method of superlong-term forecasting of ice conditions in the Okhotsk Sea
Antonina Polyakova (V.I.II'ichev Pacific Oceanological Inst., Russia)
- P-15** Analysis of offshore structure reliability on the base of limit state theory
Vladimir Tsuprik (Far Eastern Federal Univ., Russia)
- P-16** Interdecadal oscillation with inversed phase in the Japan Sea ice extent as compared to the northeast Pacific SST and Baykal Lake ice thickness
Vladimir I. Ponomarev, Svetlana P. Shkorba, Elena V. Dmitrieva (I.II'ichev Pacific Oceanological Inst., Russia) and Lubov N. Kuimova (Limnological Inst., Siberian Branch of RAS, Russia)
- P-17** Methodology of the ice navigation risk assessment
V. Yu. Tretyakov, S. V. Frolov and A. E. Kleyn (Arctic & Antarctic Res. Inst., Russia)
- P-18** Seasonal dynamics of production processes in the Okhotsk Sea
Vladimir I. Matveev (TINRO-Centre, Russia)