

JSPS Quarterly

Japan Society for the Promotion of Science



FEATURE: University Internationalization

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No. **13**

2005
Autumn



Prof. Motoyuki Ono

Interview with

JSPS President Prof. Motoyuki Ono

What do you think of the overall state of internationalization within Japanese universities?

As scientific research is universal in nature, universities must be places that transcend national borders in attracting outstanding people to them. This said, efforts to develop the international posture of Japanese universities have up till now been left too much to individual researchers. There is still way too little systematic, strategic effort being made in this direction. Having persisted for many years, this problem requires urgent solution if frontier science and technology is to be advanced in Japan. Our university system is currently undergoing its first major reform since the new higher education system was established in 1949 after the war. We should take advantage of this golden opportunity to also enhance the international complexion of Japanese universities.

What is JSPS's role in implementing the new university internationalization program?

It will be JSPS's task to survey the

international programs of 20 universities selected as pilot institutions under the program. We will identify their successful practices, while surveying those of overseas universities as well. Next, we will use these examples to create model international strategies in the 20 universities. Then, we will disseminate the fruits gained from applying these models to other universities in Japan.

As you know, JSPS has a long history of supporting universities through its international collaboration and fellowship programs. It's our desire to build upon this experience in providing even greater support to them. Establishing internationalization strategies and building infrastructure upon which to execute them will be advantageous to universities in terms of enhancing their standing in the selection process of various funding programs.

What do you see as being most important in creating international strategies at universities?

Viewed from a broad perspective, internationalization encompasses a range of issues from university program planning, organization and implementation, to securing qualified educators and administrators while working to enhance their performance, to improving services offered to overseas researchers. To advance such internationalization, a fusion will need to be

achieved between top-down management and bottom-up initiative. The sort of university governance that overarches all departments will need to be established if internationalization activities are to be implemented in a flexible and effective manner. Concurrently, the researchers, educators and administrators who carry out these activities must themselves work to energize their programs by instilling them with an "internal internationalization." It will be important to strike a balance between such self-initiative and overall university governance.

How do you view the path ahead?

It will be necessary to look at the steps universities take in this direction and the results they achieve over a 5-year period. Building models should not be our ultimate objective; they must be used to transmit both a message and a vision to the universities.

Internationalizing universities is an all-embracing process—one with ramifications over a spectrum of higher education, foreign student and S&T policies. To be successful, therefore, this process mandates close coordination among the Ministry of Education, Culture, Sports, Science and Technology (MEXT), JSPS, the universities, and other program affiliates.

The Program: “Strategic Fund for Establishing International Headquarters in Universities”

In FY 2005, Japan’s Ministry of Education, Culture, Sports, Science and Technology (MEXT) inaugurated a funding program to establish and strengthen “international strategy headquarters” within universities and other Japanese research institutions. The program is aimed at creating an internationally competitive research environment in these institutions—one that, amidst fierce global competition for knowledge assets, will attract outstanding researchers to them from both within Japan and abroad.

These headquarters are tailored to the institutional characteristics of each university. Their operation is cross-sectional, permeating all the university’s departments and institutes. The headquarters devise international strategies, while promoting organic linkage, both systematic and cross-departmental, throughout the university. In this way, the program seeks to strengthen, through targeted funding, the international activities of universities and other Japanese research institutions.

Rather than being applied to international joint research, funding under this program provides logistic support for advancing the university’s own distinctive international activities carried out by faculty and students. Concretely, the program supplies funding for the following purposes:

- For information collection, compilation and analysis needed to establish international strategies
- To strengthen international strategy headquarters staffing by hiring and training personnel
- To provide “one-stop” service for foreign researchers and students, both for enrollment processing and life-in-Japan counseling
- To build networks among visiting researchers who have returned to their countries and their Japanese colleagues

MEXT has chosen 20 universities to pilot this program. Each has set up a model international strategy headquarters, which will receive funding over a five year period. The activities of these headquarters are expected to

continue after the funding has ended.

JSPS, in cooperation with the Japan International Science and Technology Exchange Center (JISTEC), functions as a bridge between MEXT and the participating universities. It performs comprehensive analyses of the pilot programs and conducts studies on the internationalization activities of universities both in and outside Japan, extracting examples of good practices. This research and analysis program is scheduled to run for a period of five years from FY 2005–FY 2009.

The program is implemented by the University International Strategy Council, chaired by Prof. Tsutomu Kimura, president, National Institution for Academic Degrees and University Evaluation. The Council provides recommendations on various aspects of university internationalization, including the enhancement of their research activities, educational curricula, and environment for hosting overseas researchers and students.

Program Sketch

Purpose

This new program supports the establishment and promotion of university-wide international strategies tailored the unique institutional character of each university. It does this while working to strengthen the infrastructure upon which to carry out the universities’ internationalization. This process entails the establishment of pilot universities that have the potential serve as emulatable models of internationalization. Successful international strategies developed by these universities are extracted and sent to other universities. Exercising their autonomy, the receiving universities consider adapting these strategies to their respective programs.

Program Outline

This is a new program, launched in FY 2005 by Japan’s Ministry of Education, Culture, Sports, Science and Technology (MEXT). It is budgeted at ¥500 million per year.

Program implementation is commissioned by MEXT to the Japan Society for Promotion of Science (JSPS) and the Japan International Science and Technology Exchange Center (JISTEC).

In turn, JSPS and JISTEC re-commission projects to the selected universities (with each project funded at ¥10-40 million per year). Project duration is five years, from FY 2005 through FY 2009.

Roles of Program Actors

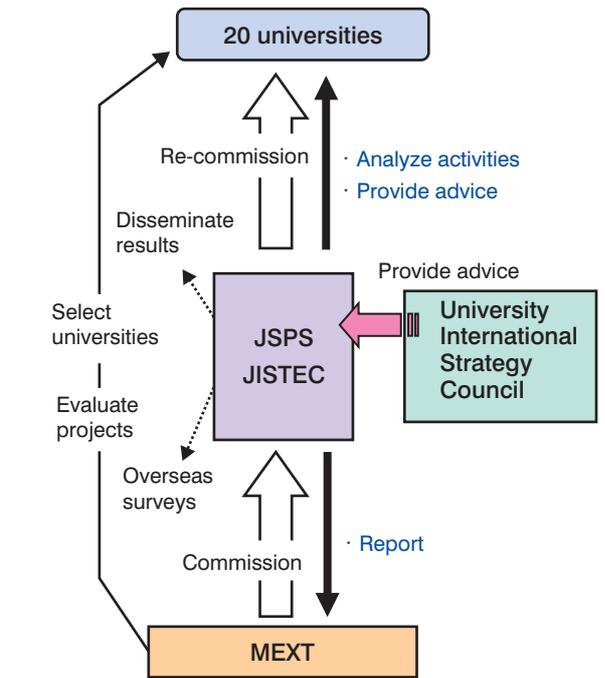
Twenty Pilot Universities
Advance institution-wide international activities by strengthening the functions of their “international strategy headquarters.”
Examples:

- Establish within their organizations international strategy headquarters, and strengthen the program planning and implementation functions of these headquarters
- Systematically strengthen their support systems for foreign researchers and students, including those for enhancing their living environment as well as facilitating education and research
- Secure and train university faculty and staff who can carry forward internationalization initiatives
- Collect and disseminate pertinent information; build networks

JSPS and JISTEC

- Develop strategic models for university internationalization
 - Conduct comprehensive evaluations of the pilot universities’ internationalization activities, and extract good practices
 - Survey international strategies and internationalization activities of universities and other institutions both in and outside Japan
- Provide advice on internationalization activities to pilot universities
- Provide funding to support such activities
- Disseminate good results to other universities

University International Strategy Council
Provide advice to JSPS regarding overall program operation



MEXT

- Select 20 pilot universities (selection made by evaluation working group within the Committee on International Affairs under MEXT’s Council for Science and Technology)
- Conduct interim project evaluations (at 3-year juncture) and post-project evaluations

List of Twenty Pilot Universities

Institutions	Name of strategy headquarters
Hokkaido University (national university)	International HQs on “Sustainable Development”
Tohoku University (national university)	Global Operations Center
The University of Tokyo (national university)	Division for International Relations
Tokyo University of Foreign Studies (national university)	International Strategy Headquarters
Tokyo Institute of Technology (national university)	International Planning Office
Hitotsubashi University (national university)	International Headquarters
Niigata University (national university)	International Headquarter and International Academic Support Office (IASO)
Nagoya University (national university)	International Exchange and Corporation Headquarters
Kyoto University (national university)	The Organization for the Promotion of International Relations (OPIR)
Osaka University (national university)	International Affairs Board
Kobe University (national university)	Office for the Promotion of International Exchange
Tottori University (national university)	Headquarters for Planning and Promoting International Strategies
Hiroshima University (national university)	Organization for Promotion of Strategic Internationalization
Kyushu University (national university)	Organization for the Planning and Coordination of International Affairs
Nagasaki University (national university)	Center of International Collaborative Research, Nagasaki University
The University of Aizu (prefectural university)	Center for Strategy of International Programs
Keio University (private university)	Organization for Global Initiatives
Tokai University (representative), Kyushu Tokai University, Hokkaido Tokai University (private universities)	Head Office of International Affairs, Tokai University (HIAT)
Waseda University (private university)	Office of International Research Promotion, Waseda University
National Institutes of Natural Sciences (inter-university research institute)	International Strategic Headquarters

— Carried out by the Overseas Fellowship Division

New MoU Concluded with New Zealand

On 1 June, the signing ceremony was held for a new memorandum of understanding with the New Zealand Ministry of Research, Science and Technology (MoRST). It lays the foundations for mutually promoting and strengthening Japan-New Zealand scientific cooperation through a program of joint research, inter-CoE collaboration, and researcher exchange.

Heretofore, JSPS had unilaterally supported a relatively small-scale program that saw Japanese researchers visit New Zealand and invited NZ researchers to Japan. The new MoU adds greater breadth by stipulating programs supported on a bilateral basis. Its implementation will be carried out on



From left to right: Prof. Ono, Prime Minister Clark, Dr. Anderson

the New Zealand side by the Foundation for Research, Science and Technology (FRST), Health Research Council of New Zealand (HRC), and The Royal Society of New Zealand (RSNZ), under the guidance of MoRST. The next step will be for JSPS to establish program

guidelines with these implementing organizations, upon which to launch expanded collaborative activities.

The signing ceremony was held at the official residence of the New Zealand Ambassador to Japan, Dr. John McArthur, in the presence of New Zealand Prime Minister Helen Clark, who was visiting Japan at the time. JSPS president Prof. Motoyuki Ono and MoRST chief executive Dr. Helen Anderson signed the MoU into effect. Following the ceremony, all stayed for afternoon tea and, in a relaxed and friendly atmosphere, talked about the future development of scientific exchange between the two countries.

— Research Cooperation Division I

Expanded MoU Concluded with CNRS

On 15 June, a signing ceremony was held in Paris for a new memorandum of understanding between JSPS and the Centre National de la Recherche Scientifique (CNRS). It had been over 30 years since the original agreement was concluded in 1973. During that period, a close Franco-Japanese collaborative research relationship had evolved. On this occasion, the MoU,

revised and updated to strengthen further bilateral research cooperation, increased the number of joint projects and workshops, while putting in place a program framework aimed at contributing to the formation of sustainable networks between research teams of the two countries.

— Research Cooperation Division I



CNRS director general Prof. Bernard Larrouturou (center), JSPS president Prof. Motoyuki Ono (right)

Meeting of Japan/Korea Joint Committee for Basic Scientific Research

On 24 May, the fifteenth meeting was held of the Japan/Korea Joint Committee for Basic Scientific Research at the Kyoto International Conference Hall. At the meeting, the Japanese members, headed by co-chair Prof. Keitaro Yoshihara



(fellow, Toyota Physical & Chemical Research Institute) discussed with the Korean delegation the implementation of the Japan-Korea Scientific Cooperation Program, which is operated jointly by JSPS and the Korea Science and Engineering Foundation (KOSEF). Alternating between Japan and Korea, these meetings have been held since the program started in 1991.

This time, the Committee reviewed, based on reports submitted by their principal re-

searchers, the results of the joint research projects and seminars that ended last fiscal year, and they selected projects and seminars to be conducted in FY 2005. The selection results were as follows:

	Applications	Selections
Joint Research Projects	101	36
Seminars	30	13

They decided to set the application period for next year's projects and seminars between around September to early December.

— Asian Program Division

First Projects Selected under CHORUS Program

On 6 June, a 5-member delegation headed by Prof. Jean Laforet from the French Ministry for Research came to JSPS to hold a committee meeting to select the initial projects under the CHORUS Program, which was launched this year to support Franco-Japanese joint research in the humanities and social sciences and related interdisciplinary fields. Altogether, 35 applications were received,

from which seven highly ranked in the previously conducted document review were chosen by the committee. Participating in the meeting on the Japanese side were JSPS executive director Mr. Isao Kiso and inspector general Dr. Hirochika Inoue along with two senior program officers of JSPS's Research Center for Science Systems: Prof. Hiroshi Ishii and Prof. Kimio Morimune.

The seven joint research projects, scheduled to be implemented over a 3-year period starting in July, are expected to advance H&SS research collaboration between the two countries while meeting the program's objective of "contributing to the solution of problems facing contemporary society."

— Research Cooperation Division I

Nanotechnology Workshop Held with Academy of Finland

On 11 May, a delegation from the Academy of Finland (AF) visited JSPS's headquarters in Tokyo. Headed by AF president Prof. Raimo Väyrynen, it comprised the following members: Ms. Eeva Laurila, science advisor; Mr. Paavo Löppönen, director, Development and Evaluation; Ms. Annamajja Lehvo, senior science advisor; Dr. Heikki Mäkipää, director, The Finnish Institute in Japan; and Ms. Ai Takase, research project manager. After having lunch with JSPS president Prof. Motoyuki Ono, they got together with JSPS's operational staff to discuss exchange activities carried out under the memorandum of understanding between the two agencies.

Then on the 13th, JSPS and AF joined forces to hold a workshop on "nanoscience and nano-technology." The workshop was initiated based on a

proposal by the Academy, which said it wanted to introduce nanotechnology research being conducted in Finland to Japan and to create a platform for discussing the possibility of collaboration in this field with Japanese researchers.

At the workshop, presentations were given by eight researchers, including Prof. Yasuhiko Arakawa, Research Center for Advanced Science and Technology, The University of Tokyo; Prof. Toshiro Hiramoto, Institute of



Prof. Arakawa addressing workshop on 13 May



From left front row: Dr. Mäkipää, Mr. Löppönen, Prof. Väyrynen, Ms. Laurila, Ms. Lehvo; Third from right back row: Prof. Ono

Industrial Science, The University of Tokyo; and Dr. Petri Ahonen, program manager, Academy of Finland, before some 50 attendants. Following the presentations, a vigorous panel discussion was held on the idea of creating new interdisciplinary domains by interfacing diverse fields and on the need to make useful application of the fruits of nanotechnology research in enhancing society and improving people's lives, among other topics.

— Research Cooperation Division I

Tenth "Science in Japan" Forum held in Washington, DC

On 10 June, JSPS Washington Office held its tenth "Science in Japan" Forum at the Cosmos Club. The forum, which seeks to promote Japan-US collaboration by introducing the latest trends in Japanese scientific research, has since 1996 been held with the support of the National Institutes of Health (NIH), National Science Foundation (NSF), U.S. Department of Energy (DOE), and American Association for the Advancement of Science (AAAS). In tune

with the "World Year of Physics," this forum was titled "Progress in Interdisciplinary Fields of Physics: Cosmos, Elementary Particles, Nuclei and Atoms."

The forum opened with remarks from Mr. Hiroshi Fukai, director, JSPS International Program Department, followed by Prof. Akira Masaike, director, JSPS Washington Office, who explained why physics was chosen as the

forum's theme and introduced the two moderators.

The morning session was moderated by Prof. Michael S. Turner, assistant director, NSF Directorate for Mathematical & Physical Sciences and professor, University of Chicago, who described the current state of particle physics and astro-physics. The session proceeded with presentations from Prof. Humitaka Sato, professor emeritus,

Kyoto University; Prof. Yoichiro Suzuki, director, Institute for Cosmic Ray Research, The University of Tokyo; and Prof. Yasuo Tanaka, director, JSPS Bonn Office.

Prof. Peter D. Barnes, former director, Physics Division, Los Alamos National Laboratory, moderated the afternoon session. He started the dialogue by describing recent trends in atomic and nuclear physics, and was followed by presentations from Prof. Toshimitsu Yamazaki, professor emeritus, The University of Tokyo; Prof. Ken'ichi Imai, professor, Graduate School of Science, Kyoto University; and Prof. Yasuhiko Fujii, director, Neutron Sci-



ence Research Center, Japan Atomic Energy Research Institute.

All of the speakers were leading experts in their respective fields. As their presentations remained broad in scope while elaborating the latest state of related research, they were of consid-

erable interest to general science practitioners and administrators as well as to specialists in those fields.

The forum assembled some 130 government administrators, university researchers and others, who listened avidly to the presentations and exchanged information on research in the subject fields with the speakers and one another.

For abstracts and biographical notes, please see the following website: <http://www.jspsus.org/FORUM2005/Agenda05.htm>

— JSPS Washington Office

JSPS Science Forum Held by Stockholm Office

On 17 June, the fifth in the series of the JSPS Stockholm Office's Science Fora was held at The Royal Swedish Academy of Sciences. This forum is organized by the Office each year to share with Nordic researchers information on top-level research being carried out in Japan, and to learn from them the latest trends of research in their region. This time, it was decided to focus the forum on pioneering research with practical applications, an area of special emphasis within the Swedish research community. As material science is designated as one of four priority research categories in the Japanese government's Second S&T Basic Plan, the forum was given the title "Frontiers in Material Science."

The proceedings began with messages of greeting from JSPS president Prof. Motoyuki Ono and Royal Swedish Academy of Sciences first vice presi-

dent Prof. Leif Wastenson. Following them, a total of five distinguished speakers from Sweden and Japan delivered presentations on nano-materials and devices.

The morning session speakers were Prof. Sumio Iijima, director, Research Center for Advanced Carbon Materials, National Institute of Advanced Industrial Science and Technology (AIST); Prof. Eleanor Campbell, Göteborg University; and Prof. Osamu Terasaki, Stockholm University, while the afternoon session's were Prof. Bo Monemar, Linköping University; and Prof. Isamu Akasaki, Meijo University (professor emeritus, Nagoya University). The forum attracted nearly 70 students and researchers, a great many of whom were young researchers. They engaged the speakers in active rounds of questions and answers. The stately venue of The Royal Swedish Academy of Sci-



ences coupled with the intensity of audience's enthusiasm imbued the forum with a profoundly academic atmosphere.

Finally, the Stockholm Office took the opportunity to thank the staff of The Royal Swedish Academy of Sciences for their cooperation in providing the fine venue as well as in carrying out all facets of the event, including pre-forum advertising. See related website at <http://www.jsps-sto.com/site.aspx?id=533>

— JSPS Stockholm Office

Events

Bonn Office

German-Japanese Symposium in Tokyo
"Urban Planning – Sustainable Cities"
National Olympics Memorial Youth Center, Tokyo, 12 September 2005

San Francisco Office

JSPS/UBC Asian Studies Joint Colloquium
"Experiences With and Within: Christians in Japan from 16th Century to Present Days"
University of British Columbia, Vancouver, 23-24 September 2005

Strasbourg Office

The Fourth JSPS Forum in France
"Oceanography"
University Louis Pasteur, Strasbourg, 23 November 2005

Recruitments

For FY 2005

JSPS Postdoctoral Fellowship (Short-term) for North American and European Researchers
Application deadline from host institution to JSPS: 11-14 October 2005

For FY 2006

JSPS Postdoctoral Fellowship for Foreign Researchers (Standard)
JSPS Invitation Fellowship for Research in Japan (Short-term)
Application deadline from host institution to JSPS: 8-12 May 2006

For details, ask a prospective host researcher or visit our website.



JSPS Summer Program



Attended by 104 young pre- and post-doctoral researchers from the US, UK, France, Germany and Canada, the JSPS Summer Program, co-sponsored by The Graduate University for Advanced Studies (Soken-dai), was held over a 2-month period from 14 June to 24 August.



Opening ceremony

The program began with a one-week orientation held at Shonan Village in the seaside resort town of Hayama. At it, the fellows received special lectures, gave poster presentations, attended classes in Japanese language learning, engaged in Japanese culture activities, and experienced Japanese living through homestay with a Japanese family. After the orientation, the participants went their

separate ways to their respective host institutions. Their summer internships afforded them an experience upon which to consider coming back to Japan to do research at future junctures in their careers. On the day before the program ended, the participants reassembled to present their research reports.



Doing Japanese calligraphy

The following is a close-up of some of the orientation program's main components and of the fellows' research activities. For more detailed information on the JSPS Summer Program, please see our website: <http://www.jsps.go.jp/english/e-summer/>

— Carried out by the Overseas Fellowship Division

Japanese Language Training

Eleven hours were dedicated to intensive Japanese study. The participants were divided into classes by the level of their existing Japanese language ability. They learned Japanese "survival" language of a kind useful in their daily lives and lab activities. Many fellows commented that the exercise was "difficult but a good and interesting challenge," some saying that it

gave them the incentive to continue studying Japanese after the program ends.



Homestay

On the weekend, the fellows stayed at Japanese homes, where they enjoyed speaking in Japanese and eating with their host family members. There were a variety of host families, ranging from retired couples to younger families with children. Most of their homes were located in the vicinity of Soken-dai. Some of the fellows enjoyed sightseeing with their host families, going to such place as the money-washing shrine or the Great Buddha in Kamakura, and experiencing firsthand Japanese culture by wearing a kimono or joining in a tea ceremony. Each in his or her own way was well received and entertained by the host family.

Among the fellows' comments were the following: "Experiencing a 'typical' Japanese family and seeing real Japanese family culture, I learned a lot about Japanese family life and Japanese culture that are not obvious from guidebooks." "Even some language difficulties are no real barrier between open-minded people."

Poster Session

This was the first time for the Summer Program to include a poster session. The



participants prepared their posters before coming to Japan. The session was meant to enhance the experience of each of the young researchers within the program, while facilitating an information exchange among them. Of the session, one of the participants commented, "I was interested to see what the others are working on, to talk with students from completely different disciplines, and to find out what brought us all to Japan."

To Past and Present JSPS Fellows:

We are in the process of updating our mailing list. If you have changed your address or would like to add your name to the *JSPS Quarterly* mailing list, please mail your full name and address (including country) to JSPS Fellows Plaza, 6 Ichibancho, Chiyoda-ku, Tokyo 102-8471 or fax it to us at +81-3-3263-1854. Please indicate whether you are a current or former JSPS Fellow.

Research Activities

The centerpiece of the Summer Program was the fellows' internship at a host research institution, where they took part in research activities with frontline Japanese researchers in their respective fields.

Mr. Joel Chestnutt, Mr. Mike Stilman, Mr. Philipp Michel

(PhD students, Robotics Institute, Carnegie Mellon University) at Digital Human Research Center (DHRC), National Institute of Advanced Industrial Science and Technology (AIST)

"In our research we try to formulate algorithms that allow humanoid robots to perceive the world as well as plan intelligent and useful activities such as walking and manipulation. At the DHRC, we had the unique opportunity to implement our algo-



Three fellows with Dr. Kagami and Dr. Nishiwaki

rithms on some of the most advanced humanoid robots in the world. More im-

The following are some comments offered by fellows on their research experiences.

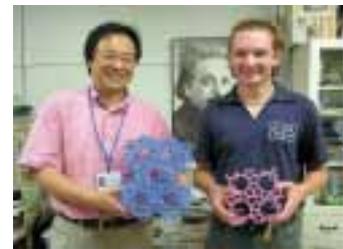
portantly, we were part of an incredible community of researchers whose guidance and friendship are invaluable. Our hosts, Dr. Satoshi Kagami and Dr. Koichi Nishiwaki, and the students in the lab created a supportive and fun work environment. In the future, we plan to continue the productive international teamwork started this summer. We hope that this collaboration will be enhanced by having had the unique opportunity to immerse ourselves in Japanese culture."

Mr. Robert Dörner

(PhD student, University College London) at The University of Tokyo

"Under the program, I investigated a type of zeotype, microporous material and its application as storage device for hydrocarbons in exhaust fumes. The summer program has allowed me to learn new techniques in my area of work and use

equipment that would not have been available at my home research institution. Hopefully, I will be able to stay in touch with the many nice people I have met in this program. The experience I gained in the lab at The University of Tokyo will be a good foundation for any future work I plan to undertake during and after my PhD course."



Mr. Dörner with his host Assoc. Prof. Tatsuya Okubo

Bonn

Bonn Office Reports on Pre-Orientation for Summer Program

On 3 June, JSPS Bonn Office held a pre-departure orientation at the Gustav-Stresemann-Institut for participants of the Summer Program in Japan. The orientation, held this year for the first time, assembled four of the seven German participants in this year's program and nine of the participants in last year's.

The orientation began with self-introductions by the participants; a briefing on JSPS's international activities, including the Summer Program; and an introduction to the German-Japan exchange program implemented by DAAD (German Academic Exchange Service). After a coffee

break, two of last year's participants gave animated presentations on their experiences of living and doing research in Japan under the Summer Program. Then, Prof. Dr. Heinrich Menkhaus, chair of the JSPS Club, introduced the participants to the German fellows' alumni association with an eye to inviting their membership upon return from Japan. Lastly, a Q&A session was held on life and research in Japan.

For this year's program participants, the meeting provided a good opportunity to get to know each other as well as to learn from the experiences of the past partici-

pants, which all the more spurred their motivation to go to Japan this summer. As for last year's participants, they were both happy to share their experiences and to have the chance to get back together with their Summer Program colleagues. Both gave the meeting high marks and expressed thanks to JSPS for holding it.

— JSPS Bonn Office



Washington, DC

NSF Holds Summer Program Orientation

On 4-5 April, the National Science Foundation in the US held an orientation for participants under its East Asia and Pacific Summer Institutes program. Attending were students bound for Japan, China, South Korea, Taiwan and Australia. About 60 of the some 150 participating students would attend JSPS's summer program in Japan.

The orientation began with a general session for all the participants on the nature and purpose of the NSF program. It was followed from the afternoon of the first day by location-specific meetings. In the one on Japan, JSPS Washington Office director Prof. Akira Masaike and his staff took part in a session for the students scheduled to

go to Japan, in which they explained the summer program and provided support for a lecture given on Japanese language and culture.

— JSPS Washington Office

Pre-Departure Summer Program Meeting & Alumni Fellowship Evening in UK

In the afternoon of 20 May, a pre-departure meeting, organized by the JSPS London Office and the British Council Japan, was held for participants in the JSPS Summer Program on the premises of the British Council UK. The purpose of the meeting was to familiarize the participants of the Summer Program, while laying the groundwork among them for utilizing their summer experience in continuing collaboration with Japanese colleagues. An explanation was given of the program and information provided on necessary pre-departure preparations. An introduction was also given of JSPS programs that can offer the participants a next step in advancing joint research at



Pre-departure meeting

Japanese institutions after the Summer Program ends.

The meeting started off with remarks by the British Council Japan, followed by a program description from the JSPS London Office. Then, representatives of the Biotechnology and Biological Sciences Research Council, The Royal Society, and The Daiwa Anglo-Japanese Foundation offered introductions of UK-Japan exchange carried out by their respective organizations. The British participants said the meeting offered them a good chance to meet their fellow travelers.

Following the meeting, the UK-JSPS Alumni Association held an "Alumni Fellowship Evening." Bringing together researchers who had participated in JSPS programs and others interested in Japan, the event provided a good opportunity for exchanging information on Anglo-Japanese research activities, while expanding communication between researchers of the two countries. It was held at *Galerie Besson*, where the "living national treasure" Japanese



Alumni fellowship evening

potter Tatsuzo Shimaoka was conducting an exhibition, thus giving the participants, including those who had attended the pre-departure meeting, a unique opportunity to observe firsthand Japanese culture.

These young researchers, it is expected, will contribute to the alumni association's activities upon returning from Japan after the Summer Program, helping to broaden the scope of the Anglo-Japanese research community. Though small in scale, it is hoped that such events will be held in other regions, contributing to similar bilateral research community building in them as well.

— JSPS London Office

UK-JSPS Alumni Association Holds General Assembly Along with Evening Lecture and Debate

In the evening of 14 July, the second General Assembly of the UK-JSPS Alumni Association was held at the Royal Geographical Society. At the assembly, it was announced that Ms. Melody Liles would succeed Dr. Darren Bagnall as the association's secretary. After completing this and other items of business, a lecture and debate, entitled "Earth-Shaking Events: Natural Disasters and Their Global Impact," was held on the impact of natural disasters and vulnerability to them, focusing on the recent tsunami in Asia.

Invited to address the session was Prof. Kenji Satake, Geological Survey of Japan, National Institute of Advanced Industrial

Science and Technology (AIST); Prof. Julian Hunt, University College London; and Dr. Terry Cannon, University of Greenwich. Their presentations not only covered natural disasters from a perspective of the natural sciences but also in terms of their social and political impacts as seen from the viewpoint of the humanities and social sciences. Capturing the interest of all the attendees, this approach spawned an extremely broad-based discussion. Altogether, some 60 people attended the event, who included government officials, researchers in related fields and NGO representatives as well as the association members. As it gave the alumni an opportunity to interface with people from various sectors, this lecture-debate



session had value beyond being a mere members activity. In the future, it is expected that the association will continue to build the Anglo-Japanese research community through events such as this.

— JSPS London Office

JSPS Science Dialogue

From this fiscal year, JSPS has instituted the "Science Dialogue Program," which provides a framework for JSPS fellows to participate in the educational programs of high schools within the vicinity of their host institutions. Through this program, JSPS seeks to kindle a thirst for learning among the high school students, while giving the participating fellows an opportunity to deepen their ties with Japan through their contact with the students.

On 24 June, Dr. Ruth Goodridge, a JSPS fellow at the Nara Institute of Science and Technology, gave a lecture under the program to around 30 students at Nara High School. Her research topic at the Institute being "Development of Bioactive Glass-Ceramics for Use with Selective Laser Sintering." Dr. Goodridge's lecture to the high school students was entitled "Life and Research of a Biomaterial Scientist."



Giving lecture to students

Using an abundance of pictures and other visual aids, she explained why she wanted to be a researcher; and drawing upon her research experiences in Japan and other countries, described her work as a scientist to date. She also used samples to illustrate points in her lecture on biomaterials.

Dr. Goodridge explained how biomaterial have various applica-



Dr. Ruth Goodridge

tions including use in contact lenses and artificial bones, and how there is a demand for developing biomaterials, which being neither toxic or allergenic, are matched to the needs of patients. She said it is her own personal dream to develop biomaterials that synchronize with the human body and can adapt to its growth. She also shared her views on the place of female scientists within the research community. Finally, she emphasized to the students that the best way for them to be highly motivated in their studies is to truly enjoy the pursuit of science.

Dr. Goodridge's lecture was followed by a Q&A session, in which the students asked volleys of questions, many in English, ranging from surgery to implanting artificial bones and the properties of ceramic materials to whether other members of Dr. Goodridge's family are scientists and what she enjoys most about her work. To each of these questions, Dr. Goodridge offered carefully worded, thoughtful replies.

— Overseas Fellowship Division

Recent Visitors to JSPS (May-July 2005)

LIPI Chairman Visits JSPS

On 15 June, a 3-member delegation from the Indonesian Institute of Sciences (LIPI), headed by LIPI chairman Prof. Umar Anggara Jenie came to JSPS along with Kyoto University professor Dr. Yuji Imamura and three members of his group. Meeting with JSPS executive director Mr. Isao Kiso, they discussed the current state and progress made under the core university project between the Research Institute for Sustainable Humanosphere, Kyoto University and the Research and Development

Unit for Biomaterials, LIPI, which is approaching its tenth year of operation. They also considered the possibility of future collaboration under the Asian CORE Program, which JSPS launched just this fiscal year.

In the discussion, it was confirmed that JSPS and LIPI will work together in holding a tsunami seminar in Padang, Indonesia, this August.

— Asian Program Division



At right: Prof. Umar Anggara Jenie

Czech Education Minister Visits JSPS

On 23 May, Dr. Petra Buzková, Minister of Education, Youth and Sports of the Czech Republic, and Dr. Václav Pačes, president of Academy of Sciences of the Czech Republic, led a delegation to JSPS. They held a discussion with JSPS president Prof. Motoyuki Ono and other JSPS executives in which it was agreed to further develop the

exchange activities being carried out under the memorandum of understanding between JSPS and the Academy of Sciences.

— Research Cooperation Division I



From bottom left: Prof. Ono and Dr. Buzková

Message from Former JSPS Fellow (1)

My Stay in Japan as a JSPS Postdoc Fellow

In 1986, I finished my PhD in microbiology at University Louis Pasteur (ULP) in Strasbourg, France. Though I had several other options to go to laboratories in the EU or US as a postdoc researcher, I finally decided to choose Japan. I still clearly recall the conversations I had with my colleagues and boss, who asked "Why Japan? What a strange idea! You should go to the States or stay in Europe." At that time, the Japanese economy was at its peak, what would later be called a "bubble." However, I personally was interested in getting to know a culture and lifestyle different from those of western countries. I also wanted to gain new experiences in a Japanese university environment.

After exchanging several letters with various laboratories in Japan (at the time there was no email), I found one working on pathogenic bacteria at The Institute of Medical Science, The University of Tokyo. I came to Tokyo in February 1987 as a JSPS postdoc fellow without having almost any background knowledge of Japan or the host group. Nevertheless, I was very lucky: I was able to easily settle in Tokyo and initiate my research with colleagues in the host laboratory. I really enjoyed life in the laboratory, as the lab meetings were kindly held in English and everybody was helpful to

me in conducting my new experiments. Fortunately, I was also asked to work on one of lab's main projects, which together with my own research required pretty hard work every day. After almost a year into my stay, I was able to present my own work at an annual meeting of The Molecular Biology Society of Japan held in Kyoto. I was also able to publish my study in a good journal soon after leaving Japan. In addition, the fellowship gave me an opportunity to make many friends, enjoy daily life in Tokyo and learn lots about Japanese culture. These all became an integral part of my special background. Some 18 years after my stay in Japan, I still maintain strong scientific and personal relationships with my Japanese colleagues, while creating new interpersonal networks to promote scientific cooperation between the two countries.

In this sense, I was quite lucky to find a good laboratory even without visiting Japan prior to my postdoc stay. Not all of my French colleagues who have gone to Japan were so lucky, as some of them found it less than easy to adapt to their host laboratory. Now, it is much easier for foreign applicants to find a suitable lab in Japan by taking advantage of JSPS's short-term fellowship programs, which are very useful as they give the foreign researcher an opportunity



Prof. Marie-Claire Lett

JSPS postdoc fellow, 1987
 Professor at University Louis Pasteur,
 Strasbourg, France
 President of "Association des anciens boursiers francophones de la JSPS"

to observe firsthand the research activities, background and (a very important point!) atmosphere of the potential host laboratory. In addition, information from the members of the JSPS alumni association "Association des anciens boursiers francophones de la JSPS" on laboratories and life in Japan can be particularly useful for French-speaking applicants preparing to stay in Japan.

Simultaneously, it will also be important for us to encourage and help Japanese students and young researchers to come to French laboratories. Thus, it is my strong wish that JSPS will continuously support exchange and promote collaborative scientific activities between Japan and France.



Prof. Lett with students in her lab



University Louis Pasteur, Institute of Botany



Introducing JSPS Overseas Offices: Strasbourg

In May 2001, JSPS Strasbourg Office was established on the second floor of Maison Universitaire France-Japon in Strasbourg, France. Located next to the botanical garden of University Louis Pasteur (ULP), the office's window commands a view of St. Maurice Church and its balcony of ULP's observatory. Though humbly staffed with just a director (Prof. Yoichi Nakatani) and one trainee, the office's program is vibrant. Being contagious, this atmosphere seems to energize many of the researchers who visit the office.

Among the principal functions of the Strasbourg Office are holding JSPS Fora and Academic Seminars, giving briefings on JSPS programs, recruiting for JSPS fellowships, and supporting the operation of a JSPS fellows alumni association.

Holding JSPS Fora

Since 2002, the office has held these large-scale fora once a year in Strasbourg. This year, the forum will be held on 18 November on the theme "Oceanography." The upcoming event is scheduled to include poster presentations by young researchers in addition to lectures by highly distinguished scientists from Japan and France. The proceedings will be aired in real-time over the Internet. (<http://www.canalc2.tv/>)

Holding Academic Seminars

Since 2003, the office has in cooperation with Maison Universitaire France-Japon been holding Academic Seminars at a fre-

quency of once or twice a month. Each is held on a different topic, with a French or Japanese researcher in the subject field serving as the lecturer. Small in scale, these seminars offer the 20-30 attending researchers an opportunity to engage in close, content-rich discussions with the lecturer.

Giving Briefings on JSPS Programs

Also since 2003, the office staff has delivered introductions to JSPS programs at over 40 universities, *grandes ecoles* and research institutes throughout France. At these meetings, views are exchanged with university presidents and other administrators. Former JSPS fellows often accompany the staff and answer questions from firsthand experience on doing research and living in Japan. The office plans to double its efforts in disseminating information on opportunities provided for French researchers through JSPS fellowships and other programs.



Prof. Nakatani describing JSPS programs

Recruiting for JSPS's Postdoctoral Fellowships

In cooperation with CNRS, the office



issues calls for applications for JSPS's Postdoctoral Fellowships (Short-term) for North American and European Researchers. Twice a year, it convenes a joint selection committee to choose nominees from among the applicants, whom it refers to JSPS's headquarters in Tokyo.

Supporting JSPS Alumni Association

Association des anciens boursiers francophones de la JSPS was established in 2004. The association is chaired by ULP professor Marie-Claire Lett and boasts Nobel laureate Jean-Marie Lehn (professor ULP and Collège de France) as its president emeritus. The association has a quickly growing membership, which now numbers over 120, and is planning to establish branches in regions throughout the country. The office is scheduled to assist the members in holding their upcoming general meeting and in building a network among former JSPS program participants. (Association's webpage: <http://assoc-jsps.u-strasbg.fr/>)

— JSPS Strasbourg Office

Prof. Yoichi Nakatani Receives Légion d'Honneur from France

The director of JSPS Strasbourg Office, Prof. Yoichi Nakatani, was awarded *Chevalier dans l'ordre national de la Légion d'Honneur* from France in a ceremony held at University Louis Pasteur (ULP) on 27 May. The conferral date of the order was 31 December 2004. The *Ordre de la Légion d'Honneur* was established by Napoleon in 1802 to commend meritorious service to the nation.

Since 1977, Prof. Nakatani has served as a CNRS (Centre National de la Recherche Scientifique) researcher, research director and emeritus research director at ULP,

where he organized a research group with Prof. Guy Ourisson, former president, French Academy of Sciences. His vigorous work in the group conducting a chemical, biochemical and biophysical analysis of biomembrane evolution achieved highly appraised findings, which have been reported in such journals as *Nature*. Over many long years as a professor at ULP, Prof. Nakatani also made substantial contributions to furthering academic exchange between France and Japan, including the establishment of collaborative agreements between ULP and leading Japanese universities and institutes.



Prof. Guy Ourisson and Prof. Yoichi Nakatani

In 2002, Prof. Nakatani was appointed as Director of JSPS Strasbourg Office, in which capacity he is striving to promote scientific exchange between Japan and France. In various ways, Prof. Nakatani continues to make tremendous contributions to academic partnership building between Japan and France.

Hailing from the Czech Republic, Dr. Pavel Baroch started his JSPS postdoctoral fellowship at Nagoya University's Eco Topia Science Institute in October 2004. Dr. Baroch's host, Prof. Osamu Takai, met him when he went to the Czech Republic to deliver a lecture under a collaboration with Prof. Jindrich Musil, who was at the time Dr. Baroch's faculty advisor. Dr. Baroch's colleagues at the Institute say, "He is a cheerful, talkative person, easy for everyone in the lab to communicate and work together with."

We understand your PhD work was focused on the study and application of various plasma sources operated in a vacuum and used for surface modification. You changed your focus to the study and development of systems for waste water treatment under the JSPS fellowship, didn't you?

Yes. We are attempting to use an electrical plasma discharge in a liquid medium for this purpose. This approach appears to be very promising, especially due to its high efficiency in degrading various kinds of water pollutants and, moreover, its ecological friendliness, as no chemicals are added. The technology can, therefore, be applied to water used for medical purposes and to the quick, cheap and safe processing of medical waste fluids.

In my PhD course, I was interested in bio-processes as well as plasma. Connecting the two fields is what makes my present research so attractive. Nevertheless, many of the problems we're working on now are very new to me, so from time to time can be a really hard nut to crack.



Generation of electric plasma discharge in aqueous solution

Why did you choose Japan to pursue your research?

There were actually two main reasons. One was the expectation I had that Japan would allow me to conduct my research in an environment with a high level of experimental

possibilities. The other was my desire to encounter a completely new culture in which people's thinking, ideas and work style differ from my own, allowing me to exchange experiences with them.

What do you think about the state of research and the research environment in Japan? Does it differ from that in your country?

In my opinion, Japan has a high level of research, driven by really enthusiastic people. Also, the technical equipment in laboratories is excellent. I appreciate the very fast delivery system for standard components required in research activities. In the case of non-standard components, however, it is harder in Japan than in my country to find technicians who can quickly manufacture them.

What merits do you derive from conducting your research in Japan?

For me, there are a lot of pluses. One, for example, is the opportunity it gives me to conduct my research in a country that boasts many of the top leaders in my field. Another is the chance it allows me to see different approaches to solving related problems. And yet another is the possibility being here affords me to establish working relations and contacts with Japanese researchers.

What do you usually do outside of your research?

Since I decided to study Japanese, I have been attending language classes. In addition, I like to play football and ping-pong, go bicycle riding, listen to music, and play my guitar. I travel in my free time to see new places, visit other JSPS fellows working in different areas, and learn something new from Japanese culture. Moreover, I've made several visits to the AICHI-EXPO. On 24 June, there was a Czech day at the EXPO, and I was lucky enough to meet the Czech delegation at it.



Dr. Pavel Baroch

M.Sc. (Applied Physics and Physical Engineering), Faculty of Applied Sciences, University of West Bohemia, Czech Republic, 2000

Ph.D. (Plasma Physics and Physics of Thin Solid Films), Department of Physics, University of West Bohemia, Czech Republic, 2004

How do you feel about Japanese life, culture and customs?

I think Japan is a country of great contrasts. On one hand, there are very hurried people fully occupied with their jobs, while on the other, there are wonderful gardens and temples where people might spend hours just doing "nothing." In any case, life here seems to move faster than what I am used to. Concerning Japanese culture and customs, I must say I have gotten to like almost everything I have experienced so far. The only exception was sitting for a long time with my legs crossed during the tea ceremony. (smile)

What advice would you give someone about to begin a JSPS fellowship?

If you are the person who doesn't mind the challenges of a new culture and life style and have ideas you want to test, then I'd say go for it. Just one word of advice regarding the Japanese language. Even if you know some Japanese, I recommend attending language classes, as for me doing so has been a great way to make new friends.

Interview by JSPS Fellows Plaza



Doing sightseeing at Itsukushima Shrine



Experiencing the tea ceremony

Introducing Japan: Aichi

Dr. Baroch is conducting his research at Nagoya University, which is located in Aichi Prefecture.

Aichi Prefecture is situated in the center of Japan's main island of Honshu. It is a hub for what the Japanese call *monozukuri*—"making things," but in such a way as to apply Japan's traditional spirit and unique craftsmanship to the manufacture of value-added products. A wide variety of things are made in the prefecture, ranging from such traditional crafts as pottery and textiles to manufactured products such as cars and airplanes. Boasting a population of over two million, Nagoya is the region's core metropolis. Built upon a rich infrastructure of history and tradition, as epitomized by centrally located Nagoya Castle, the city is developing into a still culturally steeped, international industrial center.

The 2005 World Exposition, themed "Na-

ture's Wisdom," is currently being held in Aichi Prefecture. The last World Exposition to be held in Japan was 35 years ago in Osaka. This time, more than 120 countries and international organizations are participating in the Aichi EXPO, which features exhibits on such futuristic hi-tech advances as linear motor cars, robots and new energy. Multitudes of people have come to see the EXPO's fascinating pavilions and events. As a special attraction, each of the registered countries is allotted its own day, "national day," to introduce through music, dance, stage and other media its unique culture.

In the world of a Japanese cuisine, Nagoya has its place with such special attractions as *miso-nikomi udon* (handmade wheat noodles boiled in a rich soup of soybean paste).

Among the various ways to prepare *udon*, the people of Nagoya like to cook them in a clay bowl with *hatcho miso* (bean paste,

made locally in Okazaki), leeks, eggs and seasonings. Served simmering in the bowl, *miso-nikomi udon* warms one up in winter. Its popularity, though, is not limited to the cold season: many restaurants in Nagoya serve this style of *udon* all year around. Yet another palate pleaser that can be enjoyed in Nagoya is *misokatsu*, deep-fried pork cutlets served in a *hatcho miso* sauce.



Miso-nikomi udon
Nagoya Castle



Misokatsu



JSPS Fellows Plaza Expands Website

JSPS Fellows Plaza has reformatted and expanded its website, which provides information for present, past and prospective JSPS fellows. Please visit our new site at the following address:
<http://www.jsps.go.jp/english/e-plaza/>

The website features various components, including a "How to Apply" section, "Experiences and Messages from JSPS Fellows," and "Program Guidelines." Our newsletter "JSPS Quarterly" and the booklet *Life in Japan for Foreign Researchers* can also be viewed on the site. Other new pages are currently under construction, including an "E-orientation" and a guide to finding nearby fellows.

If you have any opinions or impressions you wish to share regarding the new Fellows Plaza website, please contact the JSPS Fellows Plaza.

— JSPS Fellows Plaza





Cover photo:

A Japanese scene of autumn leaves and colors

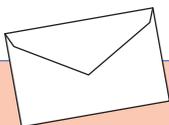
About JSPS

The Japan Society for the Promotion of Science (JSPS) was established as an independent administrative institution to perform the following main functions: fund scientific research, foster researchers, and promote international scientific exchange.



Crowing Rooster, Emblem of the Japan Society for the Promotion of Science

From days of old in Japan, it has been the belief that the vigorous cry of the rooster in the gray of the morning augurs the coming of a new and bright day. As the crowing rooster can therefore be thought of as a harbinger of the kind of new knowledge that promises a brilliant future for humankind, it was chosen as the emblem of the Japan Society for the Promotion of Science. This emblem was designed in 1938 by Professor Sanzo Wada of Tokyo Fine Arts School to depict the rooster that symbolizes the breaking dawn in a verse composed by Emperor Showa.



Request for Reader Comments

We are taking a survey with an eye to reflecting reader interests in the *JSPS Quarterly*. If you have an opinion of our newsletters, we would like to hear from you. We would also like to know your impressions of the JSPS Fellows Plaza webpage. Please e-mail your comments to the JSPS Fellows Plaza at

fellowsplaza@jps.go.jp

or fax them to us at

+81-3-3263-1854.

For further information on JSPS's organization and programs, please visit our website [www.jps.go.jp/english/], or mail or fax inquiries to JSPS Fellows Plaza using the address or fax number given below. JSPS Quarterly and our brochure may also be downloaded.

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