HOKKAIDO UNIVERSITY

Title	Hokkaido University Sustainability Weeks 2009 : Annual Report : A Step Toward the Future to Build a Sustainable Society
Issue Date	2017-03
Doc URL	https://hdl.handle.net/2115/65252
Type	report
File Information	chapter-2.pdf,

Hokkaido University Collection of Scholarly and Academic Papers : HUSCAP

2. Websites of the Events and Activities

2009 Asia Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2009)

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39595 (Link to HUSCAP)
Date	October 4 – 7 (Sun.-Wed) **(Finished)**
Organizer	Hokkaido University, Global COE Program; APSIPA ASC 2009 International Organizing Committee
Co-host	Hokkaido University, Graduate School of Information Science and Technology; The Institute of Electronics, Information and Communication Engineers, Japan; Information Processing Society of Japan; Microsoft Research Asia; The Institute of Engineering, Singapore
Venue	Oct.4 Hokkaido University Conference Hall 9：30-17：30 Oct.5 Sapporo Convention Center 9：30-18：00 Oct.6 Sapporo Convention Center 9：00-17：30 Oct.7 Sapporo Convention Center 9：00-12：35
Language: English **Intended Audience:** Researchers, General Public, College Students	
Outline	2009 Asia Pacific Signal and Information Processing Association Annual Summit and Conference (APSIPA ASC 2009) is expected to be an opportunity to develop environmental technologies and standardizations of signal processing, information technology, and communications. It also supports the growth of many industries in Japan. This conference will focus on the presentation of international papers by many researchers and students in the Asia-Pacific region. We will offer a wide variety of sessions such as poster sessions, lecture sessions, forum sessions, panel discussions, tutorials, and so on. We hope that you will be interested in joining us.
Progarm	Please check the details of the program at APSIPA ASC 2009 website. http://www.gcoe.ist.hokudai.ac.jp/apsipa2009/
Registration	Pre-Registration is available on the APSIPA ASC 2009 website. http://www.knt.co.jp/ec/2009/apsipa/
Fees	Admission fee : Member 50,000 JPY / Students 20,000 JPY *If you do pre-register, there is a discount available for the admission fee. Please see the APSIPA ASC 2009 website for details. http://www.knt.co.jp/ec/2009/apsipa/

Contact	Hokkaido University Graduate School of Information Science and Technology Ms. Ito TEL : +81-(0)11-706-6489 E-mail :ito[at]icn.ist.hokudai.ac.jp
URL	APSIPA ASC 2009 website http://www.gcoe.ist.hokudai.ac.jp/apsipa2009/

Report

The Asia Pacific Signal and Information Processing Association (APSIPA) is a scholarly society established in April 2009 with the aim of advancing studies on signal processing theory, information processing and communication, technological investigation and research and the sharing of expertise in order to contribute to the promotion of learning, technologies and related initiatives. APSIPA projects include lectures, discussions and observation tours concerning signal and information processing and communication, encouragement and dissemination of academic investigations/research, studies and technological development, and publication of trade journals and magazines.

APSIPA ASC 2009 was the first international conference hosted by the APSIPA, and showcased cutting-edge technologies for signal and information processing and for information communication through presentations and discussions. These are indispensable themes for the development of telecommunication technologies/products as well as for the establishment of social and industrial infrastructure today. The event provided Japanese telecommunication researchers and engineers with opportunities to present their research results, and also served as a forum for technological investigation and research exchanges.

The conference was attended by approximately 260 people from 17 countries, and numerous distinguished researchers in the fields of signal and information processing and information communication presented their research results. The four-day event featured two plenary keynote speeches, six tutorial sessions, three panel discussions, twenty general oral sessions and ten poster sessions, at which informative discussions were held concerning state-of-the-art R&D.

Panel Session

Poster Session

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39595
（Link to Hokkaido University Scholarly and Academic Papers （HUSCAP）

The 9th SEGJ Int'l Symposium "Imaging and Interpretation – Science and Technology for Sustainable Development -"

Overview

Date	October 11 – 14 (Sun.-Wed.) **(Finished)**
Organizer	The Society of Exploration Geophysicists of Japan (SEGJ)
Co-host	The Australian Society of Exploration Geophysicists (ASEG); European Association of Geoscientists and Engineers (EAGE); Environmental and Engineering Geophysical Society (EEGS); The Korean Society of Earth and Exploration Geophysicists (KSEG);The Society of Exploration Geophysicists (SEG); Vietnam Association of Geophysicists (VAG); Hokkaido University Faculty of Science Institute of Seismology and Volcanology
Venue	Hokkaido University Conference Hall
Language: Japanese / English **Intended Audience:** Researchers, General Public, College Students, High School Students, Elementary and junior high school students	
Outline	Geophysical exploration has been an indispensable tool in natural resource development, and recently it is the expected to contribute to the sustainability of environments, as well as social and human systems in various areas on both a small and large scale. The main theme of the 9th symposium is "Imaging and Interpretation – Science and Technology for Sustainable Development -" which focuses on the process of maintaining the balance between human activity and the environment for future generations. On Oct.12, Open lecture for the public will be held from 10:00 to 15:00 at Hokkaido University Conference Hall.
Registration	*Events for General Public: Not required *Symposium : Required at http://www.segj.org/is/9th/
Fees	*Events for General Public : Free of charge *Symposium: Admission fee : Member 35,000 JPY / Students 10,000 JPY *If you do pre-register, there is a discount available for the admission fee. Please see the 9th SEGJ International Symposium website for details. http://www.segj.org/is/9th/

Contact	SEGJ International Symposium Organization Committee E-mail segj9th@segj.org TEL : +81-(0)11-706-4679 FAX: +81-(0)11-738-5725
URL	The 9th SEGJ International Symposium website http://www.segj.org/is/9th/

Report

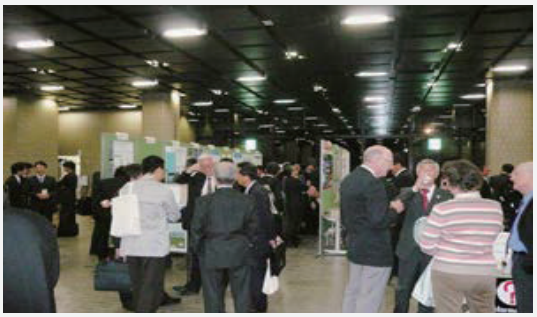
Geophysical exploration technology (used for underground imaging with a variety of measurement techniques) plays an important role in various fields, including those of natural resource development, infrastructure improvement, environmental conservation and natural disaster prevention. In addition, it has recently taken on increased importance as a fundamental technology for the creation of a sustainable society.

The 9th SEGJ International Symposium on Imaging and Interpretation was held to achieve two objectives: to disseminate information about R&D results in Japan to the rest of the world, and to provide a forum for members of SEGJ to exchange information with scientists and engineers and overseas members of related academic societies as well. The themes of the symposium were twofold: how results obtained with geophysical exploration technology should be interpreted, and how we should contribute to the societal challenge of achieving sustainable development.

The symposium was attended by a total of 193 participants, including 69 individuals from other countries. Three distinguished researchers (including one invited from overseas) delivered keynote lectures, and 134 general lectures were given by participants from domestic and overseas institutions. Furthermore, on the theme of -Leading-edge Technology for Exploration of the Earth – Toward a Future of Sustainable Development, overseas participants made 17 poster presentations highlighting undertakings in progress in their countries, while overseas academic societies and businesses ran 10 trade exhibitions. These academic activities are expected to provide information about Japan's R&D results to other countries and facilitate exchanges of expertise and technical information with overseas specialists, representing tremendous progress in efforts to contribute to the development of geophysical exploration technology and the achievement of sustainable development.

At this symposium, as part of efforts to train young people and educate the public, an excursion and an exhibition for citizens were held under the theme of Looking, Touching and Thinking: The Earth – Our Beautiful Home. On the day before the symposium (a Sunday), an excursion was organized to Mt. Usu and Mt. Showa Shinzan with the participation of 23 local upper-grade elementary school students and junior high school students and 18 of their parents. Furthermore, with the first day of the symposium falling on a national holiday, the keynote lecture and exhibitions were opened to the public to promote better understanding of geophysical exploration technology in society and encourage locals to interact with researchers. Through these activities, it is expected that geophysical exploration technology will become more widely recognized among people and be passed on to the next generation as a fundamental tool for the creation of a sustainable society.

Excursion to Showa-Shinzan Volcano



Venue of Poster Session

Students' Propositions of the Green New Deal: The 6th Debate Competition, School of Economics and Business Administration

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39966 (Link to HUSCAP)
Date	October 24 (Sat) 10:00-12:20, 12:50-17:00 November 2 (Mon.) 12:15-14:00 (Finished)
Organizer	Hokkaido University Graduate School of Economics and Business Administration
Venue	Oct.2 Hokkaido University Center for Experimental Research in Social Sciences W409, W406, W407 Nov.2 Conference Hall
Language: Japanese (Some English at the Poster Presentation **Intended Audience:**Researchers, General Public, College Students, High School Students, Elementary Schools, Junior High Schools and High Schools Student	
Outline	The School of Economics and Business Administration will host its annual debate. This year's event (the sixth in the series) will present our students' unique ideas concerning the Green New Deal. On **October 24 (Saturday),** students will hold a formal debate on the Green New Deal's advantages and drawbacks. A pre-debate event was held on **July 2 (Thursday),** and the faculties from the School of Economics and Business Administration gave lectures on the same theme. On **November 2 (Monday),** during the Sustainability Weeks, the proposals covered in the debate will be put together in the form of posters, and oral presentations will be made to visitors. Everyone is welcome to learn about the Green New Deal proposals by Hokkaido University students both through the debate and at the poster sessions.
Registration	Not required (Charge-free)
Contact	Hokkaido University Graduate School of Economics and Business AdministrationContact (Ms. Tsukada) TEL : +81-(0)11-706-4066 FAX : +81-(0)11-706-4947
URL	http://www.econ.hokudai.ac.jp/jp08/

Report

Faculty of Economics held the sixth annual debate competition on October 24. This event started in 2003 for the purpose of improving communication skills of undergraduate and graduate students and has been inspiring them to express themselves in academic areas. This year, we received thirteen team entries from inside and outside the faculty. It was unfortunate, however, some teams had to cancel their entries due to the H1N1 flue.

This year's subject was "Green New Deal: Ideas from Students to Hokkaido" collaborating with other events in Sustainability Weeks also held in Hokkaido University during the time. Students discussed how we should tackle with the global environmental issues and orient local environmental policies in Hokkaido. Many interesting ideas from students are revealed as the debate proceeded; the battle consists of 10 minutes presentations from each team and 20 minutes Q&A session.

After a very close battle, team UNO representing Uda Seminar at School of Economics won the championship and team WOS consisting of students from School of Law, School of Dental Medicine and Faculty of Engineering was the runner-up.

Administrative works such as chairs and judges are served by faculty members, graduate students and experienced undergraduates. Judgments seemed to have many difficulties and often took time due to close battles. In order to use the judging time effectively, we introduced additional Q&A sessions this year and accepted questions from audience.

Our debate competition received a favorable review as usual. We believe that this event plays an important role in our education program and we also expect more teams to join the competition next year.

Presentation of a participating team

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39966
（Link to Hokkaido University Scholarly and Academic Papers （HUSCAP）

CLARK THEATER 2009

Overview

Date	October 30 – November 3 (Fri. – Tues.) (Finished)
Organizer	Hokudai Theater Project Execution Committee 2009
Co-host	Hokkaido Regional Environment Office, Ministry of the Environment, Hokkaido University Sustainable Low-Carbon Society Project
Venue	Clark Memorial Student Center
Language: Japanese, English, Others **Intended Audience:** For all	
Outline	The “Clark Theater” film festival will be held from Oct 30 – Nov. 3, 2009. Various films, both long and short that are important culturally but have had little opportunity to be viewed publicly will be showcased during this event. On Nov.1, a special event called “Beyond An Inconvenient Truth” will be held at 12:45 p.m. (free admission).This event will begin with a showing of the Academy Award-winning “An Inconvenient Truth”, and will include a talk session attended by distinguished guests and students. We hope that the event will also encourage those with limited interest in environmental problems to begin considering the issues at hand. Lectures will follow the movies. We look forward to your participation. This year’s Clark Theater will also showcase other outstanding environmental programs. Please visit our website for the detailed programs.
Registration	Not required (Charge: 500 yen / Advance tickets: 400 yen. Some films will be free of charge.)
Contact	Hokudai Theater Project Execution Committee 2009 E-mail : info[at]clarktheater.jp
Website	CLARK THEATER 2009 Website URL : http://www.clarktheater.jp/ (Japanese Only)

Report

Thanks to the support of many people, the Clark Theater Film Festival was brought to a successful close once again this year. We would like to express our sincere appreciation to all those who visited our theater and supported the event.

This year, we showed *Tsumiki no Ie* (The House of Small Cubes) at the opening, followed by a program highlighting the Banff Mountain Film Festival (a world-famous outdoor film showcase). In a special event called *Beyond An Inconvenient Truth*, we held a lecture meeting after showing the award-winning film. As epitomized by these films, we believe that we can approach the theme of environmental issues through the medium of theater.

In particular, the *Beyond An Inconvenient Truth* special event (co-hosted by the Hokkaido University Sustainable Low-Carbon Society Project and the Ministry of the Environment's Hokkaido Regional Environment Office) attracted many visitors, who watched the Academy Award-winning *An Inconvenient Truth* and listened attentively to related talks by distinguished guests. Furthermore, to our delight, a large number of people participated in the Seminar on Climate Change Policy – a related event also hosted by the Ministry of the Environment. We believe we succeeded in putting on a show to involve the general public in thinking about global warming together as a first step by using the relatively familiar approach of visual presentation in accordance with the original goal of the event.

The Hokudai Theater Project Execution Committee will continue to advocate, through various approaches, the potential of having a permanent theater at a university as an educational institution promoting related activities.

Lecture meeting after the film

Venue with full of audience

Seminar on Climate Change Policy

Overview

Date	November 1 (Sun.) 15:30～17:00 (Finished)
Organizer	Hokkaido Regional Environment Office, Ministry of the Environment
Co-host	Hokkaido University Sustainable Low-carbon Society Project CLARK THEATER 2009
Venue	Hokkaido University Conference Hall
Language: Japanese **Intended Audience:** For all	
Outline	The Hokkaido Regional Environment Office of the Ministry of the Environment, the Sustainable Low-carbon Society Project of Hokkaido University, and Clark Theater 2009 will jointly host a lecture meeting on the policy of creating a low-carbon society. The event will be attended by officers in charge of policy formulation and execution at the Ministry of the Environment, and discussions between lecturers and other participants are also scheduled. We look forward to the participation of those who are interested in asking questions of or expressing opinions to staff from the Ministry of the Environment.
Registration	Required (Charge-free) *Please send your name and phone number to the following e-mail address to register.
Contact	Hokkaido Regional Environment Office, Ministry of the Environment/ Contact : Mr.Yasuda E-mail : REO-HOKKAIDO[at]env.go.jp TEL:+81-(0)11-299-1952

Report

The Hokkaido Regional Environment Office of the Ministry of the Environment hosted the Seminar on Climate Change Policy along with the Hokkaido University Sustainable Low-Carbon Society Project and the Hokudai Theater Project Execution Committee 2009. Prior to the seminar, the Hokudai Theater Project Execution Committee 2009 showed the Academy Award-winning *An Inconvenient Truth* and held a talk session to give seminar participants a chance to watch the movie and develop an awareness of global warming issues ahead of the event.

The seminar began with an address by Hajime Takeyasu, Manager, Environmental Policy Section, Hokkaido Regional Office Ministry of the Environment, followed by a lecture from Naoya Tsukamoto, Head of the Environmental Risk Assessment Office at the Ministry of the Environment's Environmental Health Department, about the Fourth Assessment Report issued by the Intergovernmental Panel on Climate Change (IPCC). The lecture illustrated that warming within the climate system is unequivocal, highlighted that most of the observed average global temperature increase since the middle of the 20th century was most likely caused by increasing concentrations of greenhouse gases resulting from human activity, and stressed that the effects of global warming had already begun.

Next, Professor Masahito Fukami from Hokkaido University Public Policy School introduced trends of domestic and overseas government policy measures to fight global warming. At a Q&A session followed, approximately 80 participants, where opinions were actively exchanged. Associate Professor Masahiko Fujii from Hokkaido University's Faculty of Environmental Earth Science joined Tsukamoto and Fukami in the Q&A session. Input from the floor included an opinion that the Ministry of the Environment and the Forestry Agency should work closely in promoting forest-sink certification and carbon offset programs by leveraging abundant forests (one of Hokkaido's strengths), and a question about what would become of the automobile tax system in and after the next fiscal year.

Coupled with the pre-seminar showing of *An Inconvenient Truth*, the event provided seminar participants with an opportunity to consider global warming issues. The Hokkaido Regional Environment Office at the Ministry of the Environment is committed to the implementation of a variety of programs to promote understanding of environmental issues, including global warming, among Hokkaido residents.

Poster

Sustainability Weeks 2009 Opening Symposium ——— International Symposium on Sustainable Development -Recommendations for Tackling the 5 Challenges of Global Sustainability-

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/40088 (Link to HUSCAP)
Date	November 2 (Mon.) 9:00 – 18:00 (Finished)
Organizer	Hokkaido University
Sponsorship	Ministry of Education, Culture, Sports, Science & Technology Japan
Venue	Hokkaido University Conference Hall

Language: Japanese, English

Intended Audience: Researchers, General Public, Citizens, Students

Outline

Hokkaido University has established “Hokkaido University’s Initiative for Sustainable Development” in 2005, and has vigorously encouraged research projects in five areas that explore ways toward achieving a sustainable relationship between society and the environment.

Already there is significant progress in research in these areas:

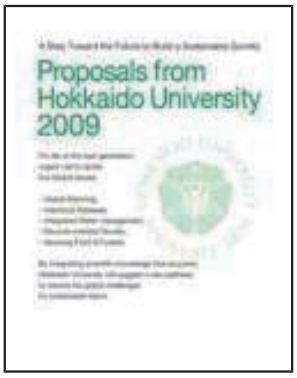
1. Global Warming
2. Infectious Diseases
3. Integrated Water Management
4. Recycle-oriented Society
5. Securing Food & Forests

To make use of the scientific knowledge acquired so far, scientists will suggest a new framework for society to resolve global challenges for a better and sustainable future.

In the **First Hokkaido University Sustainability Research Poster Contest**, students will present their programs of research toward helping to create a sustainable future, and winners of the Hokkaido University Sustainability Poster Awards will be selected from among them. We look forward to welcoming the public, government officials, students and researchers who are interested in finding out how the latest research results might affect society in the future.

<6 Proposals from Hokkaido University>

- Global Surveillance is the key to Control of Zoonotic Infections: Avian, Swine, and Pandemic Influenza
- Japan's Initiative in International Development Cooperation for Water Management
- Environmental Cooperation among World Factories for a Low-Carbon Society and a Cyclical Society: Common Environmental Destiny with China, Korea and Japan
- Hokkaido Independence for Sustainable Development – Self Sufficiency on Food and Energy-
- Establishment of an Amur-Okhotsk Consortium toward Future Sustainability in the Sea of Okhotsk
- Initiatives by Higher Education for Establishing a Sustainable Society



Download Brochure "Proposals from Hokkaido University 2009"

Registration	Required (Charge-free) *Please click and apply for registration.
Contact	Hokkaido University Initiative for Sustainable Development (HUISD) TEL: +81-(0)11-706-2093 E-mail: sw1[at]oia.hokudai.ac.jp

Program

*Program listed below is subject to change. (As of Oct. 20)

Time	Program	Presenter
Opening Ceremony		
9:00-9:05	Opening Address	Hiroshi Saeki, President of Hokkaido University
9:05-9:10	Congratulatory Speech	Isao Kiso, Director-General for International Affairs, Ministry of Education, Culture, Sports, Science and Technology

9:10-9:15	Congratulatory Speech	Fumio Ueda, The Mayor of Sapporo
9:15-9:30	Background of the Symposium	Takeo Hondoh, Chairperson, Commitee for Sustainability Weeks 2009
9:30-10:00	Keynote Speech “Roles of the Urban University in Pursuit of Sustainability”	Wim Wiewel, President of Portland State University
10:00-10:10	Questions from the floor	

Opening Symposium

Session 1. Toward Anticipation and Prevention of Infectious Diseases		
10:10-10:40	Importance of Global Surveillance for the Control of Zoonotic Infections: Avian, swine, and Pandemic Influenza	Hiroshi Kida, Director of Research Center for Zoonosis Control, Hokkaido University
10:40-10:50	Restoration of Zoonotic Diseases is Not So Easy	Takeshi Kurata, Director of Toyama Institute of Health
10:50-11:00	Questions from the floor	
11:00-11:15	Break	
Session 2. Toward the Expansion of an Integrated Water Management System		
11:15-11:35	Japan’s Role in International Development Cooperation for Water Management	Naoyuki Funamizu, Graduate School of Engineering, Hokkaido University
11:35-11:55	Views from the Counterpart in Development Cooperation Case of Burkina Faso	Angerbert Biaou, The International Institute for Water and Environmental Engineering (2iE), Burkina Faso
11:55-12:05	Questions from the floor	
12:05-12:15	Discussion	
Session 3. First Hokkaido University Sustainability Research Poster Contest		
12:15-14:00	Contest	(Lunch Break)

Session 4. Toward a Establishment of a Recycle-oriented Society		
14:00- 14:20	The risk is an opportunity-Transition from 'export-oriented' economy to expansion of domestic demand and environment protection by cooperation in Asia	Fumikazu Yoshida, Faculty of Public Policy, Hokkaido University
14:20- 14:40	Circular Economy in China: Current Situations and Suggestions	Jinhui Li, Department of Environmental Science and Engineering Tsinghua University, China
14:40- 14:50	Questions from the floor	
14:50- 14:55	Break	
Session 5. Toward the Sustainability of Food and Biomass Production		
14:55- 15:15	Hokkaido Independence Plan for Sustainable Development -Self-sufficiency on Food and Energy-	Mitsuru Osaki, Research Faculty of Agriculture, Hokkaido University
15:15- 15:35	Current Situation, Future Prospects of Sustainable Agriculture in China	Xujun Ye, College of Life Sciences, Zijingang Campus, Zhejiang University, China
15:35- 15:45	Questions from the floor	
15:45- 16:05	Break	
Session 6. Toward the Creation of a New Framework in the Global Warming Era		
16:05- 16:25	Establishment of an Amur-Okhotsk Consortium toward Future Sustainability in the Sea of Okhotska	Takayuki Shiraiwa, Research Institute for Humanity and Nature/ Institute of Low Temperature Science, Hokkaido University
16:25- 16:35	Marine Resources in the Sea of Okhotsk and Expectation by Fisheries Cooperative Associations	Tetsuaki Shinya, Boad of Abashiri fisheries cooperative Association, Chairperson of Fishery Environment Preservation Committee

16:35-16:45	Practical Efforts in Dairy Farming Toward Sound Marine and Terrestrial Material Circulation Systems	Teruo Yamada, Chairman, Collegium of Tsubetsu Organic Dairy
16:45-16:55	Protection of Ecosystems in Border Areas	Hiroaki Honma, Mainichi Newspapers Nemuro, Hokkaido
16:55-17:05	Questions from the floor	
17:05	Break	
Session 7		
17:10-17:30	Initiatives by Higher Education for Establishing a Sustainable Society	Moto Ikeda, Faculty of Environmental Earth Science, Hokkaido University
Discussion Toward Becoming a Sustainable University : the common thread that links 5 proposals		
17:30-17:40		Masaaki KOBAYASHI, Councillor of Minister's Secretariat, Ministry of the Environment (MOE)
17:40-18:00	Discussion	
18:00	Closing Address	Takeo Hondoh, Chairperson, Committee for Sustainability Weeks 2009

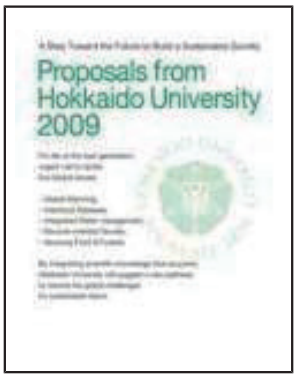
Report

Hokkaido University held this symposium to mark the opening of the Sustainability Weeks 2009. During the opening ceremony at the outset of the event, Hokkaido University President Hiroshi Saeki introduced the history of the Sustainability Weeks. He outlined the university's commitment to stepping up its efforts in research and education as well as in the dissemination of information and collaboration to address global challenges (such as climate change, the spread of infectious diseases and the depletion of water resources) through the Weeks. In subsequent speeches by invited guests, Isao Kiso, Director-General of International Affairs at the Ministry of Education, Culture, Sports, Science and Technology, highlighted the Ministry's high expectations that the recommendations made at the symposium would contribute to the creation of a sustainable society. Next, Sapporo Mayor Fumio Ueda said in a speech that the city's initiative in achieving a sustainable society had significant meaning.

Next, Wim Wiewel, President of Portland State University (one of Hokkaido University's long-term partner institutions) delivered a keynote speech entitled *Roles of the Urban University in Pursuit of Sustainability*. He introduced the triple bottom line approach (encompassing the economy, the environment and society), which has been used for partnership and collaborative projects related to sustainability between Portland State University and local communities, businesses and public organizations, and shared opinions based on his experiences.

The year 2009 marks a milestone as the fifth anniversary of the foundation of the Hokkaido University Initiative for Sustainable Development (HUISD). In this regard, at the Opening Symposium following the opening ceremony, various stakeholders, including HU faculty members, researchers from domestic and overseas institutions, individuals involved in fisheries, dairy farmers and newspaper reporters, made proposals according to the six themes outlined below to address challenges in the five areas intensively tackled by the HUISD. Masaaki Kobayashi, Councilor of the Minister's Secretariat at the Ministry of the Environment, commented that recommendations from universities are important in drawing up environmental policy measures.

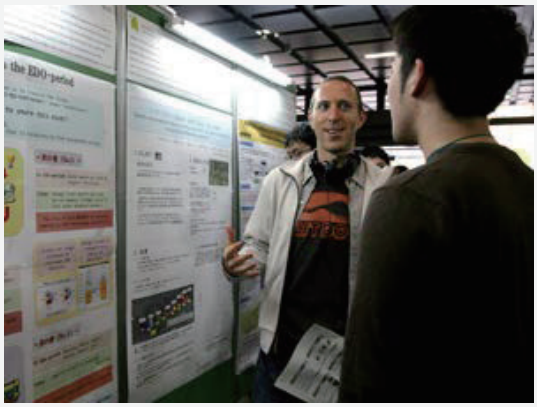
- Global Surveillance is the key to Control of Zoonotic Infections: Avian, Swine, and Pandemic Influenza
- Japan's Initiative in International Development Cooperation for Water Management
- Environmental Cooperation among World Factories for a Low-Carbon Society and a Cyclical Society: Common Environmental Destiny with China, Korea and Japan
- Hokkaido Independence for Sustainable Development – Self Sufficiency on Food and Energy-
- Establishment of an Amur-Okhotsk Consortium toward Future Sustainability in the Sea of Okhotsk
- Initiatives by Higher Education for Establishing a Sustainable Society



Download Brochure “Proposals from Hokkaido University 2009”

The venue of the opening symposium

Key note speech by Wim Wiewel, President of Portland State University



Poster contest

Commemorative photo of award winners with President Saeki

Hokkaido University also held first campus-wide research poster contest with the aims of encouraging students to review their current research from the viewpoint of its contribution to the development of a sustainable society and producing talented individuals to tackle challenges common to all humanity. A total of 72 posters were entered in the contest, and the atmosphere of the venue was charged with the enthusiasm of those presenting their work. The winners of the First Hokkaido University Sustainability Poster Awards were selected through voting by a panel of judges.

In the closing address, Takeo Hondoh, Chair of the Committee for the Sustainability Weeks 2009, brought the symposium to an end by pledging that the institution would continue the pursuit of opportunities to actively present solutions aimed at solving problems common to mankind.

Award Winners

Nine awards were granted in four divisions. For each award, one Grand Prix winner and two Outstanding Performance Award winners were selected as below.

> 1. Practical Initiative

- Grand Prix Award: Hiroshi Imae (Graduate School of Agriculture)
- Outstanding Performance Award: Yuko Otake (Graduate School of Medicine)
- Outstanding Performance Award: YoungJoon Eum (Graduate School of Environmental Science)

> 2. Breakthrough Research:

> 1) Climate and Environment Change Award

- Grand Prix Award: Prescilla Kurien (Graduate School of Environmental Science)
  Outstanding Performance Award: Chie Kosuga (Graduate School of Environmental Science)
- Outstanding Performance Award: Yukiko Kashihara (Graduate School of Environmental Science)

> 2) Technological Innovation and Social Change Award

- Grand Prix Award: Katsutoshi Yoshida, Chihiro Motoyama, Heihachirou Shigematsu, Tomohiko Otsuji (Graduate School of Public Policy)
  Outstanding Performance Award: Orencio Pedcxris Miralles (Graduate School of Environmental Science)
- Outstanding Performance Award: Yuya Uchida (Graduate School of International Media, Communication, and Tourism Studies), Danny Nou (Graduate School of Engineering)

3)
Biodiversity
and Nature
Conservation
Award

- Grand Prix Award: Terutaka Mori (Graduate School of Environmental Science)
- Outstanding Performance Award: Rumiko Kajihara, Ikue Sekiguchi, Natsumi Ishimaru (Graduate School of Environmental Science)

4) Food,
Water and
Health
Award

- Grand Prix Award: Rumiko Kajihara, Ikue Sekiguchi, Natsumi Ishimaru (Graduate School of Environmental Science)
- Outstanding Performance Award: Yoshihiro Mihara (Graduate School of Environmental Science)

5) Education
and
Communication
Award

- Grand Prix Award: Katsutoshi Yoshida, Chihiro Motoyama, Heihachirou Shigematsu, Tomohiko Otsuji (Graduate School of Public Policy)
- Outstanding Performance Award: Orencio Pedcris Miralles (Graduate School of Environmental Science)
- Outstanding Performance Award: Yoshihiro Mihara (Graduate School of Environmental Science)

6) Human
Rights,
Culture and
Peace
Award

- Grand Prix Award: Katsutoshi Yoshida, Chihiro Motoyama, Heihachirou Shigematsu, Tomohiko Otsuji (Graduate School of Public Policy)
- Outstanding Performance Award: Chie Kosuga (Graduate School of Environmental Science)

3. Good Communication Award

- Grand Prix Award: Lin Zhu (Graduate School of International Media, Communication, and Tourism Studies)
- Outstanding Performance Award: Gun Gun Hidayat (Faculty of Agriculture)

4. Attractive Poster Award

- Grand Prix Award: Yoko Matsumura (Graduate School of Agriculture)
- Outstanding Performance Award: Yuya Uchida (Graduate School of International Media, Communication, and Tourism Studies), Danny Nou (Graduate School of Engineering)
- Outstanding Performance Award: Lin Zhu (Graduate School of International Media, Communication, and Tourism Studies)

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/40088
（Link to Hokkaido University Scholarly and Academic Papers（HUSCAP）

From Hokkaido University to the World – Entrance to International Career Paths – “SD on Campus”

Overview

Date	November 2 (Mon.) 14:30-16:30 (Finished)
Organizer	Hokkaido University Executive Office on International Affairs
Venue	Hokkaido University Conference Hall
Language: Japanese/English **Intended Audience:** Hokkaido University Students	
Outline	Hokkaido University has concluded exchange agreements with more than 70 institutions in 24 countries around the world, thereby facilitating its students to study abroad and for our faculty members to become active in international exchanges. On the occasion of the SW2009 event, we will offer a special opportunity for representatives of our Partner Institutions who are keen on receiving students from Hokkaido University to visit our campus and introduce the benefits of studying with them. This will be a valuable information session for those planning to study abroad who are interested in other countries and hope to pursue careers overseas after graduation. We look forward to your participation! **///Participating Universities (Tentative) ///** Portland State University (U.S.A), The Universtiy of Texas Health Science Center at Houston (U.S.A), Ecole Superieure de Physique et de Chimie Industrielles de la Ville de Paris (France), Politecnico di Torino (Italy), Zhejiang University (China), Ebonyi State University (Nigeria), The University of Nigeria (Nigeria), etc.
Registration	Not required (Charge-free)
Contact	Hokkaido University Division for International Student and Education Contact : Ms. Kono TEL：+81-(0)11-706-8053 E-mail: ryugaku@oia.hokudai.ac.jp

Report

This event was planned and held for the first time in order to offer special opportunities for representatives of the university's partner institutions, who are keen on receiving students from Hokkaido University, to participate in the Sustainability Weeks 2009 event and introduce the benefits of studying with them.

A total of seven institutions participated: Portland State University (U.S.A.), The University of Texas Health Science Center at Houston (U.S.A.), the Ecole Superieure de Physique et de Chimie Industrielles de la Ville de Paris (France), the Politecnico di Torino (Italy), Zhejiang University (China), Ebonyi State University (Nigeria), and the University of Nigeria (Nigeria).

At the event, representatives of individual institutions introduced their educational programs for sustainable development (SD) and outlined how their students are involved in SD both on and outside university courses.

Although Hokkaido University had previously invited faculty members from its partner institutions to hold information sessions for students aspiring to study abroad, this was the first time that representatives from as many as seven such institutions had gathered together. Roughly 80 undergraduates participated, including a number of international students, and listened attentively to the explanations given.

A questionnaire to students attending the event showed that the session was well received among them, and the representatives of the participating institutions also enjoyed the sense of satisfaction provided by this opportunity to promote their universities directly to students and gauge their reactions.

Portland State University's president introduced his institution

Students from a partner institution gave an explanation

4th Fair Trade Fair Presented by YUI

Overview

Date	Fair : November 2 – 14 (Mon.-Sat.) (Finished) Weekdays : 9:00 – 19:00 Saturday : 10:00 – 16:00 Closed on Sunday Workshop: November 10 (Finished)
Organizer	International Cooperation Student Organization YUI
Co-host	Hokkaido Univ. Co-op
Venue	Fair : Hokkaido Univ. Co-op Building Workshop : TBA
Language: Japanese / English **Intended Audience:** General Public, College Students,	
Outline	Much of the abundance of cheap goods that surround our daily lives is made at the expense of the laborer in developing countries. It is our aim to raise awareness of what goes on behind the simple task of “shopping” and how it relates to the world at large through the Fair Trade Fair. During the fair you will be able to shop for fashionable goods produced under the fair trade philosophy from around the world as well as cookies and tea that will be available for sale. We welcome persons that are unfamiliar with the fair trade concept to visit our booth for information. A workshop will be also held on Nov.10. Please take some time out to shop and visit us!
Registration	Not required (Charge-free)
Contact	International Cooperation Student Organization YUI E-mail : yui.international.cooperation[at]gmail.com
URL	http://www2.hp-ez.com/hp/yui7(Japanese Only)

Report

Fair Trade Fair

The exhibition and sale of fair-trade products

This was the fourth Fair Trade Fair in the series. Held jointly by members of the Hokkaido University Co-op, it dealt with 157 products from 14 nations. A large stock of seasonal products was on offer, including winter-only chocolates and products obtained directly on a YUI study tour to the Philippines this summer. More effort than ever was made to showcase a distinct lineup of products.

In a special booth dedicated to product sales, panels were also on display to outline the mechanism of fair trade and provide information on the YUI International Cooperation Student Organization. We planned this panel exhibition to promote awareness of fair trade (considered the most familiar form of international cooperation) as well as the activities of our organization, by which we aim to help advance international cooperation in our capacity as students. Since this was the fourth event in the series and was based on proceeds from and exchanges with customers, we came to feel an increasing trend of understanding for the concept of fair trade. We would like to continue these efforts to raise awareness of the fact that the routine activity of shopping is related to the world at large.

> Lecture:
> East Timor
> and Fair
> Trade – the
> First Steps
> toward a
> Just Society

Lecture meeting

A second lecture meeting was held following last year's initial offering to provide opportunities to learn about fair trade and international cooperation on a level deeper than that of usual product sales and panel exhibitions.

This year, we invited Kiyokazu Koshida, Director of Hokkaido Peace Trade. As the founder and manager of a fair trade shop dealing in East Timor coffee, he provided insights based on his experience in the field that were also very informative for the staff of the event organizer. However, the number of attendees was limited due to various factors, including insufficient PR activities and the less favorable settings of the lecture day and time. We would like to use our experience with this lecture meeting to help it take root in the same way as the Fair Trade Fair.

Joint Symposium “Urbanization and Health – Towards the World Health Day, 2010 -“

Overview

Date	November 3 (Tues.) 13:00-17:00 (Finished)
Organizer	Department of Global Health and Epidemiology, Hokkaido University Graduate School of Medicine
Co-host	World Health Organization Kobe Center, University of Geneva, De La Salle University
Venue	Hokkaido University Conference Hall
Language: Japanese / English **Intended Audience:** Researchers, General Public, College Students,	
Outline	More than one-third of the world’s population lives in urban areas. Urbanization is still progressing rapidly throughout the world, but not necessarily in a healthy direction. This symposium will serve as a pre-meeting for World Health Day on April 7, 2010, aims to provide opportunities for comprehensive study into the current situation of urbanization in the world and resultant issues such as health problems and health disparities. Experts from across the world, including WHO officials and individuals responsible for urban planning, will assemble in Sapporo. Those interested in urbanization and health issues around the world are encouraged to take this opportunity to participate in the symposium. We look forward to your participation.
Registration	Required (Charge-free) *Please click and apply for registration.
Website	http://ghe.med.hokudai.ac.jp/sw/2009/modules/pico/index.php?ml_lang=en
Contact	Hokkaido University Graduate School of Medicine TEL : +81-(0)11-706-5051 FAX : +81-(0)11-706-7374 E-mail : tamashiro[at]med.hokudai.ac.jp

Report

The World Health Organization (WHO) has declared that World Health Day on April 7, 2010, will focus on urbanization and health, and has initiated related activities worldwide. Half of the world's population is concentrated in urban areas – a figure that is projected to increase to 70% by 2050. Hence, it is essential that health issues be tackled from the viewpoint of urbanization.

The international symposium was held by Hokkaido University Graduate School of Medicine's Department of Global Health and Epidemiology in cooperation with the WHO's Kobe Center and two of the university's partner institutions – the University of Geneva (Switzerland) and De La Salle University (the Philippines) – with the aims of raising awareness of urbanization and health and promoting participation in World Health Day.

The symposium consisted of two parts: lectures by invited speakers in the first half, and group discussions involving all participants and plenary discussions based on the preceding group discussions in the second half.

In the first half of the symposium, speakers from the WHO Kobe Center, Tokyo Medical & Dental University and Hokkaido University introduced challenges relating to urbanization and health, outlined the objectives of World Health Day 2010 and raised awareness among participants, encouraging them to engage in related activities.

The group discussion during the latter half of the symposium focused on two points: 1. health issues of urban residents, and 2. desirable events for World Health Day 2010. In the subsequent plenary discussion, the group leaders made presentations expressing group opinions that major specific issues in terms of urbanization and health include mental problems (such as depression and suicide), environmental issues (including pollution and traffic accidents) and health maintenance costs. As desirable activities to be held in relation to World Health Day, a wide range of proposals were made aimed at tackling health issues in urban areas, such as pursuing wellbeing among urban residents, overcoming a lack of exercise and popularizing ecocars.

Reflecting the viewpoint that residents should play a central role in health promotion for urban areas, we ran the symposium in a manner that helped participants actively consider ways of coming to grips with these complex issues. We hope that the results of the symposium will help facilitate activities toward World Health Day 2010 and ultimately toward the creation of a sustainable society.

Group discussion

Commemorative photo of the participants

United Nations University Global Seminar Final Hokkaido Session Future Leaders for a Sustainable Society

Overview

Date	November 3 (Tues.) 10:00 – 17:00 (Finished)
Organizer	United Nations University
Co-host	Hokkaido University
Cooperating Universities	Hokkaido University of Education, Otaru University of Commerce, Hokkai-Gakuen University, Hokusei Gakuen University
Venue	Hokkaido University Conference Hall

Language: Japanese (English partially possible)

Intended Audience: College Students,

Outline

The United Nations University Global Seminar series is held nationwide to encourage students and adults to become interested in or simply aware of the roles played by the United Nations and the global issues facing mankind.

In this Hokkaido Session, we will provide students and young people aspiring to help address challenges facing the international community with an opportunity to ascertain the state of achievement of the Millennium Development Goals (MDGs) and consider the relationship between their research programs/career plans and the MDGs.

The goals were established in 2000, and half the implementation period toward the 2015 deadline has now passed. This seminar will redirect focus onto related matters based on the recognition that achieving the MDGs will serve as a litmus test of efforts to realize a sustainable society.

Seminar Brochure

Download Brochure(PDF1MB)

Registration	No longer accepting applications – slots have been filled (Oct.28)
Contact	Hokkaido University Initiative for Sustainable Development TEL : +81-(0)11-706-2334 E-mail : g-seminar[at]oia.hokudai.ac.jp

Report

United Nations University Global Seminars have been held nationwide to encourage students and adults to become interested in or simply be aware of the roles played by the United Nations (UN) and the global issues facing mankind. The Hokkaido Session was brought to a close with this seminar (the ninth in the series). The final commemorative session was held at Hokkaido University's Sapporo campus with Hokkaido University serving as co-host. Applications for participation from across the nation, and a total of 48 students, including 21 from Hokkaido University, participated.

The theme of this session was *Future Leaders in a Sustainable Society – Toward the Millennium Development Goals to be Achieved by 2015*.

The Millennium Development Goals (MDGs) were put together in 2000 by the UN in response to particularly pressing issues that the entire world must address in the 21st century, and include 8 goals and 18 targets to be achieved by the year 2015. This seminar welcomed those working hard to help achieve the MDGs as lecturers based on the recognition that meeting the goals will serve as a litmus test of efforts to realize a sustainable society.

In the morning, two keynote speeches were delivered; first, Prof. Kazuhiko Takeuchi, Vice-Rector of UNU, spoke on the theme of *Millennium Goals and Sustainability*, followed by Toshiya Nishigori from the UNDP Tokyo Office, whose topic was *Millennium Development Goals: For the Realization of Human Development in the 21st Century*.

Six parallel sessions were held in the afternoon, with a lecturer assigned to each group answering questions from students in a lively atmosphere.

The results of a subsequent questionnaire showed that many participants learned something new through the sessions with individuals at the forefront of the MDGs, and that the seminar acted as a great stimulus both in their research and in their lives generally. Many opinions put forward by the participants also expressed hopes to learn more about the MDGs and allocate more time for the parallel sessions, as well as a desire for Hokkaido University to hold seminars like this offering the chance to learn directly from individuals working in the field.

The lecturers were also impressed by the positive attitudes of the participants. They highly regarded the small-group parallel sessions, each of which consisted of up to eight students from various undergraduate and graduate schools, thereby creating a forum for varied discussion. They also expressed a desire to offer similar opportunities in the future to enable thorough discussion of their activities with students.

Discussion at a parallel session

Group photo of the participants

Open Lecture “The 2nd Int’l Symposium on Sentinel Earth”

Overview

Date	November 3 (Tues.) 13:00 – 16:00 (Finished)
Organizer	Hokkaido University, Asian Institute of Technology, University of Alaska, University of Palangkaraya, JAXA
Co-host	Hokkaido University, Graduate School of Information Science and Technology, Graduate School of Engineering, Research Faculty of Agriculture, Faculty of Science, Research Faculty of Environmental Earth Science, Faculty of Fisheries Sciences, Institute of Low Temperature Science, Support Office for Space Science and Engineering, RESTEC, Sapporo International Communication Plaza Foundation
Venue	Hokkaido University Conference Hall
Language: Japanese **Intended Audience:**Researchers, Citizens, Students	
Outline	Recently, research themes on the drastic changes in the climate that the global environment is undergoing has gained a sense of urgency. In particular, drastic changes have happened in the Arctic because the climate and environment of the polar region has kept the balance among various factors for a long time. Therefore, we need to observe the changes in the climate and environment as it occurred in the Arctic over a long period of time in order to understand polar phenomena and its influence on the global environment. We will have an open lecture displaying the results of research and observations with satellite data and imagery.
Program	Link to the Program.
Registration	Not required (Charge-free)
Contact	Hokkaido University Graduate School of Information Science and Technology E-mail ishige[at]scc.ist.hokudai.ac.jp FAX +81-(0)11-706-6295

Report

The Open Lecture on November 3, covering the topics of “Global Warming and Drastic Changes in the Arctic” and “The Earth Viewed from the Universe – the Use of Artificial Satellites,” was easy to understand for the general public as it used videos and up-to-date information. Questionnaire results showed that more than 80% of participants were satisfied with the event.

The overall session on November 4 began with the introduction of education and research programs under the Cooperative Chair run by Hokkaido University and the Japan Aerospace Exploration Agency (JAXA) at Hokkaido University’s Graduate School of Information Science and Technology. This was followed by a lecture on insights and discoveries relating to the dynamics of tropical cyclones provided by the application of remote sensing. Lectures given during the subsequent session about the Advanced Land Observing Satellite (ALOS) and its related applications (disaster information, mapping and agriculture) featured the introduction of ALOS missions, the utilization of ALOS satellite data for technology transfer in Asia, geographical applications of remote sensing, agricultural observation and disaster monitoring using ALOS data, and the sharing and disclosure of agricultural and environmental information using GIS in Hokkaido. During the session featuring the Global Change Observation Mission (GCOM) and its related applications (ocean and atmosphere), lectures were given outlining JAXA’s GCOM initiative, societal applications in fisheries and aquaculture, global observation of marine surface vector winds, and the observation of Asian regional air pollution.

Lectures during the session of GCOM and its related applications (land and cryosphere) on November 5 covered water storage changes in Arctic watersheds, global soil-moisture monitoring, terrestrial vegetation changes and early detection of sea ice changes. In the final session featuring Sentinel Asia (the Sentinel Asia Wildfire Control Initiative), the objectives of the session and an overview of Sentinel Asia were introduced. Lectures also covered fire danger ratings, the development of a fire detection algorithm, simulation of wildfire spread and risk analysis, communication of information on fire hotspots, and advanced fire control and suppression techniques.

With this event, the importance of remote sensing technology using artificial satellites was recognized through observation of changes in the global environment. At the same time, a shared awareness was developed regarding the need to create new applications, spread their use and promote them among the general public. We therefore decided to also hold the 3rd International Symposium on Sentinel Earth and establish a network for closer international cooperation aimed at integrating remote sensing and GIS.

The Venue of the symposium

Discussion at the symposium

Experimental Exhibition: Integrative Science Reveals the Past and Future of Lake Toya and the Usu Volcanic Area

Overview

Date	November 4 -13 (Finished)
Organizer	The Hokkaido University Museum
Co-host	Hokkaido University Integrative Science Consortium
Venue	The Hokkaido University Museum

Language: Japanese

Intended Audience: General Public, College Students,

Outline	Now that the sustainability of human society is being called into question, what is needed to ensure the ongoing viability of Hokkaido University? One of the answers is integrated science. The integration of individual research programs in a given direction will act as a springboard for the discovery of new research programs, research results that have been forgotten, unexpected applications, future directions, and so forth. If Hokkaido University can wean itself from being a patchwork of researchers and functions and become a forum for integration, the institution's ongoing position as a champion of sustainable society will be guaranteed. This event will feature the exhibition of research results in a number of fields on the theme 'The Past and Present of the Usu and Toyako Regions' as the first step toward Hokkaido University's development of integrated science as a package. In addition, researchers, students, and citizens will be able to freely discuss over coffee their expectations for the integration of academic disciplines.
Movie	Please enjoy the movie of "Integrative Science Reveals the Past and Future of Lake Toya and the Usu Volcanic Area" * Compressed version (320 x 240, 25MB) * High-definition version (640 x 480, 70MB) Windows MediaPlayer is required to watch the movie.
Registration	Not required (Charge-free)
Contact	Hokkaido University Faculty of Science Department of Natural History Sciences E-mail shunfm[at]sci.hokudai.ac.jp FAX +81-(0)11-746-0862

Report

The organization of the Sustainability Weeks 2009 event was based on the University's intent to help achieve the sustainability of human society through research and education. However, we needed to ensure the ongoing viability of Hokkaido University before considering the sustainability of human society. While numerous universities in Japan compete fiercely in regard to the quality of research and education, we have to avoid a fate involving inclusion on a list of abolished universities. To compete with the University of Tokyo and Kyoto University, whose graduates include many Nobel laureates, those who thought Hokkaido University should focus on integrative science established the Hokkaido University Integrative Science Consortium. This is a challenge to differentiate this university from the others by gathering researchers in different disciplines, rather than by having individual researchers separately aspiring to receive Nobel prizes. The integration of individual research programs in a given direction will act as a springboard for the discovery of new research fields, research results that have been forgotten, unexpected applications, future directions, and so forth. If Hokkaido University can avoid simply hosting a patchwork of researchers and instead function as a genuine forum for integration, then its ongoing position as a champion of sustainable society will be guaranteed.

This event featured an exhibition of research results in a number of fields under the theme "The Past and Present of the Usu and Toyako Regions", as a first step toward Hokkaido University's development of integrated science as a package. On November 8 and 13, poster exhibitions and lecture meetings were held. Although the number of participants was limited, researchers from different disciplines who had never had an opportunity to get together, students, and members of the public freely discussed over coffee their expectations for the integration of academic disciplines. The lectures, along with the accompanying lively discussions, generated such interest that they overran their scheduled times. At the risk of self-flattery, we feel that the session gave insight into common points between different fields of study in the context of integrative science. In the future, we plan to promote Hokkaido University's integrative science approach in relation to different themes.

The venue of the lecture meeting

Poster presentation by the students

Int'l Symposium "Toward a Sustainable Low Carbon Society -Green New Deal and Global Change-"

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39928 (Link to HUSCAP)
Date	November 4 (Wed.) 9:30 – 18:00 November 5 (Thu.) 9:30 – 19:00 **(Finished)**
Organizer	Hokkaido University Sustainable Low-Carbon Society Project
Co-host	Hokkaido University Faculty of Public Policy, Faculty of Environmental Earth Science
Venue	Hokkaido University Conference Hall

Language: Japanese, English

Intended Audience: Researchers, General Public, College Students,

Outline

We will discuss from the view point of Social Science and Natural Science ways toward establishing a Sustainable Low-Carbon Society.

Day 1:Green New Deal (Nov. 4 9:30 –18:00)

The international community is facing a financial and environmental crisis, which demands an integrated solution incorporating environmental measures. Thus the New Green Deal program was proposed by US President Obama and other countries like China, EU, Korea and Japan advocated the idea. The national policies of these countries will be reviewed and assessed along with global and local policies, and potential global cooperation will be discussed.

Day 2:Global Change (Nov.5 9:30 – 19:00)

The positive feedback between ecosystems and climate systems via geochemical components will impact biological resources. We will discuss distinct indices of urgent issues, such as sea ice melting in the Arctic, and explore ways of publicizing the information of how this seriously impacts society so that global citizens can make informed decisions in response to what the indices forewarn.

Registration	Not Required (Charge-free)
Contact	Hokkaido University Sustainable Low-Carbon Society Project TEL : +81-(0)11-706-4717 E-mail : low-carbon[at]hops.hokudai.ac.jp

Program

This program is subject to change. (As of October 15)

November 4, 2009 Part 1 Green New Deal

	Program	Speaker
9:00～9:30	Registration	
9:30～9:35	Opening Remarks	Kenichi Nakamura（Dean of Faculty of Public Policy, Hokkaido University）
9:35～10:05	Keynote Speech	Fumikazu Yoshida（Director, Public Policy Research Institute, Faculty of Public Policy, Hokkaido University）
10:05～10:35	Keynote Speech -The UNEP-led Green Economy and Global Green New Deal Initiatives-	Sheng Fulai（Senior Economist, UNEP Economics and Trade Branch）
10:35～11:05	Keynote Speech – Green Development: Rethinking the Economy-Environment Connection-	James Heintz (Vice Director of Department of Economics and Political Economy Research Institute (PERI) University of Massachusetts-Amherst)
11:05～11:20	Coffee Break	
11：20～11：50	Keynote Speech	Miranda Schreurs (Professor, Director of the Environmental Policy Center, Free University of Berlin)
11:50～12:20	Keynote Speech-China's Environmental Tax and Energy Tax: Toward a Low carbon Ecomony	Ma Zhong (Director of School of Environment and Natural Resources, Renmin University of China)
12:20～12:50	Keynote Speech –Assessing the Green New Deal Programs in Korea –	Oh Sang Kwon (Professor. Department of Agricultural Economics and Rural Development. College of Agriculture and Life Sciences. Seoul National University)

12:50～14:10	Lunch Break	
14:10～15:30	Panel Discussion・Question and Answer	
15:30～15:45	Coffee Break	
15:45～16:00	-The practice of emissions trading in China: Problems and Strategies-	Ju Meiting (The College of Environmental Science and Engineering of Nankai University)
16:00～16:15	– Electricity generations policy for long term climate change management in Thailand: Multi-stakeholder s' attitudes and TOWS matrix analysis-	Nathsuda Pumijumnong (Faculty of Environment and Resource Studies Mahidol University)
16:15～16:30	-Korean Green Growth and the Transformation of a Manufacturing City toward a Sustainable City: The Case of Changwon-	Jung-Woon Kang(Dept. of Public Administration, College of Social Sciences, Changwon National University)
16:30～16:45	-Greenhouse Emissions in Jiangsu-Zhejiang-Shanghai District of China-	Xinhua Xu (College of Environmental and Resource Sciences, Zhejiang University)
16:45～17:00	-Possible cases to build a Sustainable Low-Carbon Society in Mongolia-	Bayarmaa Bold (International Affairs, Mongolian State University of Agriculture)
17:00～17:15	– Sustainable Bio-energy Production in Nigeria-	J.C. Ogbonna and B.N. Okolob (Department of Microbiology, University of Nigeria, Nsukka)
17:15	Closing Remarks	Fumikazu Yoshida（Director, Public Policy Research Institute, Faculty of Public Policy, Hokkaido University）

November 5, 2009 Part 2 Global Change

	Program	Speaker
9:00～9:30	Registration	
9:30～9:35	Opening Remarks	Moto Ikeda (Graduate School of Environmental Sciences, Hokkaido University)
Session 1 9:30～11:00	Climate change, its impact on and feedback with ecosystem Focus 1-1: Polar region as a distinct indicator and interaction with global climate	
9:35～10:00	Keynote Speech -Snow cover and hydrology in Siberia-	Daqing Yang(University of Alaska/ The Norwegian Polar Institute)
10:00～10:20	–Projection of climate change over East Asia based on time-slice experiment with high resolution AGCM–	Jai-Ho Oh (Pukyong National University)
10:20～10:40	– Arctic Sea Ice Reduction under Global Changes-	Moto Ikeda (Graduate School of Environmental Sciences, Hokkaido University)
10:40～10:55	Break	
10:55～12:45	Focus 1-2: Terrestrial and marine bio-geochemical systems	
10:55～11:20	Keynote Speech – Climate Change; Pasture, Animal Husbandry and Lifestyle of Mongolian Herders'-	Shirev-Adiya Samdan (Member of Mongolian Geographic Society)
11:20～11:40	-Comments along Siberian system- -Biogeochemical processes in forest ecosystem of northern Hokkaido under the effects of climate change and anthropogenic disturbances-	Hideaki Shibata (Field Science Center for Northern Biosphere, Hokkaido University)

11:40～12:05	Keynote Speech – Present and future changes in the Okhotsk Sea waters	Andrey G. Andreev (Pacific Oceanological Institute)
12:05～12:25	-Comments along Arctic System-	Yutaka Watanabe (Faculty of Environmental Earth Science, Hokkaido University)
12:25～12:45	Discussion	
12:45～14:00	Lunch	
Session 2 14:00～16:15	Adaptation and mitigation, their feedback to climate Focus 2-1: Food resources under global change	
14:00～14:25	Keynote Speech–Ecosystem-based fisheries management and climate change-	Chang Ik Zhang (Division of Marine Production System Management, Pukyong National University)
14:25～14:45	– Climate Change and Sustainable Fisheries-	Masahide Kaeriyama (Faculty of Fisheries Sciences, Hokkaido University)
14:45～15:05	– Sustainable Land Management Technologies and the Enhancement of Low Carbon Society in South-eastern Nigeria: a Case Study of Ebonyi State, Nigeria-	Happiness Ogba Oselebe (Department of Crop Production and Landscape Management, Ebonyl State University)

15:05～15:25	– River Futures: The Quest for Sustainability-	Gary Brierley (School of Physical Geography and Environmental Sciences, University of Auckland)
15:25～15:45	– Research and Development of Waste Fluidized Bed Combustion Technology at Zhejiang University-	Yong Chi(Zhejiang University)
15:45～16:05	-Comments along Hokkaido University biomass project-	Hajime Araki (Field Science Center for Northern Biosphere, Hokkaido University)
16:05～16:15	Discussion	
16:15～17:00	Poster Session 2	
17:00～18:30	Focus 2-2 Water resources under global change	
17:00～17:10		Taku Matsushita (Graduate School of Engineering, Hokkaido University)
17:10～17:30	-Climate change and drinking water-	Toshiro Yamada (National Institute of Public Health)
17:30～17:50	-Effect of flooding activities in a greenhouse on the nitrate pollution and emission of nitrous oxide-	Taku Fujiwara (Faculty of Agriculture and Agricultural Science Program, Kochi University)
17:50～18:10	-Resource recovery from excess sludge for control of global warming: Development of high efficient methane recovery process from excess sludge by high speed rotary disk-	Tsuyoshi Imai (Faculty of Engineering, Yamaguchi University)
18:10～18:30	-Evaluation of new phosphorus recovery technology from sewage treatment system-	Masaki Takaoka (Graduate School of Engineering department, Kyoto University)
18:30 ～19:00	Discussion on connection with Green New Deal	
19:00～	Closing Remarks Moto Ikeda (Graduate School of Environmental Sciences, Hokkaido University)	

Report

On November 4, participation of economists from Japan, China, South Korea, Europe, and the United States as well as representatives from the United Nations Environment Programme (UNEP) gave lectures and a panel discussion was conducted on the worldwide Green New Deal program. We also invited six professors from our partner institutions to lecture on economic and environmental policies for the creation of low-carbon societies in their nations. The symposium was a very significant event in terms of its efforts, illustrated with specific examples, to create a sustainable society around the world.

Hokkaido University Public Policy School plans to continue its investigation and research on policy measures to create a low-carbon society, and in particular the Green New Deal program, in cooperation with researchers in the countries represented at the symposium.

On November 5, we held four sessions on subjects related to global change: 1. Climate Change, its Impact on and Feedback to Ecosystems; 2. Terrestrial and Marine Bio-geochemical Systems; 3. Food Resources under Global Change; and 4. Water Resources under Global Change. During these sessions, ten Japanese and eight overseas researchers delivered speeches and engaged in discussions. We also held a student poster session, and the event represented an interdisciplinary symposium that covered questions on topics ranging from natural to social sciences.

The group that ran the sessions, which was centered on the Faculty of Environmental Earth Science, plans to present a key mechanism to elucidate pressing issues, scientifically investigate global changes and establish countermeasure technologies in cooperation with participating researchers at home and abroad.

Keynote speech by Miranda Schreurs (Professor, Director of the Environmental Policy Center, Free University of Berlin)

Keynote speech by Ma Zhong (Director of School of Environment and Natural Resources, Renmin University of China)

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39928
（Link to Hokkaido University Scholarly and Academic Papers（HUSCAP）

The 2nd Int'l Symposium on Sentinel Earth -Advanced Utilization Studies of Satellite Data and Imagery Data-

Overview

Date	November 4 -5 (Wed.-Thu.) 9:30 – 17:00 **(Finished)**
Organizer	Hokkaido University, Asian Institute of Technology, University of Alaska, University of Palangkaraya, JAXA
Co-host	Hokkaido University, Graduate School of Information Science and Technology, Graduate School of Engineering, Research Faculty of Agriculture, Faculty of Science, Faculty of Fisheries Sciences, Faculty of Environmental Earth Science, Institute of Low Temperature Science, Support Office for Space Science and Engineering, RESTEC, Sapporo International Communication Plaza Foundation
Venue	Hokkaido University Conference Hall

Language: English

Intended Audience: Researchers, General Public, College Students,

Outline

Recently, research on the drastic changes in the climate that the global environment is undergoing has gained a sense of urgency. One way to monitor this problem is to utilize satellite data and imagery as an interdisciplinary approach to integrate several research areas so we can effectively share observed data on the drastic changes the climate is undergoing. In this symposium, recent research results on the utilization of satellite data and imagery will be presented in the following 3 sessions:

1. application of observations of the atmosphere and ocean:
an introduction to the utilization of satellite data and imagery on the atmosphere and ocean from space

2. application of observations of disaster/agriculture/forestry/map:
understanding the disaster situation and how it applies to agriculture with satellite data imagery on agriculture

3. application of observations of terrestrial and snow/ice areas:
an introduction to the utilization of satellite data and imagery on terrestrial and snow/ice research

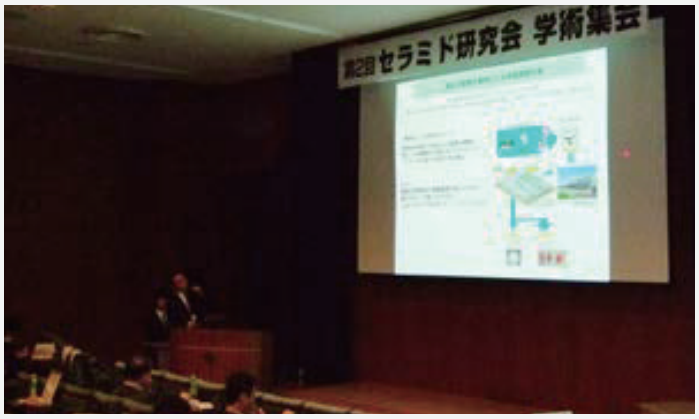
Program	Link to the Detailed Program
Registration	Not required (Charge-free)
Contact	Hokkaido University Graduate School of Information Science and Technology E-mail: ishige@scc.ist.hokudai.ac.jp FAX : +81-(0)11-706-6295

Report

This conference took on a grand scale with speeches by 6 invited lecturers, including 2 from abroad, oral presentations by 19 general speakers, and the participation of more than 100 people from across the nation.

The speeches by the invited overseas lecturers were “The Role of Ceramides in Diabetes and Cardiovascular Disease” by Dr. Scott Summers, Associate Professor of Duke-NUS Graduate Medical School Singapores, and “Distinctive Features of Ceramides in Skin” by Dr, Y. Uchida of the University of California, San Francisco. Their introduction of cutting-edge research from different parts of the world impressed participants. Lectures by other invited speakers included “The Food Functionality of Plant and Yeast Sphingolipids” by Mikio Kinoshita (the Obihiro University of Agriculture and Veterinary Medicine), “The Essential Role of Ceramides in Skin’s Barrier Function” by Masashi Akiyama (Hokkaido University Graduate School of Medicine), “Regulation of Bone Formation by Sphingosine-1-phosphate (S1P)” by Masaru Ishii (Osaka University), and “Development and Functional Properties of Optical-active Ceramides” by Kenya Ishida (Takasago International Corporation). In addition, Yasushi Tasaka from the National Institute of Advanced Industrial Science and Technology (AIST) gave a luncheon seminar entitled “Production of Animal Sphingoglycolipids Using Genetically Modified Plants.” In this way, a series of new research initiatives attracting attention in relation to sphingolipids and ceramides was introduced. With a number of additional outstanding general lecturers, the scholarly conference remained packed with participants from 9:30 a.m. to 6:00 p.m. The reception that followed the event also welcomed a large number of participants, who took advantage of the opportunity to become more closely acquainted.

In recent years, health promotion through functional food consumption has attracted attention, and there has been growing interest in the physiological functions of such food, including the role of ceramides in improving skin functions and preventing cancer. The academic conference aimed to foster development based on scientific evidence as opposed to popularity resulting from growing common interest, and highlighted the future direction of the field to many attending corporate researchers. The JSC decided to strive for further development and continue its efforts at scientific conferences and the International Food Ingredients and Additives Exhibition and Conference (ifia) as well as through PR activities on its homepage.



A scene from the lively venueLecture by Associate Professor Scott Summers

Int'l Symposium on "The Impact of Climate Change on Region Specific Systems"

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39876 (Link to HUSCAP)
Date	November 6 (Fri.) 10:00～17:00 (Finished)
Organizer	Hokkaido University Global COE Program "Establishment of Center for Integrated Field Environmental Science"
Venue	Hokkaido University Conference Hall
Language: English **Intended Audience:** Researchers, College Students	
Outline	As the IPCC Fourth Assessment Report describes it, a clearer picture has emerged of the prospective impact of global warming, such as climate change and influence on global ecosystems. On the other hand, regions have geo-specific systems such as water cycles and ecosystems, and the impact of global climate change on these elements combined with local human activity are not necessarily apparent. This symposium aims to discuss the sustainability of such geo-specific systems from local perspectives with the attending overseas and domestic experts in global climate change and ecosystem change, and to put together recommendations for related research and implementation.
Registration	Not required (Charge-free)
URL	Please click the link below to see the details of the program. http://gcoe.ees.hokudai.ac.jp/imtf/sw/2009_climate-sympo_en/
Contact	Hokkaido University Global COE Program "Establishment of Center for Integrated Field Environmental Science" TEL: +81-(0)11-706-4861 E-mail:gcoe[at]ees.hokudai.ac.jp

Report

This symposium aimed to discuss various environmental changes occurring around the world due to global-scale climate change as represented by global warming. In particular, the latest findings – those since the release of the IPCC Fourth Assessment Report – were presented.

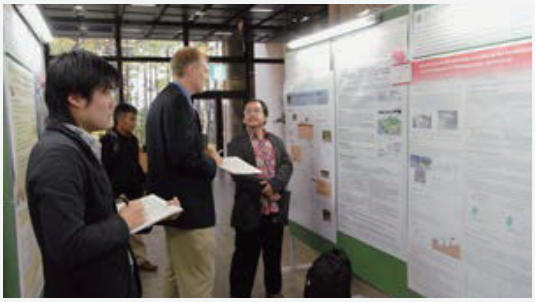
Since the region-specific systems highlighted at the symposium (i.e., the impacts of global warming, degrees of ecosystem, cryosphere and geochemical cycle change and the extent of intervention involving local human activity) significantly differ from region to region, impact assessment on a regional scale is necessary. For this reason, environmental recovery and adaptation measures need to be region-specific.

Presentations were made by researchers invited from three overseas regions (Russia, Mongolia and Indonesia) included in the Hokkaido University Global COE Program on Integrated Field Environmental Science, as well as by researchers from Hokkaido University and scholars invited from national and overseas institutions. Russia pointed out the importance of boreal forests, which are closely related to permafrost, while Mongolia reported on the quantification of steppe deterioration and changes in periglacial landforms. Indonesia presented on serious peatland fires arising as a result of development by humans and the ensuing release of methane.

To clarify the relationships between the global climate and regional climates, one researcher specializing in the Global Climate Model also presented his research results, thereby illustrating the problems and challenges of studying local climates.

At the discussion session, participants focused on how they could view their different areas of research comprehensively, discussing approaches for cooperation among the aforementioned wide fields of expertise and different research methods (e.g., modeling or observation). It was also pointed out that some phenomena (e.g., the release of methane from permafrost and peatland) were not covered by general circulation models when the IPCC Fourth Assessment Report was released, and ideas were shared on ways to treat these phenomena in climate models. Furthermore, adaptation to climate change and the development of a sustainable society were also discussed under the theme of “What is the Ideal Way to Make Climate Predictions Useful for Regional Policy Decision?”

Discussion at the venue



Poster presentations by students

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39876
（Link to Hokkaido University Scholarly and Academic Papers（HUSCAP）

The 2nd Conference of Japanese Society of Ceramides （JSC）

Overview

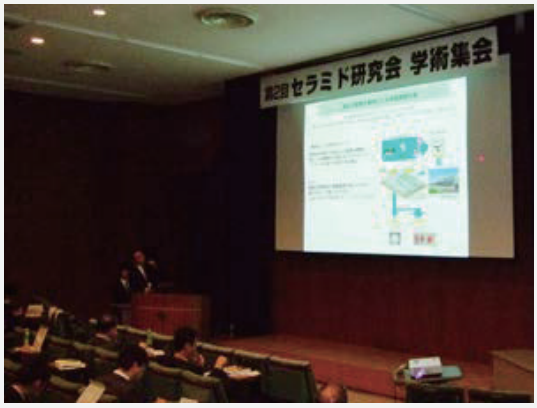
Date	November 6 (Fri)　9:30 ～18:00 (Finished)
Organizer	Japanese Society for Ceramides (JSC)
Co-host	Knowledge Cluster Initiative, Ministry of Education, Culture, Sports, Science and Technology; Hokkaido University Faculty of Advanced Life Science, Frontier Research Center for Post-genome Science and Technology
Venue	Hokkaido University Conference Hall
Language: Japanese, English **Intended Audience:** Researchers	
Outline	Ceramides, the lipid molecules in cells, have been found to be important to the maintenance of our body's health due to their role in cancer prevention, brain function and skin health. This symposium　will be an opportunity for academics from within Japan and abroad as well as researchers in industry to　exchange information on the recent developments in ceramide research. We also hope that the Knowledge Cluster of Bio-S activities in Hokkaido will be favorably affected through exposure at this event.
Registration	Required (Charged) Please see the below website (Japanese Only) for details; http://www.ceramide.gr.jp/meeting/index.html
Contact	Secretariat of Japanese Society for Ceramides (JSC) E-mail　info@ceramide.gr.jp FAX : +81-(0)11-706-9024
URL	http://www.ceramide.gr.jp/meeting/index.html (Japanese)

Report

This conference took on a grand scale with speeches by 6 invited lecturers, including 2 from abroad, oral presentations by 19 general speakers, and the participation of more than 100 people from across the nation.

The speeches by the invited overseas lecturers were “The Role of Ceramides in Diabetes and Cardiovascular Disease” by Dr. Scott Summers, Associate Professor of Duke-NUS Graduate Medical School Singapores, and “Distinctive Features of Ceramides in Skin” by Dr, Y. Uchida of the University of California, San Francisco. Their introduction of cutting-edge research from different parts of the world impressed participants. Lectures by other invited speakers included “The Food Functionality of Plant and Yeast Sphingolipids” by Mikio Kinoshita (the Obihiro University of Agriculture and Veterinary Medicine), “The Essential Role of Ceramides in Skin’s Barrier Function” by Masashi Akiyama (Hokkaido University Graduate School of Medicine), “Regulation of Bone Formation by Sphingosine-1-phosphate (S1P)” by Masaru Ishii (Osaka University), and “Development and Functional Properties of Optical-active Ceramides” by Kenya Ishida (Takasago International Corporation). In addition, Yasushi Tasaka from the National Institute of Advanced Industrial Science and Technology (AIST) gave a luncheon seminar entitled “Production of Animal Sphingoglycolipids Using Genetically Modified Plants.” In this way, a series of new research initiatives attracting attention in relation to sphingolipids and ceramides was introduced. With a number of additional outstanding general lecturers, the scholarly conference remained packed with participants from 9:30 a.m. to 6:00 p.m. The reception that followed the event also welcomed a large number of participants, who took advantage of the opportunity to become more closely acquainted.

In recent years, health promotion through functional food consumption has attracted attention, and there has been growing interest in the physiological functions of such food, including the role of ceramides in improving skin functions and preventing cancer. The academic conference aimed to foster development based on scientific evidence as opposed to popularity resulting from growing common interest, and highlighted the future direction of the field to many attending corporate researchers. The JSC decided to strive for further development and continue its efforts at scientific conferences and the International Food Ingredients and Additives Exhibition and Conference (ifia) as well as through PR activities on its homepage.



A scene from the lively venue

Lecture by Associate Professor Scott Summers

Int'l Symposium on "Sustainability Science on Seafood and Ocean Ecosystem Conservation"

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39907 (Link to HUSCAP)
Date	November 7 (Sat.) 10:00-17:00 (Finished)
Organizer	Faculty of Fisheries Sciences, Hokkaido University
Co-host	Science Council of Japan
Venue	Hokkaido University Hakodate Campus Marine Science Research Building 1F (Hakodate City)
Language: Japanese/English **Intended Audience:** Researchers, College Students, Highschool Students, General Public,	
Outline	Seafood should be reproducible resources for human being. However, world fish catches have peaked since the 1990s despite increase in aquaculture production.Traditional fisheries science consider only fisheries, some consequences of which include "fishing down" marine food webs, the over fishing by the tuna laundering, the tragedy of common, the food mileage, ecosystem crash, and food pollution.A paradigm shift, therefore, should be needed from the traditional fisheries science to a new ecological fisheries science for the protection of marine ecosystems and human food resources in order to be human well-being in future generation.
Registration	Not required (Charge-free)
Contact	Faculty of Fisheries Sciences, Hokkaido University Contact : Prof. Kaeriyama E-mail: salmon[at]fish.hokudai.ac.jp FAX : +81-(0)138-40-5605

Report

This symposium was held to establish a research and education network in the Pacific Rim for international cooperation with the goal of ensuring marine-life and ecosystem conservation. The ultimate aim is to ensure intergenerational equity of marine resources (which are consumed by approximately 2.9 billion people around the world) and the marine ecosystems that produce them. The event was attended by a total of 123 people, including researchers from 7 nations (Indonesia, Canada, China, the Philippines, South Korea, the U.S. and Japan), as well as government officials and members of the public, including students. The major details and results of the symposium are outlined below.

1. Invited Lectures

Ussif Rashid Sumaila,
The University of British Columbia

“Spatial Bioeconomics for Seafood and Marine Ecosystem conservation”

Chang Ik Zhang,
Pukyong National University

“An Ecosystem-based Fisheries Assessment and Forecasting Approach”

William W. Smoker,
University of Alaska Fairbanks

“Sustainability of the Alaska Salmon Fishery”

Hongxin Tan,
Shanghai Ocean University

“Current Status and Recent Advance of Aquaculture in China”

2.Lectures from Hokkaido University

– Yasunori Sakurai
“Ocean Ecosystem Conservation and Seafood Security forFuture Generation – A Case Study of Ecosystem Approach to Fisheries and the Adaptive Management of the Shiretoko World Natural Heritage Site”

– Mamoru
Yoshimizu
“Health Management of Hatched Fry for Sustainable Salmon

Propagation and Provides ‘Safe and Worry-free’ Salmon Products”

– Masahide
Kaeriyama
“Sustainability Sciences for Ocean Ecosystem Conservation and Seafood Security”

3.Panel
Discussion

Coordinator
Sei-Ichi
Saitoh
, Faculty of Fisheries Sciences, Hokkaido University

–
Chunhong
Yuan
,Hokkaido University

“Culture and Processing of Silver Carp, a Plankton Feeder Fish – for Sustainable Development of Freshwater Fisheries in China”

– Rizalita
Rosalejos-
Edpalina
, UNU-IAS

“Management Options to Mitigate Environmental Impact of Aquaculture in the Philippines”

– I Nyoman
Radiarta
, Hokkaido University

“Spatial Information Systems Approach toward Sustainable Aquaculture”

– Gakushi
Ishimura

Assistant Professor, Hokkaido University

“Sustainable Management of a Transboundary Fishery Resource under Climate Variability: Desperate Fishing Games of Pacific Sardine Resource”

The most important factor in conserving marine life and ocean ecosystems for future generations is risk management with an ecosystem approach based on adaptive management and precautionary principles. In this regard, proposals were made for the improvement of educational programs (such as those covering nutrition) and for a paradigm shift to new ecological fisheries oceanography in order to protect food and marine ecosystems by gaining a better understanding of the carrying capacity of these ecosystems.

Panel discussion

Commemorative photo of lecturers and hosts

◆Download the presentation

data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39907
（Link to Hokkaido University Scholarly and Academic Papers（HUSCAP）

GAIA SYMPHONY No.5 Screening, and director TATSUMURA's Commentary

Overview

Date	November 7 (Sat.) [Movie screenings] First screening : 10:00~12:15 Second screening : 13:00~15:15 Third screening : 17:15 ~19:30 [Director's Commentary] 15:30 ~ 17:00 [Fellowship Banquet] 20:30~ (Finished)
Organizer	Hokkaido University GAIA Project
Venue	Clark Memorial Student Center
Language: Japanese **Intended Audience:** All	
Outline	"Gaia Symphony" is a documentary movie series highlighting luminaries in a variety of fields, including science, sports, and music and focuses on their ways of thinking and lifestyles in relation to the earth, nature, and the environment. Gaia Symphony No. 5 features philosopher, futurologist, musician Ervin Laszlo, natural plant dye and weave artist Akiko Ishigaki, and Others. Between the second and third screenings, we will welcome Gaia Symphony director Mr. Jin Tatsumura, who will talk about the wisdom of people and nature as encapsulated in his works. Please take advantage of this great opportunity to obtain insight into the lifestyles of these fascinating people.
Registration	Required (Charge-free) Please send an e-mail to Mr.Arai or Mr.Ito using following e-mail address. Registration period : Sep.15 – Nov.7, 2009
URL	Hokudai GAIA Project Website: http://geos.ees.hokudai.ac.jp/globalwarming/GAIA/gaia.html (Japanese Only)
Contact	Hokkaido University GAIA Project TEL: +81-(0)80-5592-9735 (Mr.Arai), +81-(0)90-1532-3279 (Mr.Ito) E-mail : hokudaigaia@gmail.com

Report

Gaia Symphony is a documentary movie series highlighting luminaries active in a variety of fields, including science, sports and music, and focuses on their ways of thinking and lifestyles in relation to the earth, nature and the environment. Gaia Symphony No. 5, which was shown on this occasion, was produced based on the concept that everything is connected in some way. It features weaving artist Akiko Ishigaki and philosopher/musician Ervin Laszlo, who advocates existence in harmony with nature and positive living in today's chaotic world. Former astronaut Russell Schweickart and the 14th Dalai Lama also appear in the movie, explaining the pain and suffering that underpinned the birth of today's healthy living and affluent world.

Gaia Symphony director Mr. Jin Tatsumura talked in his lecture about the history of the documentary, told anecdotes about the production of Gaia Symphony No. 7 (currently being edited), and outlined difficulties experienced during the shooting of Gaia Symphony No. 5.

Adopted as a Hokudai Genki Project, the event was open to the public with free admittance. Furthermore, its inclusion as part of the Sustainability Weeks 2009 program meant that it was publicized on a large scale. As a result, it attracted roughly 400 people from in and outside the campus, and was brought to a successful close.

We believe that our individual ways of living, formed by our methods of thinking and psychological changes, are important in considering the global environment and its sustainability or when trying to solve various issues around the world. It is certainly significant to hold an event aimed at nurturing people's minds as part of the Sustainability Weeks at an academic center such as Hokkaido University. Hopes are high that the institution will continue to strive for the development of talented personnel who demonstrate a balance between intelligence and emotion, and that the Sustainability Weeks event will continue to be part of such efforts. We will continue to create time and space for a wide range of people to share peace of mind through the concept of Gaia Symphony.

Poster of the event

Int'l Symposium on Environmental Conservation of the Sea of Okhotsk: Cooperation between Japan, China and Russia

Overview

Date	November 7 (Sat.) 9:15 – 18:00 November 8 (Sun.) 8:30 – 19:00 (Finished)
Organizer	• Pan-Okhotsk Research Center, ILTS, Hokkaido University • Slavic Research Center, Hokkaido University • Research Institute for Humanity and Nature • New Energy Resources Research Center, Kitami Institute of Technology • Ministry of Land, Infrastructure, Transport and Tourism Hokkaido Regional Development Bureau • International Science and Technology Center (ISTC) • Hokkaido University Initiative for Sustainable Development
Co-hosting	• Ministry of Education, Culture, Sports, Science & Technology Japan
Venue	Hokkaido University Conference Hall
Language: Japanese, Chinese, Russian **Intended Audience:** Researchers, General Public, College Students, Government	
Outline	The Sea of Okhotsk and the adjacent waters of the Oyashio region are unrivaled worldwide in their fertility. Recently, two effects of the Amur River on these waters have become apparent. One is the role played by dissolved iron originating in the Amur River in the primary production of the Sea of Okhotsk and the adjacent waters of the Oyashio region. The other is the possible impact of the various pollutants discharged from the Amur River basin into the Sea of Okhotsk. The conservation of the natural environment in this sea and its neighboring ocean requires simultaneous conservation in the adjoining Amur River basin. Accordingly, this symposium will focus on the ideal future of international cooperation in efforts to conserve this land and marine environment through discussions by researchers from Japan, China, and Russia. (Simultaneous interpretation will be provided)
Program	To see the details of the Program
Registration	Not required (Charge-free)

Contact	Organizing Committee, Pan-Okhotsk Research Center, Institute of Low Temperature Science, Hokkaido University FAX: +81-(0)11-706-7142 E-mail: ao-symposium[at]lowtem.hokudai.ac.jp
URL	Pan-Okhotsk Research Center http://wwwoc.lowtem.hokudai.ac.jp/en/index.html Amur Okhotsk Project http://www.chikyu.ac.jp/AMORE/

Report

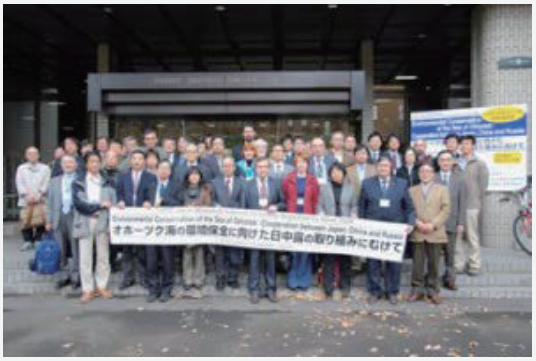
The Amur River basin and the Sea of Okhotsk are recognized as being interconnected through material cycles and the linkage of both region's ecosystems. Based on this recognition, the Amur-Okhotsk Consortium was established as a permanent multilateral network in which academic discussions are held on the current environmental problems facing the Sea of Okhotsk and the Amur River basin, and in which researchers from Japan, China and Russia share information and conduct discussions on a wide range of current issues in conformity with academic basics by transcending national boundaries.

Researchers from Japan, China, Russia and Finland reported a total of 33 sets of research results. Consequently, it was revealed that sea ice reduction in the Sea of Okhotsk (presumably caused by global warming) has weakened vertical circulation (overturning) in the ocean, which has in turn increased the temperature of intermediate water and reduced the concentration of dissolved oxygen in the Northern Pacific. It was found that this intermediate-water circulation transports dissolved iron supplied by wetlands in the Amur River basin not only to the Sea of Okhotsk but also farther to the Oyashio region, thereby supporting primary production in these waters. There is a possibility, however, that this weakened intermediate-water circulation will reduce the amount of iron transported and thus affect the primary production of the Oyashio region in the future.

On the other hand, it was shown that wetland reclamation in the Amur River basin, which has been in progress since the latter half of the 20th century, has caused a reduction in the amount of iron transported to the lower reaches of the river. It was also demonstrated that the Amur River has been seriously polluted by advancing industrialization and oil-field development. While there are serious concerns about the contamination of the Sea of Okhotsk due to oil-field accidents, the current contamination level there meets environmental quality standards.

Rapid changes in land cover in the Amur River basin have been caused by complex driving forces in the global economy. Hence, the resolution of this problem requires constant cooperation by countries sharing the Amur River basin and the Sea of Okhotsk, rather than efforts by a single country. All participants in the symposium reached a common recognition that the sustainable development and environmental conservation of the Amur River basin and the Sea of Okhotsk are top priorities. Accordingly, they approved a Joint Declaration for the establishment of the Amur-Okhotsk Consortium (a network primarily tasked with information exchanges among academic researchers toward the conservation of the regions involved), and adopted it based on full consensus by all participants.

Heated debate



Group photo of the participants

Experimental Exhibition: Let's Science!!

Overview

Date	November 8 (Sun.) 10:00 – 15:00 (Finished)
Organizer	Hokusui Science Assist
Venue	Hokkaido University Hakodate Campus
Language: Japanese **Intended Audience:** College Students, High School Students, Junior High School Students, Elementary School Students, Researchers	
Outline	Hokusui Science Assist is an organization of students from Hokkaido University's Graduate School of Fisheries Sciences that communicates the fascination of science to junior high and high schools students as well as ordinary citizens in and around Hakodate by holding a variety of science events using laboratory equipment. The organization will host a panel exhibition outlining marine observation methods and research on biodiversity in an easy-to-understand manner. There will also be an introduction to their previous activities, and experiments will be conducted together with visitors at a special booth.
Registration	Not required (Charge-free)
Contact	Hokusui Science Assist Contact : Mr. Kogura TEL: +81-(0)90-6664-2629 E-mail: jitennsya-kogu@fish.hokudai.ac.jp

Report

At this experimental exhibition, we conducted an experiment entitled “Let’s make artificial salmon roe!” When colored water with dissolved calcium ions is dripped into a solution containing sodium alginate extracted from seaweed, the sodium alginate and calcium ions react chemically to form a thin film around the water droplets, resulting in miniature balls that look like salmon roe. We created artificial salmon roe of various colors in this way together with visitors to the School of Fisheries Sciences during the school festival.

The event’s main target audience was elementary school students. However, it was also favorably received by their parents and senior citizens, and there were always visitors at the venue. The exhibition not only presented the experiment; its principles were also explained to children in plain language. We believe it is worth recognizing that levels of explanation were flexibly adapted according to the target audience, and that all presenters shared this adaptation. The artificial salmon roe produced were put into Falcon tubes so that visitors could take them home. This is thought to have contributed to the event’s popularity.

We will continue to be active in efforts to communicate the fascinating aspects of science to a greater number of people, and plan to gradually increase the range of experiments performed. In the future, we would like to help make Hakodate a city known for its science by conducting large-scale experiments at public facilities in the area.

Science is interesting!

Not only children but also adults enjoyed.

ILTS International Symposium “Frontier of Low Temperature Science”

Overview

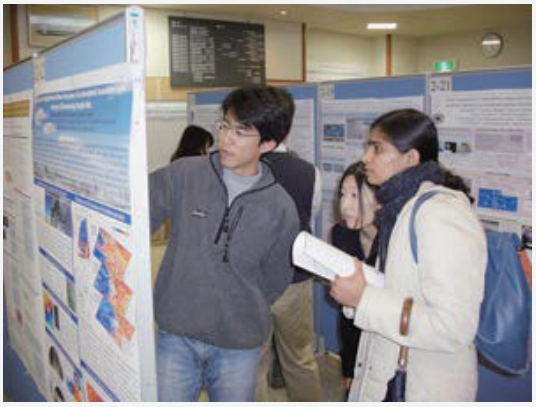
Date	November 9 (Mon.) 10:00 – 17:30 November 10 (Tues.) 9:30 – 18:30 (Finished)
Organizer	Institute of Low Temperature Science, Hokkaido University
Venue	Auditorium at the Institute of Low Temperature Science, Hokkaido University
Language: English **Intended Audience:** Researchers, College Students	
Outline	The aim of this symposium is to discuss the present status of research activities and outlook concerning the themes of the Institute of Low Temperature Science (ILTS) (i.e., the basics and applications of scientific phenomena in cold regions and under low-temperature conditions) with researchers from within Japan and abroad, and ILTS researchers. Four sessions are scheduled: Water and Material Cycles, Frontier Ice and Snow Science, Environmental Biology and the Pan-Okhotsk Region.
Registration	Not required (Charge-free)
Contact	Institute of Low Temperature Science, Hokkaido University E-mail: symposium[at]lowtem.hokudai.ac.jp FAX : +81-(0)11-706-7142

Report

The aim of this symposium was to discuss the present status of research activities and the outlook in regard to the themes of the Institute of Low Temperature Science (ILTS) (i.e., the basics and applications of scientific phenomena in cold regions and under low-temperature conditions) with scholars from within Japan and abroad as well as ILTS researchers.

Institute of Low Temperature Science Director Akira Kouchi delivered a keynote speech entitled “Toward a New Era in Low-temperature Science.” Professor Frank Wilhelms, representing Germany’s Alfred Wegener Institute for Polar and Marine Research, with which ILTS concluded a Departmental Exchange Agreement in March 2009, also gave a keynote speech entitled “How can Ice Science Satisfy Public Attention in a Warmer World?” In addition, four lecture sessions took place on the themes of “Water and Material Cycles,” “Frontier Ice and Snow Science,” “Environmental Biology” and “The Pan-Okhotsk Region.” A poster session was also held, and lively discussions were conducted along with 20 lectures by invited speakers and 30 poster presentations. The total number of participants in the two-day event was 176: 151 from Hokkaido University (of which 138 were from ILTS) and 27 from outside the institution (including 12 from abroad), including participants from the U.S., Germany, China and South Korea.

Group photo of the participants


Poster Session

Int'l Symposium on "Comprehensive University Cooperation for Sustainable Asia between Japan and China"

Overview

Date	November 12 (Thu.) 13:00-17:30 (Finished)
Organizer	Hokkaido University Center for Sustainability Science
Co-host	Ritsumeikan Research Center for Sustainability Science, Hokkaido University SGP
Venue	Hokkaido University Conference Hall
Language: Japanese, Chinese **Intended Audience:** Researchers, College Students,	
Outline	Hokkaido University and Ritsumeikan University independently established a research and education center for sustainability science with the aim of developing the field and promoting related research and education. In light of recent events around the world, sustainable global development requires the cooperation of Asia in a number of fields, and a partnership between China and Japan is particularly important. This symposium aims to explore the ways Japanese universities should cooperate closely with China toward the creation of a sustainable Asia.
Registration	Not required (Charge-free)
Contact	Hokkaido University Center for Sustainability Science TEL : +81-(0)11-706-4530 E-mail : jimu[at]census.hokudai.ac.jp

Report

This symposium highlighted ways how Japanese and Chinese universities can cooperate with each other. A simultaneous interpretation service between Japanese and Chinese was provided, and nearly one-third of the participants were students from China.

The event began with keynote speeches by two invited lecturers. First, Peking University's Vice-President Prof. Zhang Guoyou talked about the current situation of CO_2 emissions in China and efforts to reduce them by facilitating utilization of renewable energy. Next, Hokkaido University's Professor Fumikazu Yoshida pointed out that illegal waste disposal enabled companies to reduce cost of resource recycling in China. Japan has depended on such recycling system, as a result, these bilateral relations threaten the health of people engaged in the recycling business.

Then programs offered at Confucius Institutes – public institutions established worldwide by China to promote cultural exchanges – were introduced in a following general lecture session. Prof. Zhou Wei Sheng, President of the Ritsumeikan University Confucius Institute (the first one to be set up in Japan) gave an outline of his establishment and reported on the current situation, in which cultural exchange programs such as Chinese language education are central to the Institute's efforts.

During a panel discussion in the final part, Prof. Toshitaka Nozawa from *Hokkaido University's Beijing Office and* Prof. Zhang Wei Xiong the president of Sapporo University Confucius Institute drew attention to declining levels of interest among Chinese and Japanese students each other. In this regard, it was stated that information exchange via the media was insufficient for deep understanding each other, and that first-hand experience gained by actually visiting each other's countries is most important. The symposium was concluded with suggestions regarding future prospects for exchanges. It was proposed that, in addition to cultural exchange programs that have been offered by Confucius Institutes, it is also necessary to explore the possibility of researching programs in specialized fields, such as creation of a sustainable society.

Panel discussion

The venue of the symposium

Business-Academia-Government Collaboration Seminar on "Developments of Geo-spatial Information and Future World"

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/40207 (Link to HUSCAP)
Date	November 12 (Thu.) 13:00-17:00 （Finished）
Organizer	Non-profit Organization "Digital Hokkaido", Geographical Survey Institute, Hokkaido Regional Survey Department, Hokkaido University Faculty of Fisheries Sciences, Graduate School of Letters
Venue	Hokkaido University Conference Hall
Language: Japanese **Intended Audience:** Researchers, College Students, General Public	
Outline	Currently, "Geo-spatial Information" is used to prepare a new digital map of Japan. It will form an information network along with the technologies of "Geographical Information System (GIS)" and "Satellite-based Positioning System". This seminar will explain the practical uses of geo-spatial information in companies, universities, and in government. In particular presenters will speak about the recent trends for practical uses of geo-spatial information in agriculture and fishery – two important industries in Hokkaido. We look forward to your participation.
Registration	Not required (Charge-free)
Contact	Hokkaido University Graduate School of Letters, Department of Regional Sciences Contact : Associate Prof. Hashimoto TEL: +81-(0)11-706-5555 E-mail: you@chiri.let.hokudai.ac.jp

Report

The use of geo-spatial information is spreading across Japan to create a new digital map, and the movement to establish a new society is gaining momentum through the use of such information along with the technologies of the Geographical Information System (GIS) and the Satellite-based Positioning System. Against such a background, this seminar provided insights into the use of geo-spatial information by businesses, universities and government offices. In addition, as an example of spatial information, aerial photographs of Sapporo taken in 1976 and 2006 (measuring 5 m x 3 m with a scale of roughly 1:3,000) were laid underfoot in the hall, and participants were allowed to freely walk over them.

The seminar began with a keynote lecture by Ryoichi Kojiroi (Director of the Geographical Survey Institute's Hokkaido Regional Survey Department). He talked about recent efforts by the Institute under the title of "Recent Surveying Technology and Disaster Prevention."

Next, six speakers explained the use of geo-spatial information in their respective areas of expertise. These were: Yuichi Hashimoto (Associate Professor at Hokkaido University Graduate School of Letters) – "The Utilization of Geo-spatial Information for Living Environment Improvement in Cold, Snowy Regions"; Masami Kaneko (Professor at Rakuno Gakuen University Faculty of Environment Systems) – "Examples of GIS Utilization in Agriculture"; Masayuki Takada (Hokkaido Institute of Environmental Sciences) – "Pioneering Geo-spatial Information as a New Approach to Environmental Problems"; Akihiro Akabuchi (Representative Director, Hunes Co., Ltd.) and Yasutoshi Motomiya (Director in charge of development of the Engineering Division, Hokkaido-Chizu Co., Ltd.) on the utilization of geo-spatial information from a business viewpoint on the themes of "Integrated GIS in Local Governments and Transmission of Regional Information" and "Spatial Solution Business and Landscape Maps," respectively; and finally, Seiichi Saito (Professor, Hokkaido University Faculty of Fisheries Sciences) – "R&D concerning Ubiquitous Information Services to Support Sustainable Fisheries and Aquaculture." All the lecturers explained in an easy-to-understand manner how geo-spatial information is used at the cutting edge of each field. We believe that the seminar served as an awareness-raising opportunity for the development of a society to leverage the advanced use of geo-spatial information.

Participants walking over the aerial photographs of Sapporo

Lecture by Professor Saito, Hokkaido University Faculty of Fisheries Sciences

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/40207
（Link to Hokkaido University Scholarly and Academic Papers（HUSCAP）

Symposium on “Asia and Africa Development Aid and Hokkaido University”

Overview

Date	November 13 (Fri.) 13:00-17:30 (Finished)
Organizer	Hokkaido University Center for Sustainability Science
Co-host	Hokkaido University SGP
Venue	Hokkaido University Conference Hall
Language: Japanese / English **Intended Audience:** Researchers, College Students,	
Outline	Last year, New JICA was launched following a merger between JICA and the Japan Bank for International Cooperation, or JBIC. The JICA Research Institute was inaugurated with a commitment to promoting research programs and human resource development in a range of fields involving international cooperation. This symposium will highlight the new direction of international cooperation based on joint efforts by Center for Sustainability Science, Hokkaido University, and New JICA (the JICA Research Institute) as well as their roles in human resource development among other topics.
Program	Download Program (PDF) (Japanese Only)
Registration	Not required (Charge-free)
Contact	Hokkaido University Center for Sustainability Science TEL : +81-(0)11-706-4530 E-mail : jimu[at]census.hokudai.ac.jp

Report

With the full cooperation of the Japan International Cooperation Agency (JICA), we held a symposium highlighting ideal ways of cooperating with Asia and Africa via JICA. Although the event was conducted exclusively in English, more than 50% of participants were from outside the campus, indicating a high level of interest in JICA projects for Asia and Africa.

First, four invited speakers delivered keynote lectures. H. E. Ambassador of the Republic of Uganda in Japan Mr. Wasswa Biriggwa introduced the Eco-village project in his country.

Next, two lecturers from JICA gave keynote speeches: Mr. Kazunori Oshiyama from the Africa Department shared information on types of human resources viable in Africa, and Mr. Naoki Mori, Deputy Director General of the Global Environment Department, spoke about human resource development for environmental education in China. Prof. Adi Jaya from Indonesia's University of Palangka Raya provided a discussion topic on the present situation and challenges regarding environmental education in Indonesia.

In Section II, ambitious efforts enabled the venue to be connected with the JICA offices in Mongolia and Indonesia using the Polycom video conferencing system so that representatives in these offices could participate in the symposium. First, Mr. Onuki from JICA's Mongolia Office made a presentation on the current situation of waste disposal in the country, pointing out the importance of communication skills for personnel required at the front line. Next, from the JICA Indonesia Office, Mr. Funahashi (an advisor to small- and medium-sized enterprises) called attention to the importance of developing original views together with sound theories, and advocated the need to understand examples from various countries to enable flexible response based on an accurate understanding of the present situation.

In the panel discussion during Part III, Mr. Ryuji Matsunaga (who has been involved in JICA projects in Asia and Africa) along with Hokkaido University Research Faculty of Agriculture's Prof. Mitsuru Osaki and the Graduate School of Engineering's Prof. Naoyuki Funamizu (who are currently implementing the JICA-JST project) joined the other participants. Hokkaido University was identified as one of the universities with the highest contribution to JICA projects in Asia and Africa, and the symposium was concluded with an affirmation that the institution will continue to establish close relationships with these regions.

Lecture by Mr. W. Biriggw

Polycom video conference with the JICA office in Indonesia

Symposium on “Toward Sustainable Industry – Academia Collaboration. —Messages from Strategic Approach of Turin (Torino)-“

Overview

Date	November 13 (Fri.) 13:00-18:00 (Finished)
Organizer	Hokkaido University (Center for Innovation and Business Promotion, Graduate School of Information Science and Technology, Hokkaido University Initiative for Sustainable Development); Politecnico di Torino
Venue	Hokkaido University Conference Hall

Language: Japanese / English

Intended Audience: Researchers, General Public

Outline

Towards a Sustainable Industry-University Collaboration: Torino’s Strategic Approach

Torino (English “Turin”) is a major industrial city, a business and cultural centre capital of Piemonte (English “Piedmont”), a region of North-western Italy that is hub for major technical innovations like the electric engine in the 19th century, the MP3 file format in the software industry, and the common rail for diesel engines in the automotive industry.

Torino is also the second largest centre in Italy for venture capital operations and home of Politecnico di Torino (English “Polytechnic of Turin”), a leading European high education and research university with 150 years history and close links with international institutions, high-tech companies and government bodies.

At Politecnico advanced research fields and top quality education include all areas of architecture and engineering sciences – Industrial Engineering, Information Technologies, Building Engineering, Environmental Engineering, Management Engineering, Architecture and Design –, focusing in particular on ICT, Nanotech, Aeronautics, Renewable energy sources, and Industrial design.

The Politecnico has a very good track record of collaboration with industry, and it is strongly committed to basic and applied research, as the over 800 research project contracts obtained every year testify. Alenia, Compaq, Ferrari, FIAT, General Motors, IBM, Michelin, Microsoft, Nokia, Philips, Piaggio, Pininfarina, Pirelli, Siemens, STMicroelectonics, Telecom Italia, are just some of the research partners of Politecnico.

Such collaborations are rooted in Politecnico's approach towards leveraging scientific knowledge to spur technological capabilities and performances of companies. In fact a new model of campus, based on a technology transfer that leverages on the process of diffusion and exchange of knowledge between academia and industry as a complex system of transactions, was established at Politecnico.

Politecnico di Torino's fully integrated model of university-industry relationships – specifically targeted at sustaining entrepreneurship within and outside the university boundaries – is the "Cittadella Politecnica", an innovative kind of campus fully integrated in every-day's city life, where students live, study and receive multicultural stimuli.

This challenge is supported by funding resources obtained both at national, international and local level by networking in a managerial way with enterprises, venture capital firms and investment funds that share Politecnico's commitment to match research seeds with the needs of people and society thus contributing to build a sustainable tomorrow.

Such approach towards collaboration pursued in Turin presents an example of "Sustainable Industry-University Collaboration" that could be replicated in Hokkaido. In fact Politecnico di Torino and Hokkaido University have already initiated cooperating in research projects in the space of technologies for a sustainable traffic management, while soon will do so in the area of measurement systems related to Sustainable Development.

Program	Download the program(1.4MB)
Registration	Not required (Charge-free)
Contact	Center for Innovation and Business Promotion, Hokkaido University Contact : Associate Prof. Yamaguchi TEL : +81-(0)11-706-9556 E-mail yamaguchi[at]mcip.hokudai.ac.jp

Report

This symposium consisted of three parts: a keynote speech, presentations on examples and a panel discussion. With a total of six guests attending from the Politecnico di Torino (Polytechnic of Turin) and the Embassy of Italy in Japan, the event had a strong international flavor. The event was a great success, with numerous questions also asked by the participants.

First, the Management Center for Intellectual Property and Innovation's Executive Director Prof. Hisatake Okada and the Embassy of Italy's Minister-Counselor Dr. Alfredo Maria Durante Mangoni delivered welcome addresses, followed by a keynote speech by the Politecnico di Torino's Vice-Rector Prof. Carlo Naldi under the title of "The Model of Industry-University Collaboration in Place at the Politecnico di Torino." It was impressive to hear that the polytechnic's campus has a Business Research Center that houses offices of global companies including General Motors, Motorola and Microsoft, and that these companies favorably affect venture businesses in the surrounding areas.

During the next session, as examples of IT collaboration between the two universities, Prof. Edoardo Calia and Prof. Tsuyoshi Yamamoto introduced projects in the field of advanced Information and Communication Technology (ICT) that combined the Politecnico di Torino's wireless communication technology and Hokkaido University's omni-directional digital image capturing technology. They also expressed expectations for closer cooperation between regional industries in Hokkaido (including Sapporo) and Turin. Highlighting efforts toward sustainable development, Prof. Patrizia Lombardi presented metrics (or evaluation indices) to assess sustainable development, and Hokkaido University's Vice-President Prof. Takeo Hondoh presented the concept of an environmentally friendly sustainable society, citing the establishment of an international consortium toward the future sustainability of the Sea of Okhotsk as an example.

The subsequent panel discussion featured a lively discourse on sustainable industry-university collaboration to address the problems of an aging society as common issues for the future. Like Japan, Italy also has a rapidly graying population, and the discussion included a wide range of views on the roles of education and ICT in addressing these issues as well as the commercialization of related research results. Expectations that Hokkaido should serve as a hub for exchanges between the two countries were also expressed.

(Results)

- 1. The active exchanges conducted between Hokkaido University and the Politecnico di Torino based on an inter-university agreement meant that a wide range of issues could be discussed from broad perspectives covering social sciences, such as an environmentally friendly sustainable society and today's aging population.
- 2. The additional participation of many people from outside Hokkaido University provided the opportunity to raise public awareness of both institutions' programs.

(Future development)

We plan to conduct joint research in medical engineering to respond to the needs of an aging society and study the feasibility of university-industry collaboration beyond national boundaries based on the results of this research.

Keynote speech by Prof. Carlo Naldi, Politecnico di Torino's Vice-Rector

Panel discussion

Symposium on “Sharing a Vision of the Future of Japan and Hokkaido after the ‘OIL’ Peak”

Overview

Date	November 14 (Sat.) 13:00-17:30 (Finished)
Organizer	Hokkaido University Center for Sustainability Science
Co-host	The Mottainai Society, Hokkaido University SGP
Venue	Clark Memorial Student Center
Language: Japanese **Intended Audience:** Researchers, College Students,	
Outline	It is important to discuss energy resources in qualitative rather than quantitative terms. This symposium aims to clarify an ideal vision of the future for the world as well as for Japan and Hokkaido from the viewpoint of energy constraint in conjunction with the Mottainai Society, which promotes the widespread use of the Energy Profit Ratio (EPR) as a barometer. We will discuss ideas toward appropriate plans for the future with extensive public participation.
Registration	Not required (Charge-free)
Contact	Hokkaido University Center for Sustainability Science TEL : +81-(0)11-706-4530 E-mail : jimu[at]census.hokudai.ac.jp

Report

This symposium consisted of keynote speeches in the first session, the presentation of research results in the second session, the introduction of various efforts by a public experimental station and municipalities in Hokkaido in the third session, and the declaration of an appeal to the people of Hokkaido as its closing. The event was a great success, and despite rainy weather enjoyed the participation of many local residents with high levels of awareness regarding the pertinent issues.

Two experts were invited to deliver keynote speeches: the Mottainai Society's President Yoshinori Ishii talked on the title of "The Peak Oil – Also a Food and Civilization Peak: Japan's Plan B." Former Hokkaido University President Norihito Tambo spoke on the title of "Japan and Hokkaido in the 21st Century – Toward a Sustainable Society." They presented recommendations for practical ways of creating a post-oil-peak society in Japan and Hokkaido, including information on how people might change their lifestyles.

In the second and third sessions, research results and project reports from the front line were presented based on the themes of the keynote speeches. The research results highlighted joint efforts by the Central Research Institute of Electric Power Industry and Hokkaido University's Center for Sustainability Science. In the area of project reports, researchers and staff in charge from the Hokkaido Industrial Research Institute and the cities of Date, Furano and Ashoro presented and gave examples.

Questions asked and views expressed also by local residents at the symposium indicated a high level of interest in the issues of biomass.

For the future, the participants affirmed a resolve to strengthen their investigative research bases with a focus on the Center for Sustainability Science and to work closely with related institutions.

Key note speech by Norihito Tambo, Former Hokkaido University President

Case reports by local governments

Japan-Korea Open Forum on Future Prospects for a Carbon Neutral Society as Seen from the Stance of Agriculture

Overview

Date	November 14 (Sat.) 13:00-16:00 (Finished)
Organizer	Hokkaido University Research Faculty of Agriculture
Venue	Hokkaido University Conference Hall

Language: Japanese/English

Intended Audience: Researchers, General Public, College Students

Outline

Open forum is held for understanding and discussing toward the carbon-neutral society based on agriculture, which focus on technologies of biomass utilization and sustainable agriculture between Japan and Korea.

Present status will be presented and future directions discussed.

Download Poster(PDF525KB)

Registration	Not required (Charge-free)
Contact	Hokkaido University Research Faculty of Agriculture Mr. Nuka E-mail : shomu[at]agr.hokudai.ac.jp

Report

At this forum, the roles of agriculture in biomass production, bioethanol resources, rice paddy warming and the material cycle were illustrated as factors contributing to the creation of a low-carbon society, and speeches were made on the following themes.

- 1. Present Status and Future Perspective of Biogas Plants in Japan (Juzo Matsuda, Professor Emeritus, Hokkaido University)
- 2. Biogas Production Using Swine Manure and Food Waste by an Anaerobic Digester (Chang-Hyun Kim, Professor, Hankyong National University)
- 3. Present Status and Future Perspective of Bioethanol Production Research in Japan (Toshihiko Yamada, Professor, Field Science Center for Northern Biosphere)
- 4. The Environmental Multi-functionality of Main Weeds in Paddy Fields (Tae-Wan Kim, Professor, Hankyong National University)

In the area of biogas, its production at plants in Japan and South Korea was introduced, and a lively discussion was conducted on its present state and related problems in each country in comparison with the situation in Europe. In regard to bioethanol, the importance of cellulosic biomass produced from perennial grasses rather than food crops was illustrated through the introduction of efforts using Japanese pampas grass and Amur silver grass. Concerning the multiple functions of paddy fields, the importance of scientifically verifying their roles (such as global warming mitigation, water resource purification and water storage) was emphasized. A general discussion was held to wrap up the forum, with Hokkaido University Research Faculty of Agriculture's Prof. Mitsuru Osaki serving as moderator. The participants reaffirmed that Japan and South Korea should promote research collaboration due to their similar levels of awareness regarding the present situation and the fact that they face the same challenges in the creation of a low-carbon society.

Opening address by Prof. Araki, Field Science Center for Northern Biosphere

Prof. Matsuda and Prof. Yamada at the discussion

Open Forum : Collaboration Between the Public and Universities Toward an Earth-Friendly Society

Overview

Date	November 14 (Sat.) 18:00-19:30 (Finished)
Organizer	Hokkaido University Global COE Program “Establishment of Center for Integrated Field Environmental Science”
Co-host	Hokkaido Environment Foundation
Venue	Hokkaido Environment Support Center (Ito-Kato Bldg.4F, N4W4, Chuo-ku, Sapporo) * Link to website of Hokkaido Environment Support Center
Language: Japanese **Intended Audience:** General Public, College Students,	
Outline	The wide variety of environmental issues we face today include how to promote global initiatives for the creation of a low-carbon society to combat global warming and ways of encouraging local enterprises to conserve immediate natural environments and reduce waste. Although universities have so far tended to take on an uneven share of the awareness-raising activities required, universities and citizens should work closely to address these issues in a harmonious manner. This event will feature science-café-style discussions with representatives of environmental organizations on the roles universities can play in creating an earth-friendly society. We look forward to the participation of those interested in considering new environmental partnerships between citizens and universities.
Registration	Required (Charge-free) *Please register through the website shown below. http://gcoe.ees.hokudai.ac.jp/reo (Japanese only)
Contact	Hokkaido University Global COE Regional Education and Outreach Promotion Office, Contact: Mr. Yoshimura TEL: +81-(0)11-706-3355 E-mail: ynobu14001[at]ees.hokudai.ac.jp

Report

This program's aim was to consider the types of action that Hokkaido University can take together with the general public on the theme of creating places for learning. The venue was almost full despite the forum being scheduled on a Saturday night.

The event began with an address by Hokkaido University Faculty of Agriculture Professor Futoshi Nakamura.

First, to provide a topic of conversation, Yasushi Watanabe (a specially appointed professor at the Communicators in Science and Technology Education Program (CoSTEP)) delivered a keynote speech entitled "The Meaning of 'Doing Something' at University." He spoke on the importance of understanding that all things are relevant to us and communicating with people who are different from us.

Next, Hiroshi Fukuma from Nippon Data Service Co., Ltd. talked on the theme of "Human Resource Development by Universities and Businesses." He recommended, in his role as a construction consultant, that people at universities should actively take action and interact with a variety of people rather than depending on their institutions.

Then, from the Regional Education and Outreach Promotion Office (REO), Kazuki Nakamura, Nobuhiko Yoshimura and Junjiro Negishi made presentations on their current undertakings, emphasizing the importance of translating research-based knowledge into practice in society rather than it being confined to universities or constrained by academic disciplines.

The second section saw lively exchanges of opinion between faculty members and the general public based on the lectures delivered in the first section. A spirited discussion was held, with many people expressing a wide range of views about the university. Many of the opinions voiced focused on the relationship between students and local residents, and the exchanges of view were very enthusiastic. This gave a glimpse of the high expectations held by locals toward the university.

A closing address was given by Associate Professor Yasuhiro Yamanaka, Leader of the Global COE Program entitled "Establishment of a Center for Integrated Field Environmental Science (IFES)."

The program's participants were very enthusiastic as they exchanged courtesies and business cards while sharing their impressions of the forum after the program closed.

Our thanks go to all those who took part in the event.

Presentation by GCOE Coordinator, Mr. Yoshimura

Closing address by GCOE Leader, Associate Professor Yamanaka

The Report of the Letter Exchange Program Between Cambodian, Indian and Japanese Teenagers

Overview

Presentation Data	http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39988 (Link to HUSCAP)
Date	November 14-15 (Sat.- Sun.) Display and Sales 10：00～18：00 Briefing Session 13:00～14:50、 Special Workshop15：00～16：30 (Finished)
Organizer	Connecting the world's Children through Communication
Venue	Hokkaido University Conference Hall
Language: Japanese **Intended Audience:** High School Students, College Students, General Public	
Outline	This is a report on the letter exchange program between Cambodia, India, and Japan. Through letters, participants expressed dreams of rebuilding Cambodia from the conflict, and bringing attention to child labor practice in India to the world. What was the reaction of Japanese teenagers to these letters? Video taped interviews of Smoky Mountain Children in Cambodia, and Working Children in India will be screened. ※Nov 14th (Sat)； Report 1 (Cambodia) Special Workshop1 (You can exchange letters with Smoky Mountain Children) ※Nov 15th (Sun); Report 2 (India) Special Workshop2 (You can join in the activity to learn about child labor) ※We will also sell items from the rehabilitation center of child labor.
Registration	Participants for Special Workshops are required to send your name, phone number, and workshop number to the following address: E-mail : exchange.ccc@gmail.com Deadline : November 13 (Fri.) * Unofficial participants are also welcome.
Contact	Connecting the world's Children through Communication （CCC） Contact : Komase E-mail： exchange.ccc@gmail.com
URL	http://exchange.kuronowish.com/

Report

We held debriefing sessions of a summer seminar hosted by the *Connecting the World's Children through Communication* (CCC) volunteer organization.

Exhibition: Exhibits included 17 reports on the summer seminar and approximately 50 photographs.

Debriefing sessions: Two sessions were held: a Cambodian session on November 14 and an Indian session on November 15. In the Cambodian session, we provided a visual introduction to the lives of children living on a smoky mountain (garbage dump), outlined the history of the country and offered local food samples to allow participants to experience Cambodia's cuisine. In the Indian session, we focused on exploitative child labor, showing images of children working at a market and introducing the lives of pupils at the Bornfree Art School – an institution aimed at educating children through the arts for the purpose of rehabilitation from child labor.

Workshops: In the Cambodian session, we read letters from children living on the smoky mountain, discussed the content of the letters and wrote replies on *shikishi* cards to be delivered to them. In the Indian session, we looked at the lives of children engaged in child labor and compared them to our own to renew our appreciation of how we live.

Exhibition & sale: Works produced by children at the Bornfree Art School were displayed for sale.

Evaluation: Many respondents to our questionnaire on the debriefing sessions and workshops said that they had learned about a world very different from the one they were in, appreciated the chance to understand the situation through two-way communication, and wanted to offer more support to those countries. As these comments indicate that the respondents recognized our contribution to education for international understanding, we believe that the event's goal was achieved. Lessons learned from issues with staff positioning and PR activities will also enable future enhancements in these areas.

We hope to continue our involvement with CCC activities in consideration of these matters for improvement in order to provide forums to teach children that both they and others are precious. We would also like to increase levels of awareness among all members through workshops on the issues faced by young people both at home and abroad.

Introduction of posters

Writing reply to Cambodia

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/39988
（Link to Hokkaido University Scholarly and Academic Papers （HUSCAP）

Int'l Symposium on "Indigenous Peoples and Natural Resources – A View of Sustainable Use -"

Overview

Date	November 15 (Sun.) 10:00-17:00 (Finished)
Organizer	Hokkaido University Graduate School of Letters
Co-host	Hokkaido University Center for Ainu & Indigenous Studies
Venue	Hokkaido University Conference Hall
Language: Japanese, English **Intended Audience:** Researchers, General Public, College Students, Government	
Outline	While the sustainable use of resources is essential for the conservation of the natural environment, indigenous peoples also harbor a wealth of knowledge that offers insights into resource management; such expertise has been fostered through their rapport with the environment over the course of time. In this symposium, researchers at the University of Auckland (one of Hokkaido University's academic agreement partners) will be invited to outline how New Zealand's indigenous Maori people have managed resources and report on the implementation of new approaches for the use of natural resources such as eco-tourism. Discussions on the ideal future of resource management using the knowledge of Japan's indigenous Ainu people are also scheduled. We look forward to the participation of all those interested in environmental conservation and indigenous peoples.
Registration	Not required (Charge-free)
Contact	Hokkaido University Graduate School of Letters, Research Group of Regional Sciences TEL : +81-(0)11-706-4163 E-mail tikeda[at]let.hokudai.ac.jp

Report

The wisdom of indigenous peoples includes a wide variety of insights into resource management that have been cultivated through many years of interaction with the environment, and we have much to learn from them in terms of using resources sustainably.

At this symposium, three guests were invited from New Zealand – Dr. Brad Coombes, Mr. Marino Tahi and Mr. Alex Nathan. They provided topics of discussion on natural resource management by the Maori indigenous people and about eco tourism as a new way of using natural resources. Resource management by Japan's indigenous Ainu people was also reported on, and future approaches to sustainable resource utilization were examined.

The Maori manage natural resources while using them in a traditional way (an approach that places emphasis on conservation) as opposed to the preservation method, in which natural resources are maintained in their present condition by designating protection zones. At the symposium, examples were shown of how the Maori's conservation-oriented approach has encouraged them to take an active part in conservation activities themselves and has led to successful cooperation with the government. Discussion was also conducted on the feasibility of and problems relating to eco-cultural tourism, which incorporates eco-tourism and the introduction of traditional culture. As representatives of Japan, Yugo Ono spoke on the development of Ainu ecotourism in Hokkaido, Koichi Kaizawa outlined the feasibility of natural resource management based on Ainu culture through reports on forest management efforts, Masayoshi Hayasaka detailed the implementation of Ainu eco-tourism in Shiretoko, and Satoru Kawakami introduced the practice of sika-deer hunting. Although the Maori and the Ainu are both still struggling with unresolved problems in relation to the recovery of their indigenous rights, the symposium was significant in that it provided good examples of the fruits of active involvement by indigenous peoples in natural resource conservation and new possibilities for the future. Many participants expressed views along the lines that learning the cultures of indigenous peoples provides helpful pointers toward the creation of a sustainable society.

This symposium also paved the way for future practical implementation and research through cooperation between the Maori and the Ainu. We would like to further deepen such interaction through close exchanges of information and to promote understanding, practice and research relating both to resource conservation issues and to indigenous cultures.

Lecture by Dr. Coombers

Commemorative photo with lecturers

Int'l Symposium on "Sustainable Development of Society and the Mission of Professions"

Overview

Date	November 15 (Sun.) 13:00-17:00 (Finished)
Organizer	Center for Applied Ethics and Philosophy (CAEP), Hokkaido University Graduate School of Letters
Venue	Hokkaido University Conference Hall
Language: English **Intended Audience:** Researchers, College Students,	
Outline	Professions such as medicine and law have enjoyed their authority and autonomy because their professional knowledge and skills to allow them to contribute to society. However, as the social structure and the perceptions of the public change, the image of the professions has also transformed. This symposium will bring together Japanese and overseas scholars to discuss a wide range of topics regarding professional ethics such as the social responsibility of professions in contemporary globalized society and the role of professionals for the sustainable development of society. The symposium is open to the public as well as academics, practitioners, and students.
Registration	Not required (Charge-free)
Contact	Center for Applied Ethics and Philosophy (CAEP), Hokkaido University Graduate School of Letters TEL : +81-(0)11-706-4088 E-mail : caep[at]let.hokudai.ac.jp
URL	http://ethics.let.hokudai.ac.jp

Report

This symposium was held as a central part of the Fourth International Conference on Applied Ethics (November 13 – 15) hosted by the Hokkaido University Graduate School of Letters and the Center of Applied Ethics and Philosophy (CEAP).

The event welcomed Prof. Michael Davis (from the Illinois Institute of Technology) and Prof. Randall Curren (from the University of Rochester) as proposers. Prof. Davis's lecture was entitled "Engineers and Sustainability: An Inquiry into the Elusive Distinction between Macro-, Micro- and Meso-Ethics." He first defined the ethics of engineers (as professionals) as those of the profession at a meso level. He then maintained that the achievement of sustainability is an integral part of engineering professional ethics, and that it is therefore an obligation of engineers to work toward such an achievement. He also argued that engineers, who produce manufactured products, buildings and other output that extensively affects people's lives, have the power to help create a sustainable society, and that such a contribution is expected by the public at large.

Prof. Curren spoke on the theme of "Sustainability in the Education of Professionals." After outlining current issues concerning sustainability, he affirmed that social contribution is the very reason for the existence of professionals, and that as long as such existence is based on people's trust, creating a sustainable society is also integrally bound with professional ethics. He further maintained that, although sustainability education is already provided as part of studies on professional ethics, it must become more integrated into the subject in the future.

In the subsequent Q&A session, a meaningful discussion was held with many questions and comments from the floor. This International Conference on Applied Ethics was already the fourth in the series, which will be continued as a forum for the discussion of major themes concerning applied ethics at home and abroad with sustainability and ethics as the cornerstones of related research themes. The next conference – the fifth – is slated for November 2010.

Lecture by Prof. Davis

Q & A session

Joint Japanese-Finnish Seminar on Northern Environmental Research

Overview

Date	November 16 (Mon.) 9:00-17:30 November 17 (Tue.) 9:00-17:30 November 18 (Wed.) 9:00-12:00 (Finished)
Organizer	Institute of Low Temperature Science, Hokkaido University
Co-host	Hokkaido University Research Faculty of Agriculture, Graduate School of Environmental Science, Field Science Center for Northern Biosphere; University of Helsinki; University of Oulu; Arctic Centre, University of Lapland; The Finnish Institute in Japan
Venue	Hokkaido University Conference Hall
Language: English **Intended Audience:** Researchers, College Students	
Outline	Environmental and socio-economic change in the northern regions has resulted in an urgent need for information on climatic changes covering large regions as well as local areas. The Seminar on Northern Environmental Research will provide information on the themes which are relevant to the northern areas both in Finland and Japan. Informational exchanges on scientific expertise, initiatives and ongoing research projects, preparation of funding applications for co-operation projects, and increases in student and scientist exchanges, are topics that especially students and young scientists will be interested in. We welcome you to join this seminar.
Registration	Not required (Charge-free)
Contact	Dr. Kunio Shirasawa, Institute of Low Temperature Science, Hokkaido University TEL : +81-(0)11-706-5425 E-mail: kunio[at]lowtem.hokudai.ac.jp

Poster Download		Poster(123KB)
Program	Download the updated program (As of Nov.4, 2009)	

Report

This seminar was aimed to introduce the latest outcome of research programs implemented jointly by Hokkaido and Finland as well as international programs to train young researchers on the environmental issues in northern regions, where rapid changes due to global warming have been undergone. It was also a forum for discussing the continuation of joint research programs and the feasibility of research plans. The initiative seminar was organized by the Arctic Centre of the University of Lapland in Rovaniemi from September 3 through 5, 2008.

This joint seminar was continued on this year with special emphasis on the promotion of educational and research exchanges among young researchers and as well as graduate-level students. Over the period of two and a half days, three plenary sessions and an overall discussion event were held, followed by the two-days field trip to the Shikotsu-Toya National Park, where discussions on the northern environmental issues were continued. In Session 1 (Cryosphere & Boreal Forests), seven presentations were made, followed by nine in Session 2 (Landscape and Land Use Changes) and twelve in Session 3 (Human-Environment Relations). Sessions 1 and 2 included presentations on progress reports of some joint researches by Hokkaido University and three Finnish universities (i.e., the University of Helsinki, the University of Oulu and the University of Lapland), which were presented and discussed during the previous seminar in Finland. Presented in those sessions were also new research proposals, possibility to continue ongoing research programs, educational and research exchange programs for young researchers and students, and credit transferability between Hokkaido and Finnish universities. One of the successful educational programs was that a sea-ice field course textbook has been published, based on joint sea-ice field courses organized for last a few years by Hokkaido University, the University of Helsinki and the University of Alaska.

Session 3 was a new subject concerning ‘Human-Environment Relations’, organized by the Center for Ainu & Indigenous Studies of Hokkaido University, the Muroran Institute of Technology and the University of Lapland. Discussions were focused on the impacts of environmental changes in northern regions and also current problems facing on such indigenous people as Sami in Lapland and Ainu in Hokkaido, where rapid changes due to local and global scale climatic changes and increased human activity have been undergone.

Future programs of this joint seminar, proposed new programs and a plan to publish a book jointly by Japanese and Finns were discussed at the end of the seminar, and the University of Oulu proposed to organize the next joint seminar in Oulu in 2010.

During the seminar, Directors of the Thule Institute and the International Affairs Office of the University of Oulu, a sister/partner institution of Hokkaido University, and also the Vice-Rector and the Director-General of the Administration Office of the University of Lapland visited to see the Vice-President of Hokkaido University, Prof. Hondoh to talk views on educational and research exchanges for young researchers and graduate students.

On the field trip, participants visited the Ainu Museum in Shiraoi to learn Ainu culture and history and the Shikotsu-Toya National Park to learn about park management, maintenance and local issues. Since most of the Finnish participants were oriented to field science, this field trip provided a good opportunity especially for Session 2 to learn, in practice, about the present state of national parks in Japan.

Discussion at a parallel session

Excursion Ainu Museum Poroto Kotan

◆Download the presentation data：http://eprints.lib.hokudai.ac.jp/dspace/handle/2115/40043

*Link to Hokkaido University Scholarly and Academic Papers （HUSCAP）

CRC Int'l Symposium on "Innovation Driven by Catalysis-past, present, and future" -dedicated to the 20th anniversary of CRC-

Overview

Date	December 7-9 (Mon.-Wed.) (Finished)
Organizer	Hokkaido University Catalysis Research Center
Co-host	Hokkaido University Sustainability Weeks 2009, Global COE
Venue	Hokkaido University Conference Hall
Language: Japanese/English **Intended Audience:** Researchers	
Outline	The CRC International Symposium dedicated to the 20th anniversary of CRC will be held at Hokkaido University for three days in December this year. During the symposium, we will have memorial lectures by prominent catalysis scientists in order to review various achievements made in catalysis chemistry and technology during the past 20 years. Also the International Symposium generally entitled, "Innovation Driven by Catalysis-past, present, and future", will showcase active catalysis researchers as they discuss the future of the next science and technology that will emphasize the importance of catalysis in sustainable technology development. **<Schedule>** • December 7th : Memorial lectures and reception 12:00 – 18:00 • December 8th : International Symposium on "Catalysts and functional materials for energy conversion" 9:00 – 17:00 • December 9th : International Symposium on "Well defined surface structure for precise reaction control" 9:00 – 13:15
Registration	Not required (Charge-free)
Contact	Hokkaido University Catalysis Research Center E-mail : sakura@cat.hokudai.ac.jp TEL : +81-(0)11-706-9162 FAX : +81-(0)11-706-9163
Website	URL : http://www.cat.hokudai.ac.jp/event.html

Report

Commemorative lectures and international symposiums were held over a period of three days to mark the 20th anniversary of Hokkaido University Catalysis Research Center (CRC)'s establishment. The events aimed to look back on the history of catalysts' contribution to science and technology in terms of resources, energy, the environment and materials, as well as to cast an eye to the next generation and the frontiers of science and technology and discuss the implementation of catalytic chemistry toward the achievement of a sustainable society. A total of 220 people, including 25 from abroad, assembled at Hokkaido University's Conference Hall for the symposium.

The event began with poster presentations on the morning of December 7. Researchers in the field of catalytic development and related material and analysis disciplines assembled from across Japan to make enthusiastic presentations at the venue, which showcased 80 posters. Next, five speakers (four Japanese and one Chinese) delivered commemorative lectures. They looked back on the remarkable improvements that catalysts have provided to people's lives based on the history of Nobel prizes, and recognized the related contributions once again. They also indicated a shared understanding that catalysts are capable of making a broader contribution to the achievement of a sustainable society, and that catalytic development must evolve as an advanced science and be applied accordingly in its role as a key technology for sustainability.

On December 8, University of Tokyo Professor Kazunari Domen (one of the world's leading authorities on photocatalysts) gave a commemorative lecture on the theme of "Catalysts and Functional Materials for Energy Conversion," and lectures on new fuel-cell materials and catalytic materials were given by 13 speakers, including 4 invited from abroad (the U.S., Norway and Germany). Envisaging a future supported by new, more efficient fuel cells, participants at the event engaged in lively discussion at the Q&A session that followed. After the lectures, a poster session was held as on the previous day, with presenters fielding a multitude of questions.

On December 9, a commemorative lecture was given by Kyoto University Professor Koichi Eguchi (renowned for his research on solid oxide fuel cells) on the theme of "Well-defined Surface Structure for Precise Reaction Control," followed by lectures from nine speakers, including four invited from abroad (the U.S., Germany, China and France). The session provided an overview of leading-edge academic research on surface structures, and highlighted the true nature of catalysts.

The achievement of a sustainable society requires further advancements in catalyst technology, and will therefore take time to attain. The symposium served to reaffirm the need for in-depth basic academic research founded on cooperation across a range of disciplines.