



Hokkaido University Exchange Days Held in Fudan University and Zhejiang University, China



Executive and Vice President Takeo Hondoh delivers his address



Zhejiang University venue

In an effort to tie the objectives of promoting partnerships in research and education between Japan and China and fostering outstanding individuals with a global perspective and spirit of innovation, HU held exchange events at Fudan University (Shanghai, Mar. 10-11) and Zhejiang University (Hangzhou, Mar. 12). From HU, approximately 60 faculty members and students from undergraduate and graduate schools participated, including Executive and Vice President Takeo Hondoh.

Besides introducing students in China to leading-edge academic research programs at HU, general information and history were also imparted. Through direct interaction between university researchers and students promotion of research and student exchange took a step forward and set the backdrop for all to consider the fascinating differences between the two cultures.

Chinese and Japanese university staff and students participated in the events, including Fudan University Executive Vice President Yihua Zhang, Zhejiang University Vice President Ping Wu, and Japan Society for the Promotion of Science (JSPS) Beijing Office Director Hiroshi Fukunishi. They attentively listened to an introduction

to the participating departments and divisions and a lecture by Prof. Kohei Watanabe of HU's Research Faculty of Media and Communication.

Associate Prof. Ying Xiong of the Graduate School of Letters (Fudan University) and Prof. Gong Jian Ping of the Faculty of Science (Zhejiang University), both currently staff at HU and alumni of those university where the events were held also made presentations, and students from both universities eagerly listened to their addresses.

During the student exchange sessions, 20 HU students staying in China for a short-term Chinese language program and 30 students from the host universities discussed ways to enhance mutual understanding between the two countries from the viewpoint of the younger generation.

Study-abroad counseling was also provided on the sidelines of each event, and Chinese students interested in studying at HU enthusiastically asked questions to faculty members and administrative staff in charge of overseas studies.

The total number of participants for both venues was about 500. HU will continue to step up its PR efforts abroad to attract outstanding overseas students and promote international exchange.

NEWSLINE

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Anticipating Sustainability Weeks 2010

Since its foundation as Sapporo Agricultural College in 1876, HU has contributed to the creation of a society in which people live in harmony with nature. Since the beginning of the 21st century, we have broadened our outlook and set the goal of achieving a sustainable society through research and education in pursuit of relationships involving harmony among the environment, society, the economy, and individuals.

In 2008, HU hosted the G8 University Summit in Sapporo and adopted the

Sapporo Sustainability Declaration with 20 overseas universities, 14 Japanese institutions, and the United Nations University and pledged to act as a driving force behind the realization of such a sustainable society.

We will host the Sustainability Weeks again this year to reconfirm our commitment.

The theme of this year's Weeks – the fourth in the series – is **Toward a Society Offering Quality of Life and Human Dignity for All**. Come join in the symposiums, lectures, workshops,

and exhibitions we have planned and engage in discourse with researchers from around the world as well as with students and members of the general public so we can all work together for the sake of a better future.

For more information, please visit:
<http://www.sustain.hokudai.ac.jp/sw>



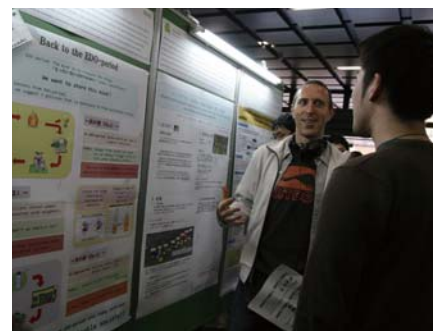
Photos from Sustainability Weeks 2009



Opening Symposium



Interacting with the audience



Student answers questions on his poster at the First Sustainability Research Poster Contest

Sustainability Weeks 2010 Event and Activities

Ⓢ : Symposium Ⓟ : Public Lecture Ⓞ : Other Event

Pre-Events	
Sep. 25	Ⓟ Public Lecture: A Global Health Consortium for Sustainable Society
Oct. 13 - 15	Ⓟ Science Café: Talking about biodiversity
Oct. 16	Ⓞ The 7th Presentation & Debate Competition, School of Economics and Business Administration
Oct. 22	Ⓟ Public Lecture: Hokkaido University Sustainability Form
Sustainability Weeks	
Oct. 25 - 26	Ⓢ Sustainability Weeks 2010 Opening Event Toward a Society Offering Quality of Life and Human Dignity for All – Comprehensive exploration into the causes of the crises we face –
Oct. 25	Ⓢ International Workshop on Green Circuits and Systems
Oct. 27	Ⓞ Invitation to Study Abroad Programs: SD on Campus – A Global Quality of International Campus Life
Oct. 27	Ⓞ Sustainable Campus Tour
Oct. 27	Ⓞ First Sustainable Campus Contest
Oct. 28	Ⓢ International Symposium on Renewable Energy (Tentative)
Oct. 29	Ⓢ International Symposium – Global Campus for Sustainability Education
Oct. 29	Ⓢ Symposium on Northern Mountains: Past Change and Monitoring Network
Oct. 30 (AM)	Ⓢ Key Issues for Carbon Storage and Biodiversity –Tropical Peat and
Oct. 30 (PM)	Ⓟ Forest –
Oct. 30	Ⓢ Hokkaido Community Care Symposium
Nov. 1	Ⓢ Symposium on EcoDesign for a Low Carbon Society Based on Regional Partnerships Between Urban and Rural Areas
Nov. 1 - 2	Ⓢ Workshop for the 2nd Amur-Okhotsk Consortium Meeting 2011
Nov. 2	Ⓢ Symposium on Expanding the Potential of Children in Future Society (Tentative)
Nov. 3	Ⓢ The Instruction on Research Diagnostic Criteria for Temporomandibular Disorders
Nov. 3	Ⓟ Seminar on Environmental Policy – Biodiversity and Climate Change –
Nov. 3	Ⓟ Public Program on Health Sciences
Nov. 3	Ⓟ Public Lecture: The 3rd International Symposium on Sentinel Earth – Advance in Satellite Imagery Data and GIS and Their Applications –
Nov. 4 - 5	Ⓢ The 3rd International Symposium on Sentinel Earth – Advance in Satellite Imagery Data and GIS and Their Applications –
Nov. 4	Ⓢ Business-Academia-Government Collaboration Seminar on Developments of Geo-spatial Information and Future World II
Nov. 5	Ⓢ Hokkaido Marine Bioscience Symposium
Nov. 6	Ⓞ ~The 14th Ainu Language Speech Contest "ITAK AN RO" ~Let's Speak in Ainu Language!~
Nov. 6	Ⓢ International Symposium on Child Poverty and Anti-poverty Strategy
Nov. 6	Ⓢ International Symposium on "Reproductive Rights and the Sustainability of Women's Health in Historical and Contemporary Perspectives"
Nov. 7	Ⓢ Special Lecture – Intergenerational Justice and Health in an Aging Society
Nov. 9	Ⓟ Public Lecture: Theory and Practice of Fisheries Sustainability Science
Nov. 15	Ⓢ SCJ Hokkaido District Conference "Green Innovations Originating in Hokkaido"
Long Term Events	
Oct. 24 - 29	Ⓞ The 2nd Hokkaido University Sustainability Research Poster Contest I
Oct. 24 - 31	Ⓞ Special Event: Ride and Think for Sustainability in Hokkaido Univ.
Oct. 25 - Nov. 6	Ⓞ Fair Trade Fair vol.5
Oct. 26 - Nov. 3	Ⓞ Controlling Zoonoses: An Experimental Exhibition on Integrative Science
Oct. 29 - Nov. 3	Ⓞ CLARK THEATER 2010
Nov. 2 - 5	Ⓞ The 2nd Hokkaido University Sustainability Research Poster Contest II



HU-USM Joint Workshop on “Understanding and Integrating Sustainability into Teaching Modules”

On June 7, HU and Universiti Sains Malaysia (USM) signed an Academic Exchange Agreement and Memorandum of Understanding in conjunction with a two-day joint workshop organized by HU/USM and sponsored by ProSPER.Net (The Promotion of Sustainability in Postgraduate Education and Research Network), titled “Understanding and Integrating Sustainability into Teaching Modules”.

USM is a member of the ProSPER.Net academic alliance established through the strong initiative of HU and takes a leading role for the promotion of Higher Education for Sustainable Development (HESD) internationally.

The workshop was facilitated by HU/USM and attended by faculty/staff/students from ProSPER.Net member universities, i.e., Chubu University, Miyagi University of Education, Okayama University, Rikkyo University, United Nations University Institute of Advanced Studies (UNU-IAS), as well as Hokkaido University of Education, Kushiro Campus.

The workshop commenced with an opening address by HU's Executive and Vice President Takeo Hondoh and was followed by a keynote lecture by USM Vice Chancellor Dzul kifli Abdul Razak on “Higher Education and Sustainable Development”. Representatives from each participating university then gave presentations on their practices on integrating SD in their teaching modules, and a lively discussion ensued among all participants including students.



Keynote lecture by Vice Chancellor Razak

USM is also a partner in an important initiative by HU called the “Alternative University Appraisal Project” that started in June 2009 and is partially funded by MEXT and ProSPER.Net. The aim to create a learning community among universities in Asia-Pacific region engaging in Education for Sustainable Development (ESD) will allow HU to strengthen its collaboration with USM even further.

Further details on the workshop can be found at: <http://www.sustain.hokudai.ac.jp/aua/jp/>

HU-JICA Water Sustainability Joint Symposium and Follow-up Proposal

On December 11, 2009, HU and the Japan International Cooperation Agency (JICA) jointly hosted the “International Cooperation on Water Security – Strategy to Disseminate Wisdom & Technology from Japan to the World –” to mark five years of collaboration between the two institutions. The objective of the symposium for HU was to devise a proposal concerning the sustainability of water based on discussions with various stakeholders.

After the opening speech by Executive and Vice President Hondoh, Prof. Funamizu of the Graduate School of Engineering gave a keynote lecture introducing mechanisms of water management systems currently used in Japan and in other countries of the world. He discussed the problems that arise when applying these mechanisms in developing countries without adapting them to fit the local environment, and emphasized the necessity of ingenuity when developing new systems –



Keynote lecture by Prof. Funamizu

particularly drainage and sanitation – because the end users do not always appreciate the need for sanitary conditions.

Following a lively discussion with stakeholders, Mr. Togawa, the Director General of JICA Sapporo brought the meeting to a close by urging the participants to continue to make good use of the human and intellectual resources that abound in HU and throughout Hokkaido to strengthen international cooperation.



Prof. Funamizu submitting the proposal to Mr. Nakagawa

As a consequence of the symposium, Prof. Funamizu visited the JICA headquarters and submitted a proposal concerning international cooperation in the field of water and sanitary systems to Mr. Nakagawa, Director of Global Environment Department of JICA, on February 18.

The full text of the proposal can be downloaded from the following website: http://www.sustain.hokudai.ac.jp/pdf/Hokkaido_University_Proposal.pdf



Prof. Takeuchi of the Research Institute for Electronic Science Receives the 6th JSPS Prize

Prof. Shigeki Takeuchi of the Research Institute for Electronic Science was awarded the 6th Japan Society for the Promotion of Science (JSPS) Prize at a ceremony held on March 1. He was recognized for his outstanding contribution to the realization of quantum information processing and communication using photons.

The JSPS Prize was established by the Japan Society for the Promotion of Science in order to raise the level of scientific research in Japan to the world's highest standard. Its specific goals are to recognize and support young researchers that show high creativity and superlative research abilities by sustaining their motivation with support in order for them to move forward in their work.

Utilizing the basic principles of

quantum mechanics, quantum computers can solve some kinds of problems which are too hard even for today's supercomputers. Prof. Takeuchi proposed and successfully developed a test bed for a quantum computation algorithm using photons, which is one of the examples of the application of basic principles of quantum mechanics to information processing. He also successfully developed an optical quantum circuit 'an entanglement filter' that enables the extraction of photon pairs based on the correlation between their polarizations (i.e., quantum entanglement – a central concept of quantum mechanics). He also succeeded in beating the standard quantum limit for the sensitivity of optical phase measurement by using four entangled photons.

His achievements are expected



Prof. Shigeki Takeuchi

to lead to the implementation of quantum information processing using photons and revolutionize technologies for quantum computing, quantum cryptography communications, and optical measurement. There are also high hopes for continued research progress in quantum information processing and communication.

Understanding Deep Currents that Circulate Cold from Antarctica



Deployment of the current meter



View from the research vessel in the region of observation

The world's oceans participate in a global network of circulating ocean currents which have a definite effect on the earth's climate. A research team led by Assistant Prof. Yasushi Fukamachi of the Institute of Low Temperature Science revealed the export of a massive cold current near the sea floor off the Kerguelen Plateau in the Indian Ocean sector, and recognized that it is an important pathway from Antarctica to oceans around the world as well as playing an important role in global ocean circulation.

In this joint research with Australia's Commonwealth Scientific and Industrial

Research Organisation (CSIRO), Fukamachi and his colleagues conducted field monitoring off the Kerguelen Plateau – a major export pathway for Antarctic Bottom Water (AABW) – over a two-year period starting in February 2003. By utilizing a variety of instruments such as current meters and temperature-salinity recorders moored in the deep ocean to obtain time-series data, they were able to detect an equatorward flow of a very strong, deep ocean current with an average velocity of over 20 cm per second. It was also revealed for the first time that the volume of water carried

by this current toward the equator has significant temporal variations.

Their research clarified that conventional ship-based observations, which were carried out previously, are unable to obtain the mean strength of the flow because it varies significantly over time off the Kerguelen Plateau. This finding strongly suggests the importance of continuous monitoring for the oceanic general circulation such as that currently under way in the North Atlantic in the outflow areas of AABW.

The results of this study were first reported in *Nature Geoscience* (*Advance online publication*) on April 25, 2010.

<http://www.nature.com/ngeo/journal/vaop/ncurrent/index.html>

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Funding Program for World-Leading Innovative R&D on Science and Technology – Sustainable Development of a Molecular-Tracking Radiotherapy System

In March 2010, the Council for Science and Technology Policy (an advisory body under the Cabinet Office of Japan) finalized the selection of the core researchers and research subjects for a very-large-scale national project known as the *Funding Program for World-Leading Innovative R&D on Science and Technology*. The program aims to advance world-leading research initiatives to shoulder the burden of the future of science and technology in Japan, and a total of 30 projects were selected from among 565 applications submitted from establishments across the nation (including 428 universities and related institutions). From HU, the *Sustainable Development of Molecular-Tracking Radiotherapy System* project led by Prof. Hiroki Shirato of the Graduate School of Medicine was selected. Since this is also the only project chosen from the field of radiation therapy, it has gained great attention for its potential to be the impetus for future technological innovations in radiation

and oncological therapy in Japan.

Pinpoint radiation treatment is becoming possible for tumors unaffected by organ motion such as those that develop in the brain. However, those in the lungs and liver require imaging technologies to identify their location and precise irradiation because of the respiration-induced motion they are subject to. Prof. Shirato developed a real-time tumor-tracking system that automatically ascertains the location of a gold marker implanted near the tumor and irradiates it only when the marker is located within a predetermined area, and also introduced the world's first 4D setup system using the real-time tumor-tracking radiotherapy system.

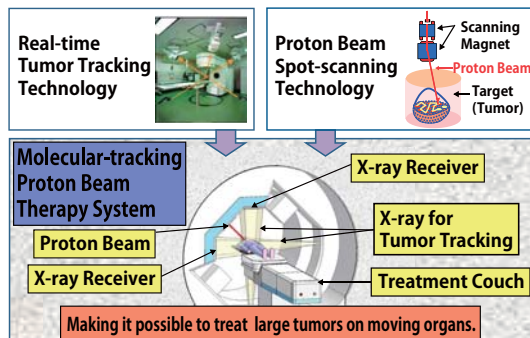
Under the Funding Program, the world's first molecular-tracking proton beam therapy system, which allows precise irradiation of even large tumors located at deep-seated organ sites affected by respiration-induced motion, will be completed. The system's operation will be made possible by

combining the real-time tumor-tracking technology fostered through X-ray therapy at HU with spot-scanning proton beam irradiation. The latter is a technology that allows pinpoint irradiation involving the movement of a pencil proton beam, and was applied to clinical practice by a Japanese company for the first time ever. Since proton beams have a more localized dose distribution than X-rays, the combination of real-time tumor-tracking technology with the aforementioned proton beam irradiation system will optimize treatment efficacy and substantially reduce the amount of unnecessary irradiation to normal healthy tissues. Significant increases in both recovery rate and safety are therefore expected.

For this molecular-tracking proton beam therapy system, HU will seek to obtain approval under the Pharmaceutical Affairs Act to continue providing cutting-edge medical care beyond the period of the program and view it as the nucleus of cancer treatment at the university. Young researchers to be fostered through R&D efforts under this program are expected to contribute to the sustainable development of radiation treatment as a whole, and by extension to overall oncological therapy, by engaging in cutting-edge research programs using the system, or by working as doctors, medical physicists, or radiation biologists for the ever-increasing number of universities, hospitals, and businesses that use radiation treatment equipment.



Project Leader
Prof. Hiroki Shirato



Molecular-tracking proton beam therapy system overview

HU and Poland: Ten Years of Successful Collaboration in Mathematicians



Group photo of the workshop taken at Bedlewo, Poland, on September 2002

Singularity theory, despite being a relatively recent branch of mathematics, has already played an important role in connecting various disciplines of science. Its deep and intriguing

results have promoted fundamental progress in optics, image recognition and processing, control theory, mechanics, relativity theory, and numerous other fields of study including those pertaining to biological, medical, and social sciences. Japanese singularity theorists hold a prominent place in this field, so it was a natural consequence that they were recognized in the 21st Century COE program *Mathematics of Nonlinear Structure via Singularity*.

Aiming to promote international connections between research institutions and educate young mathematicians, Professors Keizo Yamaguchi (Dean of the Graduate School and Faculty of Science), Shyuichi Izumiya and Goo Ishikawa of the Center for Research Interactions in Mathematics of HU, together with



Graduate School Introduction Series 13

Graduate School of Chemical Sciences and Engineering

In April 2010, the Graduate School of Chemical Sciences and Engineering was established to accommodate science and engineering faculty members to facilitate collaboration and allow them to pool their expertise in order to offer educational programs in their fields

Purposes of the graduate school's establishment

Previously, the Graduate School of Science attached primary importance to education in basic chemistry to prepare students for cutting-edge research while the Graduate School of Engineering provided chemical education focusing on practical applications that also serve in the industrial world. However, the need to promptly connect the results of basic cutting-edge research to applied research that can react to global challenges that require immediate attention (such as those related to climate change and environmental conservation) as well as meet the demand for secure energy and food resources and overcome intractable diseases was acknowledged, and the Graduate School of Chemical Sciences and Engineering was established. The new school will integrate scientific and engineering knowledge and offer state-of-the-art educational programs to give students the skills they need to

flexibly respond to the global challenges facing today's society and acquire basic scholastic ability to allow in-depth understanding of the properties of materials and the changes they undergo. These skills will manifest themselves in the ability to use this knowledge to invent and develop materials and technologies that society needs

Characteristics of the graduate school

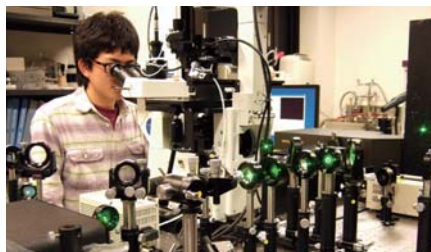
The Graduate School of Chemical Sciences and Engineering covers a wide range of disciplines, which are broadly divided into three groups:

1. Precise control and analysis of molecular-level reactions, theoretical development, development of new reaction systems by applying relevant findings, and skillful application to practical chemical processes
2. Artificial control of physical properties through hierarchical assembly of molecules and atoms, and establishment of relevant molecular theories; applications toward the

invention of organic, inorganic, and high molecular materials as well as metallic nano-materials and related composite materials that offer new functions

3. Atomic-level structural and functional analysis of biomolecules, chemical analysis of structures, and functions of cells and individual organisms; applications toward the artificial control of biological systems and design of medical science and service materials

For each of the three disciplines outlined above, the Graduate School of Chemical Sciences and Engineering offers three categories of student class schedules (1. *Molecular Chemistry and Engineering Course*, 2. *Materials Chemistry and Engineering Course*, and 3. *Biological Chemistry and Engineering Course*) Instructors in these courses will work together closely to groom engineers and researchers to develop and expand related technologies in chemistry and science.



Student experiments with Optical Tweezers (left) and Automated Column Chromatography System (right)

their Polish counterpart Professor Stanislaw Janeczko (Director of the Institute of Mathematics, Polish Academy of Sciences (Banach Center), and Director of the Center for Advanced Studies of Warsaw University of Technology decided in 2001 to establish a series of open international conferences named the "Polish-Japanese Geometric Singularity Theory Working Days". Three of the workshops were organized on the premises of the Institute's conference facility at Bedlewo in western Poland; three others took place in picturesque Polish neighborhoods, including the mountains and the seaside. Several Polish researchers also took part in the singularity theory conference held in Sapporo in September 2003.

Each meeting was comprised of over thirty high quality research and survey lectures, while a friendly atmosphere helped maintain close contact between the participants. The conferences were attended by the world's leading

mathematicians, including Professors Heisuke Hironaka, who won the Fields Medal in 1970, Takuo Fukuda and Stanislaw Lojasiewicz, as well as specialists from several countries other than Japan and Poland. Moreover, there has always been a substantial attendance of master and doctoral students.

The next workshop will be held in Poland in May 2011, and due to the growing number of researchers who have taken part in, and the significant volume of joint research papers originating from the conferences, we hope that the future Polish-Japanese Singularity Theory meetings will further contribute in recognizing the universal role of mathematics in a general sense and singularity theory in particular.

*Written by Stanislaw Janeczko/
Director of the Stefan Banach International
Mathematical Center, Poland*

HU Alumni Today – Dr. Takashi Asano, Professor Emeritus of the University of California at Davis



Receiving the 2001 Stockholm Water Prize on August 16, 2001.

In 1959, when I graduated from Hokkaido University with a BS degree in Agriculture (majoring in agricultural chemistry), I had no idea that I would become an environmental engineering professor in the United States. My journey began in the summer of 1963 when the petroleum company I worked with in Osaka decided to send me to study sanitary engineering in the Department of Civil Engineering at the University of California at Berkeley (UC Berkeley). Environmental problems in Japan were becoming critical, and water resources including drinking water were threatened. Serious water shortages occurred in Tokyo in the summer of 1963, just one year before the 1964 Tokyo Summer Olympics.

It is hard to imagine now, but Japan was still poor in those days after emerging from the post war period. Thus, only a limited number of Japanese students could go to the United States to study. The exchange rate then was 360 yen to one dollar, and you could bring only \$500 in cash with you! Although studying in the United States was prestigious, I struggled with loneliness, academic pressure, and economic uncertainty. However, the time I spent at UC Berkeley studying for my MSE degree from 1963 to 1965 had a tremendous

impact on my liberal thinking and future professional career. The assassination of President John F. Kennedy, the Vietnam War protests, the Civil Rights Movement, and the Free Speech Movement all occurred during that period.

The level of my graduate school education in the United States was much higher than in Japan, and the study demands were overwhelmingly intense and covered a wide range of cutting-edge subjects. After finishing my MSE degree, I was fortunate enough to be able to obtain a National Science Foundation pre-doctoral fellowship to pursue a Ph.D. at the University of Michigan, Ann Arbor during 1967-1970. My Ph.D. research allowed me to combine sanitary/environmental engineering with water resources engineering dealing with nutrient enrichment (eutrophication) in the aquatic environment.

While teaching and doing research in prominent universities in the United States, I have had the privilege of meeting and associating with many bright graduate students and post doctoral researchers from all over the world. I was fortunate that my work on water reclamation, recycling and reuse – recovering sustainable water from wastewater was recognized in the early 1980's as one of the emerging disciplines in integrated water resources management, and as a consequence, I was awarded the 2001 Stockholm Water Prize by H.M. King Carl XVI Gustaf of Sweden in the Stockholm City Hall.

http://www.youtube.com/watch?v=cT_y26Z98MA

<http://www.youtube.com/watch?v=EuqXKKKJgjs>

Thanks to my former students and professional colleagues, I was honored to receive an Honorary Doctorate from Hokkaido University in 2004 and from the University of Cadiz in Spain in 2008. Thanks also to the Japanese Government, The Order of the Sacred Treasure, Gold and Silver Star was conferred upon me in the spring of 2009. With my sincere appreciation, I now serve as an area advisor to the water related projects in the Japan Science and Technology Agency. My wife, Holly, and I have lived in Davis, California for the past 30 years.

Hokkaido University Federation of Alumni Association General Meeting 2010 Held

On June 9, the general meeting of the Hokkaido University Federation of Alumni Association was held at a hotel in Sapporo. The event was attended by 57 representatives, including Federation President Fumio Sudo and board members from faculty/district alumni associations. Representatives of overseas district alumni associations from Korea, China, and Taiwan also attended.

New alumni associations joining the federation (the Alumni Association for the Public Policy School, the Alumni Associations in Taiwan and in Korea) were introduced, and reports on the state of activities by each faculty/district alumni association were given. HU reported on recent events and Internet services for its alumni.

After the general meeting, participants actively exchanged

opinions at a gathering and the evening concluded with everyone singing the HU dormitory song *Miyako zo Yayoi*.



Group singing of *Miyako zo Yayoi*



Studying in Hokkaido University – the Voice of International Students

Dalaibuyanii Byambajav (from Mongolia), Graduate School of Letters, PhD 3rd year

After I had taught in a university in Mongolia for six years, I came to Sapporo in 2007 to become a graduate student again. At that time, my impression about Japan was based on a few books that I read and stereotypic images, but one thing was unequivocally clear to me: research and education in Japanese universities are among the best in the world.

I chose HU because a friend of mine, a Japanologist, recommended it to me. Now that I have experienced the excellent educational programs offered by HU and lived in the beautiful environment of Sapporo, I can recommend it to you. Every year I see more and more international students coming to HU. Now nearly fifty percent of all the graduate students in my lab are international students. It is a good opportunity to make friends not only from Japan but also from different

countries of the world.

Learning Japanese at the International Student Center was the first step to my studies at HU. Thanks to their excellent teaching I learned basic Japanese faster than I had expected and soon became able to communicate well with my professors and lab mates. I was amazed by the hard work that the graduate students devote to complete their studies as well as the friendships that I was able to develop with them. During the year I studied as a research student I prepared for the doctoral course in the department of Sociology. My professors and lab mates provided me with a lot of support for my research. Besides this during the past three years I have been lucky enough to receive financial support from HU for conducting fieldwork in Mongolia and presenting my research at various international conferences.

In addition to the excellent research

environment at HU, life in Sapporo is also ideal for me and my family. There are four seasons and plenty of interesting things to experience. Besides winter sports such as skiing and snowboarding, we enjoy various festivals in the winter. It is so nice to view the blossom of cherry trees in the spring and to visit beautiful landscapes in the summer and autumn. If you like cycling, HU's campus and Sapporo are the best places for it.



Strange-shaped rocks at Shakotan Peninsula

Huang Muhan (from China), Graduate School of Economics and Business Administration, Master's Course 2nd year



Field of flowers in Furano

Hello everybody. My name is Huang Muhan. I am from China, and am enrolled in the master's degree program at the Graduate School of Economics and Business Administration.

I have been deeply interested in Japanese culture since I was a high school student, and began teaching myself Japanese as soon as I entered university in China. I was fascinated by Hokkaido's beautiful scenery and the wonderful campus of HU, which made me decide to study here after graduation. My undergraduate major was sociology, so I was concerned whether I could pass the entrance exam for the master's degree program HU's Graduate School of Economics and Business Administration. Thanks to the enthusiastic training and guidance of my professors and seniors, I passed the exam without any difficulties in 2009 and achieved my aim of becoming a research student at HU.

At first, I was under immense pressure because it was hard to familiarize myself with studies in the master's degree program and I couldn't adapt to a lot of changes very well, but I managed to gradually get used to my busy campus life through interaction with professors and seniors. Occasional relaxation is an important part of making overseas student life productive. Hokkaido has really beautiful scenery: you can take a day trip from Sapporo to enjoy the flower fields in Furano, the snowscape in Otaru, and hot springs in Noboribetsu. Hakodate, the Kushiro Wetlands, Akan National Park, and Shiretoko National Park are a little farther away from Sapporo and involve an overnight stay, but should be visited at least once.

Also, international exchange activity is thriving here in Hokkaido. I was particularly impressed when I joined a Japanese tea ceremony and a traditional rice-cake making event. Exchanges with locals, Japanese students and students from other countries are intensely enjoyable and also broaden my horizons. I do not think these experiences can be gained through university study alone. I have also had short-term homestays in Kushiro, Takikawa, Biei, and other places. I had some very valuable experiences with my homestay families in which we taught each other about our own cultures and societies, watched TV, went on picnics, and took trips together. I'm still in touch with them now.

Although my life HU is very busy, it is fun and very productive because I can learn new things every day.

International Science and Technology Center (ISTC) and HU Host International Workshop on Research for Disaster Mitigation

On May 10 and 11, the Faculty of Science's Institute of Seismology and Volcanology and its Department of Natural History Sciences held an International Workshop on the Progress of Research for Disaster Mitigation of Earthquakes and Volcanic Eruptions in the North Pacific Region (hereafter referred to as "WS") at HU's Conference Hall in conjunction with ISTC.

Due to its location in a plate subduction zone, the North Pacific region has the world's greatest concentration of earthquakes and volcanic activity, and has suffered extensive damage as a result of tsunami and volcanic eruptions. HU has worked closely with researchers in Russia and the USA to elucidate the mechanisms behind earthquakes and volcanic eruptions in the region and to promote research studies into prediction technology. The aim of the WS was to discuss the roles of international cooperation with the aim of further promoting these research activities. Despite the event being held during the work week, a total of 130 people participated, including 13 guests invited from abroad and members of the general public.

The workshop began with opening addresses from individuals including Institute of Seismology and Volcanology Director Yuichiro Tanioka, Executive and Vice President Hisatake Okada, and MEXT's Earthquake and Disaster-reduction Research Division Director Yoshinori Suzuki. On the first day and on the morning of the second day, researchers invited from Russia and the USA, and their Japanese counterparts, including representatives from the

Japan Meteorological Agency, the Geospatial Information Authority of Japan and the Geological Survey of Hokkaido, made a total of 18 presentations on the present situation of earthquake/volcano monitoring and alert systems. This was followed by enthusiastic discussions on various topics. The afternoon session on the second day focused on reports regarding future research projects in each country followed by a general discussion. Participants reconfirmed the achievements and challenges of the joint research programs implemented thus far, and reiterated their shared opinion concerning the importance of strengthening cooperative systems for the future. There were also proposals about further advancing joint research activities such as those aimed at fostering the next generation of researchers and contributing to disaster prevention efforts.



Commemorative photo of all participants

GCOE-NGIT 2010

For three days from January 18 through 20, the 3rd International Symposium on the Global COE Program of the Center for Next-Generation Information Technology Based on Knowledge Discovery and Knowledge Federation (GCOE-NGIT 2010) was held at HU's Conference Hall under the auspices of this Global COE Program.

The symposium began with an opening address by Dean Masanori Koshiba of the Graduate School of Information Science and Technology. Keynote addresses from researchers at the forefront of information and life-science fields in Japan and abroad followed as well as a session with selected students that have made outstanding achievements in the latter period of their doctoral degree programs.

Since interdisciplinary collaborative research is one of the major pillars of the Center under the Global COE Program, panel discussions highlighting interdisciplinary joint research in information and nano fields were also held this year (in addition to the aforementioned keynote speeches and selected-student session) along with lectures highlighting an interdisciplinary collaboration project by members of the Center. Graduate students from the Graduate School of Information Science and Technology's latter-period doctoral degree programs and postdoctoral fellows held a total of 86 poster sessions, in which they engaged in lively discussions with visitors.

The symposium was a significant event with more than 300 participants,

and included businesses and other people not affiliated with the university. As a related activity, the Global COE Program held post-symposium workshops at the HU Meme Media Laboratory on January 20 and 21.



Keynote speech



Students' Conference Held on the Sidelines of the TEMM



Post-presentation commemorative photo



Students talk with Environmental Ministers

On May 22 and 23, the Tripartite Environment Ministers Meeting (TEMM) made up of ministers from China, Japan and Korea was held in Chitose and Tomakomai. A poster presentation session by local students was held in conjunction with the meeting.

At the session, five students from each of Tomakomai National College of Technology and the Chitose Institute of Science and Technology (hereafter referred to as "the technical college" and "CIST") were joined by a total of eight students – two Japanese, four Chinese, and two Korean – from HU's Public Policy School, the Graduate School of Environmental Science, the Faculty of Fisheries Sciences, and the Graduate School of Economics and Business Administration.

In order to prepare for the presentation session the students conferred online, and the day before the

presentations, all 18 students convened at a Tomakomai hotel and from the early afternoon until midnight narrowed down the overall theme for their presentations to: the requirements for and methods of providing effective environmental education to two generations – children and adults in TEMM countries.

On the day of the poster presentations, the students from the technical college and CIST prepared Japanese versions of posters of the three countries, while the Chinese and Korean students prepared theirs with the help of the HU Japanese students. The environment ministers of their countries listened attentively and expressed their candid views and impressions about the students' specific approaches to environmental education.

The event offered good opportunities for Japanese, Chinese, and Korean students to interact and deepen their understanding of environmental issues.

Discussion with U.S. Ambassador to Japan H.E. Mr. John Roos

On February 4, students of the Graduate School of Economics and Business Administration and its School of Economics and Business Administration held a discussion with H.E. Mr. John Roos, the U.S. Ambassador to Japan, at the invitation of the U.S. Consulate General in Sapporo.

The 90-minute talk, which took place at Sapporo International Communication Plaza, began with Mr. Roos sharing information about himself and his family, and progressed to his relationship with President Obama and how he supported Obama's presidential bid. Mr. Roos earnestly answered questions ranging from the relocation of the U.S. Marine Corps' Futenma Air Station, to the political and economic situation in Asia, and they even discussed Japanese



U.S. Ambassador to Japan John Roos in discussion with HU students

youth's view of the U.S.

The ambassador encouraged the students to travel outside Japan and cultivate a global outlook to help build a

new future for relations between the U.S. and Japan. The experience was highly worthwhile for all participants despite the brevity of the session.

Office of International Affairs Inaugurated

HU launched the Office of International Affairs (OIA) on July 1 in an organizational restructuring effort that will further promote internationalization in education and research. Users will be able to make one convenient stop to get information and guidance on a wide range of issues that were previously separate in location and authority.

OIA Executive Director Takeo Hondoh (Executive and Vice President) outlined in his speech at the inauguration ceremony at the International Student Center that the major challenges in improving the international mobility of faculty members and students was securing outstanding students and researchers from abroad, and encouraging mobility among Japanese students with overseas institutions. He stressed that the OIA was designed to consolidate efforts by faculty members and administrative staff to promote internationalization within the university and that this goal should be pursued through dialogue among staff members.

The Office is currently divided between two locations on the Sapporo campus, but will be integrated to include all international functions by next March in a new centrally located building.



Group photo after the opening ceremony

Useful Links

Official Website of Hokkaido University

General Information, Recent News, etc.

<http://www.hokudai.ac.jp/en/>

International Student Center

Japanese Course, Scholarship, Lodging/Apartment, Studies/Lifestyle Support, etc.

http://www.isc.hokudai.ac.jp/www_ISC/index-e.cgi

Graduate School Website for Prospective International Students

Admission to Graduate Courses

<http://grad.isc.hokudai.ac.jp/cgi-bin/index-e.pl>

Admission Center

Admission to Undergraduate Courses

<http://www.hokudai.ac.jp/bureau/nyu/english/en/>

Beijing Office

Current Students, Prospective Students and Alumni in China

<http://www.hokudai.cn>

Alumni Association in Taiwan

For Alumni in Taiwan

<http://hokudai-taiwan-dousoukai.blogspot.com/>

Access to Campus

Campus Guide Map Including Sightseeing Information (English, Chinese, Hangul)

<http://hokudai.ac.jp/en/pickup/accesstocampus.html>

Previous Editions

<http://www.hokudai.ac.jp/en/pickup/publicrelations.html>

Your candid views and impressions are welcome as we strive toward continuous improvement of the content. Please contact us in the event that you have changed your e-mail address or wish to unsubscribe.

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