



TOPICS

FEATURE: World Premier International Research Center (WPI) Initiative

World Premier International Research Center (WPI) Initiative	2
• JSPS President Receives German Order of Merit	5
Gathering Held of Restart Postdoc Fellows	
Reporting Meeting for Superlative Postdoctoral Fellows	
 JSPS Hosts 2008 G8-HORCs in Japan 	
• JSPS-NSF Symposium on University Internationalization	
ASEAN+3 Forum on New Energy Development	
🜔 Korea-Japan Joint Committee fór Basic Scientific Research	7
Korean JSPS Alumni Association Holds First General Meeting	8
🦲 Japanese-German Symposium on "Marine Research"	
O Cambridge Symposium on Living Liver Transplantation	9
• Japan Edition of Royal Society's Philosophical Transactions	
🜔 Sweden-Japan Seminar on Malaria Research	10
• Symposium on Technology for Landmine Detection and Removal	.10
🌔 "Ścience in Japan" Forum Held in Washington, DC	
O JSPS Participates in ASEAN Science and Technology Week	11
🔘 JSPS Summer Program	12
• Science Dialogue	14
Recent Visitors to JSPS	



FEATURE

Initial Review Conducted under World Premier International Research Center (WPI) Initiative

Program Outline

In FY 2007, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) established a new program entitled the "World Premier International Research Center (WPI) Initiative," and commissioned JSPS to serve as its secretariat in administering project selection, monitoring and assessment functions. The "WPI Program," as it is called for short, provides priority support to projects implemented by Japanese universities and research institutes aimed at building top world-level research centers staffed by the highest caliber of core investigators. These centers are given a high degree of autonomy, allowing them to virtually revolutionize conventional modes of research operation and administration in Japan. During their funding duration of 10-15 years, each of the center projects is monitored by the WPI Program Committee, which conducts project assessments at an interval of every five years.

Each project receives assessment-adjusted funding in an amount between \$500 million to \$2 billion a year. The total program budget for FY 2008 adds up to \$7.1 billion.

WPI Project Summary

WPI Advanced Institute for Materials Research (AIMR), Tohoku University Center director: Dr. Yoshinori Yamamoto

AIMR is working to advance the development of new, functional materials through interdisciplinary studies that integrate material science, physics and chemistry. Their research employs innovative methods of atomic and molecular control, departing from typical approaches and moving towards the next generation. In addition to basic research, the Institute works 1) to create new compounds and materials with novel and innovative functions, 2) to con-



struct devices based on new fundamental paradigms, and 3) to advance applied research on materials and system architectures that will generate positive societal impacts. Among the targeted innovations are metallic glass materials, echo-emitting optical materials, and nano-scale physical and chemical materials. In addition, the Institute is working to gain a deep understanding of diverse material functions and apply it to creating new basic materials and compounds that can yield significant benefits for the future of humanity.

Institute for the Physics and Mathematics of the Universe (IPMU), The University of Tokyo Center director: Dr. Hitoshi Murayama

With new advances in observational cosmology, it was discovered that we do not know as much about the universe as once thought. It turns out that atoms make up less than 5% of the universe, while the rest, dubbed dark matter and dark energy, remains a big mystery. The Institute's research delves into the most basic questions regarding the universe's birth and evolution. Research is carried out on dark matter, dark energy, neutrinos and unified theories (e.g., superstring theory, quantum gravity). Physics is synergistically combined with knowledge derived from mathematics and cosmology in elucidating such factors as the forces acting upon elementary particles and the relationship between the space-time structure of the universe and the origin of gravity. To advance this work, the Institute is striving to produce new data while creating new mathematics to describe them, and to discover new laws of nature.



Institute for Integrated Cell-Material Sciences (iCeMS), Kyoto University

Center director: Dr. Norio Nakatsuji

Under this WPI project, leading scientists gather at iCeMS in Kyoto to advance research aimed at achieving a synergistic integration of cell and material sciences. Focus is placed on meso-control and pluripotent stem (ES/iPS) cells. Initiatives are taken to gain a fundamental understanding of how molecular complexes can be controlled in the meso-scale region of 5-100 nanometers, as such knowledge is critical to generating nextgeneration modalities of science and technology. The Institute will apply the results of this research to creating 1) new meso-space fields of chemistry and physics, 2) cellular meso-biophysics, and 3) stem-cell control by meso-engineering. It will, furthermore, contribute to human wellness by working to develop 1) environmentally-friendly chemistry using meso-control, 2) *in vivo* drug synthesis and detoxication technolo-



gies, and 3) regenerative medicine by controlling stem cells with smart materials.

Immunology Frontier Research Center (IFReC), Osaka University

Center director: Dr. Shizuo Akira

IFReC is endeavoring to unveil the entire picture of the dynamic immune system by employing a variety of imaging techniques to visualize immune cells within a living body. Fusing medical and engineering sciences to generate innovation, work is carried out to improve imaging technology so as to be able to more directly track the dynamic behavior of immune cells and their intercommunication and to elucidate how immune cells respond to the "non-self" such as pathogens and cancers.



Based on the results of basic studies aimed at generating novel concepts for understanding the dynamics of immune responses in an *in vivo* spatiotemporal context, the Center will seek to develop new strategies, including immunotherapies and vaccines that control the dynamics of immune cells, for diagnosing and treating infectious diseases, autoimmune diseases, allergies, and cancers.

International Center for Materials Nanoarchitectonics (MANA), National Institute for Materials Science Center director: Dr. Masakazu Aono

MANA is focusing on "nanoarchitectonics," a new technology system which they are pioneering to arrange nanoscale structural units in an intended configuration and produce new functions by manipulating the interaction between the units. This interdisciplinary domain, which integrates physics and chemistry with material science, has four key technologies: 1) novel manipulation of atoms and molecules, 2) chemical nano-manipulation, 3) field-induced material control, and 4) artificial self-assembly and organization. By advancing research in this new realm, the Center is attempting to shift the paradigm of materials development to include revolutionary superconducting materials, novel materials for quantum information processing, and innovative materials for fabricating photoelectric conversion devices. The products of MANA's research are expected to make significant societal contributions in such forms as environmental and energy sustainability, next-generation computing, and regenerative medicine.



FY2007 Follow-up Review Results

Convened on 20 May to carry out a follow-up review, the WPI Program Committee discussed the progress of each of the five projects with their center directors and host institution heads, and received site-visit reports from the program officers assigned to each project. From this information, the Committee assessed the state of each center's project at the initial 6-month point of their implementations.

Major findings

All five WPI centers were found to be operating at a very high level in their respective research fields and to have great potential for becoming world top-level institutes as their programs advance. Though still working to perfect their operations, these centers have made robust strides over the first six months to establish themselves as top-level research centers.

Among the five WPI centers, two were judged to be particularly impressive: iCeMS at Kyoto University and IPMU at the University of Tokyo. iCeMS has attracted worldwide attention with the generation of induced pluripotent stem (iPS) cells from human skin tissue by one of its principal investigators, Dr. Shinya Yamanaka. This breakthrough marked a major step forward in establishing iCeMS as a "globally visible" research center, which is one of the goals of the WPI Program. IPMU, on the other hand, is working to create an entirely new institutional paradigm under the adroit leadership of its director, Dr. Hitoshi Murayama. This is a highly challenge undertaking, one which promises to yield a distinctly effective model for building top world-standard research centers in Japan.

Salient issues

Among the points that the review found to need improvement at this early stage, the most salient were as follows:

- Participation of top-level researchers from around the world is an essential requisite for WPI research centers. All the WPI research centers have invited top researchers from overseas to work as principal investigators; however, their numbers and overall quality fall short of meeting the goal of creating a critical mass of core investigators at this point.
- As all the WPI center projects are in rapidly advancing interdisciplinary domains, both their research directions and strategies should undergo frequent review and adjustment, while greater effort needs to be put into fusing their diverse research undertakings and fields. Vibrant programs also need to be initiated for fostering and training talented young investigators.

The Program Committee offered the WPI centers advice in these and other areas so as to help accelerate the substantial progress they have already made in the very short project-launching period of just six months.

For more details and researcher recruitment information on each of the WPI projects, please see the following English websites:

AIMR: http://www.wpi-aimr.tohoku.ac.jp/en/ IPMU: http://www.ipmu.jp/ iCeMS: http://www.icems.kyoto-u.ac.jp/e/ IFReC: http://www.ifrec.osaka-u.ac.jp/index-e.php MANA: http://www.nims.go.jp/mana/



On 6 August, JSPS president Prof. Motoyuki Ono received the "Commander's Cross of the Order of Merit of the Federal Republic of Germany" at a ceremony and reception held in his honor at the German Embassy in Tokyo.

At the ceremony, the German Ambassador to Japan, Mr. Hans-Joachim Daerr, presented the Order of Merit to Prof. Ono. Receiving the award, Prof. Ono expressed his gratitude to the Ambassador and the Government of Germany. He was followed by Prof. Seigo Hirowatari, the University of Tokyo, who offered congratulatory remarks and proposed a toast. The ceremony was attended by some 60 people, including Nobel laureate Dr. Leo Esaki and Prof. Ono's colleagues and associates from the Ministry of Education, Culture, Sports, Science and Technology, research institutions and universities.

The Commander's Cross of the Order of Merit of the Federal Republic of Germany is bestowed on individuals in commendation of their outstanding political, economic or societal contributions. This award falls within the German Government's highest orderof-merit category.

The reason stated for bestowing the award on Prof. Ono was the high appraisal he received for promoting scientific collaboration between Germany and Japan, particularly through his leading role in planning and carrying out a number of symposia and seminars during the "Germany in Japan Year" and his vigorous support in advancing bilateral scientific exchange and implementing a spectrum of joint projects.

In reply, Prof. Ono said the achievements the award represents owe more to JSPS's long years of cooperation and exchange in science and research between Germany and Japan than whatever he has done as an individual. What warranted this rare honor was, he conjectured, a high appraisal of the excellent relations built up over long



Prof. Ono receives Order of Merit from Ambassador Daerr

years between JSPS and its partner organizations in Germany, particularly the German Research Foundation (DFG), German Academic Exchange Service (DAAD), Max Planck Society for the Advancement of Science (MPG), and Alexander von Humboldt Foundation (AvH). In other words, he said, the decoration was really conferred upon JSPS as an organization. He promised to give full expression of this honor in strengthening partnership and deepening friendly relations between Japan and Germany.

- General Affairs Division

Gathering Held of Restart Postdoc Fellows

On 14 July, a get-together was held of young Japanese researchers awarded a JSPS Restart Postdoc (RPD) Fellowship. Among the guests of honor were Her Imperial Highness Princess Akishino, Ochanomizu University president Dr. Mitiko Go, and former Japan Broadcasting Corporation (NHK) vice president Ms. Taeko Nagai. Also attending were 20 of the 30 fellows who started their tenures in FY 2007.

The meeting began with remarks by JSPS president Prof. Motoyuki Ono, followed by Princess Akishino, who offered warm words of encouragement to female fellows who are endeavoring to balance child raising with their research activities.

Drawing upon their own experiences of bearing and raising children while pursuing professional careers, Dr. Go and Ms. Nagai held a discussion on the situation surrounding female researchers and what still needs to be done to create a more conducive environment for women to play substantial roles in scientific research. Then, the attending fellows spoke about their research work and own experiences of raising children as scientist-parents.

After a break, a free conversation period, also attended by Princess Akishino, Dr. Go and Ms. Nagai, was held in a warm and congenial atmosphere in which the fellows talked to each other about their research activities and exchanged views and information on childrearing as active researchers. Attending members of JSPS's staff found this kind of opportunity for RPD fellows to meet and exchange views to be very meaningful.

The Restart Postdoc Fellowship was established in FY 2006 to support researchers who had to interrupt their work for childbearing or infant raising in making a smooth transition back into the laboratory. The fellowship does this by providing its recipients with a stipend and research grant over a re-



entry period of two years. The ultimate objective of the program is twofold: To support scientist couples who wish to have children and to work toward equal gender participation in Japan's scientific community. Over the past three years, more than 500 people have applied for this fellowship, of whom 30-40 have been selected each year. Both female researchers and male researchers with a childbearing spouse are eligible to receive a fellowship under the program. Among the 39 researchers selected as FY2008 RPD fellows, four were males. They are the first male researchers to have received this fellowship.

- Research Fellowship Division

Whereas all doctoral and postdoctoral fellows under JSPS's program Research Fellowships for Young Scientists must submit written reports at the end of each fiscal year, superlative postdoctoral (SPD) fellows are furthermore required to make an oral presentation on the progress of their research to frontline researchers of JSPS's Research Center for Science Systems at the 1-year juncture of their tenures. On 26 June, a meeting was convened for that purpose.

The object of these reporting meetings is also for the SPD fellows to receive advice and guidance on how to proceed with their research, while expanding their interdisciplinary perspectives through the opportunity the meetings

SPD Fellows Participating in Reporting Meeting

SPD Fellows	Host Institutions
Mr. Jin Noda	The Oriental Library
Dr. Takashi Ito	The University of Tokyo
Dr. Aya Bamba	Japan Aerospace Exploration Agency
Dr. Kaori Kuribayashi	The University of Tokyo
	Tokyo Metropolitan Foundation for
Dr. Kazuma Murakami	Research on Aging and Promotion of
	Human
Dr. Ryohei Tsutsumi	National Institutes of Natural Sciences
Dr. Takanori Uzawa	Hokkaido University

(In order of their presentations)

accord them to interact with mentors and colleagues of other fields.

This year, seven out of the twelve SPD fellows who started in FY 2007 participated in the reporting meeting.

The meeting opened with remarks by JSPS president Prof. Motoyuki Ono. He described how the SPD fellowship was established to help foster the world's highest caliber of young researchers, who are chosen for the fellowship from among the most qualified awardees of JSPS's postdoctoral fellowship for young Japanese scientists. It's hoped, he said, that the SPD fellows will apply in their research activities the insights gained through interaction at the reporting meeting with frontline researchers of JSPS's Research Center for Science Systems.

Then, using PowerPoint slides, the fellows described what they had achieved over the past year and where the next stage of their research is intended to take them. During the ensuing Q&A sessions, researchers in other fields asked questions while specialists



in the subject field offered critiques and comments—all in a relaxed atmosphere that spurred vigorous discussions which in many cases ran beyond the allotted time frames.

After the presentations ended, fellows who wished them were given individual consultations with the Center's senior program officers in their respective fields. Through them, they received expert advice on ways to advance their research along the path ahead. Following the consultations, a convivial gathering was held. Delving back into the contents of their presentations, the fellows engaged each other in discussions and they exchanged views across topical lines with executives of JSPS and program officers of the Research Center for Science Systems.

- Research Fellowship Division

JSPS Hosts 2008 G8-HORCs in Japan

This year's meeting of the Heads of Research Councils of the G8 Countries (G8-HORCs) was held in Kyoto, Japan on 17-18 May. Each year, these meetings assemble the heads of leading research-funding institutions in the eight member countries of Japan, the US, the UK, France, Germany, Italy, Canada and Russia. They allow the members to discuss global issues related to science and technology and the directions of S&T policy in each of their countries candidly within an informal setting. To assure this degree of freedom in the G8-HORCs meetings, only the representatives of the member institutions attend and the content of their

discussions is not publicly disclosed.

This year's meeting was convened with the representatives of ten institutions from a total of eight countries. Among the participants in the meeting were Prof. Motoyuki Ono, president, JSPS; Dr. Arden L. Bement, Jr., director, NSF



(National Science Foundation); Prof. David Delpy, chief executive, EPSRC (Engineering and Physical Sciences Research Council); and Prof. Dr. Matthias Kleiner, president, DFG (German Research Foundation). The ten members engaged each other in a frank and informative exchange of views.

On the following day, the group repaired to Kyoto University, where they received a presentation from Prof. Shinya Yamanaka on his induced pluripotent stem (iPS) cell research and toured the university's Katsura Campus.

- Research Cooperation Division II

- $\mathbf{J}_{\mathsf{SPS}}$ -NSF Symposium Held on University Internationalization

On 22-23 May, a symposium jointly sponsored by JSPS and the National Science Foundation (NSF) was held in Washington, DC. Titled "Strategic Initiatives for University Internationalization," the symposium attracted 86 representatives from US and Japanese universities who are engaged in campus internationalization programs. Giving them an opportunity to share best practices and form collaborations, the symposium focused on science and engineering education as related to the internationalization strategies of research universities. The opening plenary lecture drew upon case studies in addressing the need for researchers and higher administrators to cooperate when establishing collaborative programs. Then, sessions were held on a variety of theme-related topics. In the first, entitled "What is an Internationalized University?: US and Japanese Perspectives," the Senator Paul Simon Study Abroad Foundation Act in the US and 300.000 Foreign Students Plan in Japan were discussed. The next session compared the diverse policy initiatives of America's 50 states for promoting internationalization with Japan's centralized initiatives under the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Taken as an example of the latter, MEXT's program "Strategic Fund for Establishing International Headquarters in Universities" was introduced.

In other sessions, views were exchanged on institutional approaches to campus internationalization, especially on how to create strategy, set goals tailored to each university, and assess outcomes. Other presentations were delivered on cooperation between industry and academia, international collaborations and consortia, and double degree programs. During these sessions, strong interest was expressed in such subjects as internships, reciprocal curricula, and teaching courses in foreign languages.

In the last session on student and researcher mobility, it was reported that more short-term study-abroad programs are provided for US undergraduate students, while in Japan universities send master's and doctoral students, postdocs and research associates for overseas training via JSPS's International Training Program. Special emphasis was placed on the need to strengthen the intercultural communication skills of students on both sides.

The closing plenary lecture gave mention to a collapse in the balance between the sending and receiving of exchange students in the US and explained how the success of such exchange programs is largely influenced by funding. In the ensuing discussion, it was agreed that the two sides should learn from each other's successes while



making clear the differences in their respective systems and approaches. This yielded a shared perception of issues to be addressed in the future. In particular, a need was reconfirmed to encourage the exchange of students while endeavoring to sustain the quality of science and engineering education in Japanese and American universities. Further information on the symposium can be found on the following website: http://www.iaestenatlconf.org/siui.htm

The second round of the JSPS-NSF symposium is scheduled to be held in Japan in December of this year. As the date draws nearer, application and other details will be posted on the following website: http://www.u-kokusen.jp/. — Research Cooperation Division I

ASEAN+3 Forum on New Energy Development

On 25-27 May, JSPS, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Kyoto University sponsored the ASEAN COST+3: New Energy Forum for Sustainable Environment (NEFSE). The venue was the Kyoto University Clock Tower Centennial Hall. A decision to convene this Forum was made at the second meeting of the ASEAN Committee on Science and Technology Plus Three (ASEAN COST+3). Its purpose was to promote cooperation in new energy research and human capacity building among the 13 ASEAN+3 (Japan, China and Korea) countries. Attending the Forum were representatives of the member countries and the ASEAN Secretariat, and observers, including environment/energy researchers from

ASEAN and other Asian countries.

At the Forum, the representatives from each country reported on the state of their respective energy-related policy trends, R&D initiatives and humancapacity-building programs, while describing the challenges that confront them in these areas. Afterwards, various examples were introduced of how Kyoto University and other Japanese higher education and research institutions are cooperating in the field of new energy with Asian countries in both advancing research and developing researchers. An ensuing discussion of current issues and future vistas yielded a proposal by Kyoto University to establish a consortium of ASEAN+3 universities and research institutions in

the area of new energy research and human capacity building. It is to be named the "New Energy Consortium for Sustainable Environment (NECSE)."

The results of these discussions and a commitment by the ASEAN COST+3 members to create a sustainable low-carbon society by redoubling research and training efforts in the new energy domain will be reported at the third ASEAN COST+3 meeting.

Asian Program Division



Korea-Japan Joint Committee for Basic Scientific Research

On 4 June, the 18th meeting of the Korea-Japan Joint Committee for Basic Scientific Research was held in Korea at the Hotel Hyundai Gyeongju. It was

cochaired by Prof. Kunio Takayanagi, Tokyo Institute of Technology, and Prof. Myung-Hee Chung, Seoul National University. This annual meeting is mandated in the memorandum of understanding signed by JSPS and the Korea Science and Engineering Foundation (KOSEF) in 1991. Alternating venues between Japan and Korea, it has been held every year since then.

At this year's meeting, reports were given on the FY2007 joint research projects and seminars and their performance reviewed. Decisions were made on the selection of new projects and seminars to start in FY 2008. Future prospects and vistas for Japan-Korea scientific collaboration were vigorously discussed between the members of the two sides.

The following numbers of research projects and seminars were adopted for FY 2008.

	Applications	Selections
Joint Research Projects	47	31
Seminars	15	11

The meeting ended with an introduction to the newly established Korea-



Japan Researchers' Network (Korean JSPS Fellows Alumni Association), which would be holding its first general meeting in July.

- Asian Program Division

Korean JSPS Alumni Association Holds First General Meeting

On 19 July, the Korea-Japan Researchers' Network (Korean JSPS Fellows Alumni Association) inaugurated its establishment by holding its first General Meeting in Seoul. The alumni association comprises Korean researchers who have in the past come to Japan as participants in JSPS programs, most particularly its Postdoctoral Fellowship for Foreign Researchers, Invitation Fellowships for Research in Japan, and RONPAKU (Dissertation PhD) Program. Over the past couple of years, former JSPS fellows have started to take the initiative to establish networks and associations in countries that do not have a JSPS overseas liaison office. The Korean alumni network is the second such association to be established, the first having been formed in India in 2006.

Despite inclement weather on the day of the meeting, about 100 people braved the elements to attend it. The meeting



was held in three parts. The first was the convening of the new association's General Meeting, which started off with congratulatory messages by JSPS president Prof. Motoyuki Ono and Prof. Myung-Hee Chung, co-chairman of Korea-Japan Joint Committee for Basic Scientific Research, after which the purpose of the association's establishment was described. Then, the member discussed the association's bylaws and future activities. As time ran out, the alumni decided to continue the discussion via email over the short term.

In the second part of the meeting, JSPS explained its fellowship programs for

overseas researchers and its international programs with a special focus on Korea, and the Korea Science and Engineering Foundation (KOSEF) offered a parallel description of its international programs.

The third part of the meeting featured a special lecture on "Activities of the Council for Science and Technology Policy of Japan, and Philosophical Message of Life Science" by Dr. Tasuku Honjo, executive member, Council for Science and Technology Policy (CSTP), and visiting professor, Graduate School of Medicine, Kyoto University.

After the meeting, the participants gathered at a reception in which they introduced themselves and enjoyed conversation with one another. Amidst this amiable atmosphere, the maiden voyage of the Korea-Japan Researchers' Network embarked upon a smooth start. — Overseas Fellowship Division

Japanese-German Symposium Held on "Marine Research"

Every year, the JSPS Bonn Office and the JSPS Club (German alumni association) join forces in putting on a Japanese-German Symposium, at which frontline investigators in the year's chosen field of research give presentations on the latest research results achieved in the two countries and engage each other in discussions, while promoting collaborative research through a deeper understanding of each other's work.

This year's symposium marked the thirteenth in the series to date. It was held on 16-17 May at the historical Barocksaal Hall in the Hanseatic city of Rostock. Well-fitted to this port city venue, the symposium's theme was "Marine Research." Despite Rostock's location up in the north of Germany, the event attracted more than 160 researchers, mostly with past joint research experience with Japanese colleagues.

As 70% of the globe is covered with oceans, they exert a large impact on people's lives both from the standpoint of resources and their impact on climate change, as was addressed in last year's symposium. This time, three research sub-themes that addressed the integral relationship between hu-



mans and the ocean were explored by researchers on the cutting edge of related fields. Three Japanese and four German researchers delivered these presentations.

First, a plenary speech was given by Prof. Dr. Wolfgang Fennel, deputy director, Baltic Sea Research Institute Warnemünd, on ocean ecosystems using the Baltic Sea as an example. Then, Prof. Dr. Toshio Yamagata, Department of Earth and Planetary Science, the University of Tokyo, and Prof. Dr. Jelle Bijma, Marine Biosciences, Alfred Wegener Institute in Bremerhaven, spoke on the sub-theme "oceans, climate and weather." Next, Prof. Dr. Ralph Schneider, Excellence Cluster "Future Ocean," University of Kiel, and Prof. Dr. Yasuwo Fukuyo, Asian Natural Environmental Science Center, the University of Tokyo, gave presentations on the sub-theme "life-supporting oceans." Finally, Prof. Dr. Masaaki Wakatsuchi, Institute of Low Temperature Science, Hokkaido University, and Prof. Dr. Detlef Czybulka, Faculty of Law, University of Rostock, addressed the sub-theme "oceans' contribution to man's future."

An active Q&A discussion evolved between the panelists, who approached the theme from a spectrum of fields from physics and biology to law—and the floor comprising researchers in a wide variety of disciplines. Four members of the JSPS Club acted as moderators, introducing the lecturers and facilitating the Q&A discussions.

After the symposium ended, the JSPS Club held their annual General Meeting. It was announced that the number of dues-paying members had increased by ten percent from the time of last year's General Meeting.

JSPS Bonn Office

${f S}$ ymposium on Living Liver Transplantation Held in Cambridge

On 10 June, an international symposium, entitled "Cadaveric Liver Transplantation and Living Donor Liver Transplantation," was held in Cambridge. It was co-sponsored by the JSPS London Office, Shinshu University and the University of Cambridge. Prof. Masatoshi Makuuchi, director of Japanese Red Cross Medical Center, and Dr. J Andrew Bradley, professor of Surgery, the University of Cambridge, co-chaired the symposium. Prof. Yuko Furukawa, director of JSPS's London Office, offered congratulatory remarks to the organizers and participants and explained the work of the London Office.

The symposium saw approximately 80

attendees, among whom were four professors from both Shinshu University and the University of Cambridge. They gave scholarly lectures on clinical studies conducted on liver transplantations. Cadaveric liver transplantation is in mainstream use in the UK, whereas liver donor transplantations are not yet carried out but may start soon. Researchers in the UK are combining forces to perfect this surgical technology and its clinical application.

On the eve of the symposium, a get-together was held for the speakers, participants and organizers to allow them to get more closely acquainted before the event.



The venue's historical setting of Madingley Hall gave the proceedings a special touch of brilliance, contributing an extra dimension to the symposium's success. This Hall, with its magnificent surrounding gardens and castle, had been used by Queen Victoria's husband, Prince Albert, who attended the University of Cambridge.

JSPS London Office

Japan Edition of Royal Society's "Philosophical Transactions" Celebrated

On 16 June, a symposium sponsored by JSPS London and the Royal Society was held to celebrate a special Japan edition of the publication *Philosophical Transactions of the Royal Society B*, titled "Japan: Its Tradition and Hot Topics in Biological Sciences." The venue was the Embassy of Japan in London.

With its first edition having been published in 1665, *Philosophical Transactions* has a 350-year history of covering milestone research in the natural sciences. In 1887, the journal expanded into two separate publications, with *Philosophical Transactions A* focusing on physical sciences, and *Philosophical Transactions B* on biological sciences. The special Japan edition featured the latest research in biological sciences being advanced in Japan. It was the first time in the long history of the journal for an issue to be dedicated entirely to Japanese science. A centerpiece article, authored by Dr. Shinya Yamanaka, professor of Kyoto University, reported on epoch-making research in which his group generated induced pluripotent stem (iPS) cell from human skin tissue.

The purpose of the symposium was to introduce in more detail this sort of cutting-edge bioscience research featured in the publication to a wide swath of both the UK and international science communities, while promoting



ever-closer collaborative Anglo-Japanese research. The symposium was held as an event of JAPAN-UK 150, which commemorates the establishment of formal diplomatic relations between Britain and Japan 150 years ago. This event enjoyed the full support of the Embassy of Japan in London.

Approximately 100 people from various UK universities and research institutions attended the symposium, which was chaired by JSPS London Office director Prof. Yuko Furukawa. The proceedings started with opening remarks from the current editor of *Philosophical Transactions B*, Prof. Georgina Mace. She was followed by a welcoming address from the Ambassador of Japan in London, Mr. Shin Ebihara. Prof. Semir Zeki, the University College London, who was the editor when the Japan edition was compiled, spoke about the process involved in preparing the publication.

Entering the main part of the symposium, three sessions were held on cutting-edge Japanese research in stem cell biology, single-molecule imaging, and neuroscience. In each of these fields, leading academics from Japan and the UK were invited as the guest speakers. On the Japanese side, they included Prof. Hideyuki Okano, Keio University; Prof. Masamitsu Futai, Iwate Medical University; and Prof. Atsushi Iriki, RIKEN Brain Science Institute. To each of their lectures, a UK academic in the respective field delivered a responding presentation, followed by spirited interludes of question-and-answer discussions.

- JSPS London Office

- ${f S}$ weden-Japan Seminar Held on Malaria Research

On 11 June, a seminar entitled "Sweden-Japan Joint Seminar on Malaria Research—Diversity & Control" was held by the JSPS Stockholm Office at the Nobel Forum on the campus of Karolinska Institute. Cosponsored by the Institute, the seminar drew the participation of some 70 Japanese and Swedish researchers and students.

Over recent years, the campaign against malaria has been one of the top priorities of the United Nation's Millennium Development Program. Despite an exhaustive search over long years for effective countermeasures to the disease, malaria continues to take innumerable lives in the African and Asia-Pacific regions, causing not only untold suffering but seriously impeding development efforts in those countries.

This seminar sought to identify new approaches for tackling the malaria challenge in the 21st century. To that end, it assembled young Japanese and Swedish researchers with excellent records of research results together with researchers who have abundant on-the-ground experience in malaria-affected locations. They advanced a



progressive dialogue in a move to build networks for combining forces in future joint research initiatives. Recognizing the need for a pluralistic approach to malaria research and for sharing cumulative results, the seminar provided interdisciplinary sessions for the two sides to report on the latest state of research progress in their countries. The morning and afternoon sessions were on the four respective topics of parasites, mosquitoes, drugs, and vaccines. Each of the speakers had a background as a researcher, physician or veterinarian. They engaged each other in a cross-disciplinary exchange of views and sharing of research results, departing from the insularity typically found between research fields and the tendency to advance clinical and field research on separate tracks. This approach evoked flurries of questions and spirited discussions.

Between the sessions, doctoral students and other young researchers delivered poster presentations of their research activities, using graphics and diagrams to make the content of their work easy to understand. They enjoyed engaging the seminar participants in exchanges of views.

In the final evening session on "control," representatives of the ministries of health in Kenva and Vanuatu described the state of malaria infection in their countries and introduced measures taken by their governments to combat the disease. Both strongly emphasized the need for research with a long-term perspective and for its financial support. Their presentations were followed by a discussion on the topic "global malaria control-elimination toward eradication," and by closing remarks from Stockholm Office director Prof. Hiroshi Sano, who promised to disseminate widely the results of the seminar presentations and discussions.

- JSPS Stockholm Office

Symposium Held on Technology for Landmine Detection and Removal

A JSPS sponsored-symposium "Landmines Detection: Innovation and Demands for New Technology" was held on 14 June in Helwan, about 30 kilometers from Cairo, Egypt. It assembled some 100 scientists and concerned people in the conference room of the National Research Institute of Astronomy and Geophysics (NRIAG). Among the panelists were three Japanese professors: Dr. Motoyuki Sato of Tohoku University, Dr. Jun Ishikawa of Tokyo Denki University, and Dr. Akira Hirose of the University of Tokyo. Based upon their experiments in the laboratory and experiences in the field, they gave

presentations on innovative measures for detecting and clearing mines.

For more than 65 years, Egyptians have lived under the threat of these deadly weapons. Strictly speaking, these sand-hidden explosives were laid early in the 1940s during World War II when ferocious battles were fought between German and British tank corps at El Alamein, a town in the desert of western Egypt. On the second day of the symposium, the participants visited a once war-devastated strip of sandy soil near El Alamein, which is now safe having been cleared of mines.



It is estimated that some 20 million mines were laid in this area, most of them left unresolved after the war. In the post-war era, nomadic people and their camels wandering the desert were often killed by treading over these long-lived lethal weapons. In May, a month before the symposium, four people were killed and many more wounded by a massive explosion at a scrap metal shop. An employee, without knowing the danger, tried to dismantle a mine picked up from this old battlefield.

In eastern Egypt lies the Sinai Peninsula. This vast area was also a theater for oft-repeated Egyptian-Israeli wars.

How many millions of mines are buried there? No one knows. Innumerable mines lurk silently in the desert sand.

Over the last three decades, Egypt has been working in earnest to develop the desert by constructing new towns and industrial zones, and by mining underground resources. The landmine problem poses a big obstacle to this development work, hampering nationbuilding efforts in this age of global-

ization. A former member of the Egyptian parliament has, according to a press report, recently launched a popular movement against mines. Given the timing and heightened interest generated by Helwan Symposium, chances are that he was influenced by this large and powerful gathering of action-oriented researchers and practitioners.

JSPS Cairo Research Station

I hirteenth "Science in Japan" Forum Held in Washington, DC

On 20 June, the JSPS Washington Office held its thirteenth "Science in Japan" Forum at the Capital Hilton Hotel in Washington, DC. This forum series, 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 Science Foundation (NSF), National Institutes of Health (NIH), U.S. Department of Energy (DOE), and American Association for the Advancement of Science (AAAS).

Themed "Interaction of Physics and Biology," the Forum offered researchers from these two fields a chance to engage in cross-disciplinary discussion on research challenges that cannot be solved if addressed in the conventional manner of splitting physics and biology. Presentations were given by Japanese and American researchers on initiatives to advance research through new integrated biophysical approaches.

The Forum opened with remarks by Dr. Makoto Kobayashi, executive director, JSPS Tokyo Headquarters, who extended his appreciation to the cosponsors of the Forum, especially to Dr. Arden L. Bement, Jr., director, National Science Foundation, who was in attendance. Then, Dr. Hirotaka Sugawara, director of JSPS's Washington Office, gave a welcoming address.

In the first morning session, presentations were given on DNA and protein research from various biological perspectives. The afternoon session focused on instrumentation and facilities, showing for example how phase contrast electron microscopy blends physics and biology and how synchrotron light sources enable discoveries in structural biology. Sandwiched between the two sessions was a briefing on the latest developments in Japan's



science policy and on large-scale, interdisciplinary research facilities supported by Japan's Ministry of Education, Culture, Sports, Science and Technology.

The presentations and discussions provided the attendees with a vivid picture of how in reality physics and biology are not unconnected but intertwined, particularly in the field of bioscience.

For the lecturers' names and presentation titles, please see the following website: http://www.jspsusa.org/sij.html - JSPS Washington Office

JSPS Participates in ASEAN Science and Technology Week

From 1-11 July, the event "ASEAN Science and Technology Week" was held in Manila, the Philippines. It is a flagship event of the ASEAN Committee on Science and Technology (COST), put on to showcase major S&T achievements made by ASEAN member countries and dialogue partners in light of the region's goal of becoming a knowledge-intensive economy.

At the technical conference held on 4 July, Ms. Ayako Maesawa, head of JSPS's Asian Program Division, gave a briefing on the JSPS international exchange programs directed toward the ASEAN region. Afterwards, a meeting

was held between the JSPS representatives and members of the Philippine Society of JSPS RONPAKU Fellows (RONPAKU alumni club) to discuss scientific collaboration between the Philippines and Japan and JSPS's new program initiatives.

The S&T Exhibition, starting on 7 July, drew a large number of visitors ranging widely from high school students to researchers. Attended by representatives of science-promotion agencies of each of the ASEANs, the opening ceremony of the Exhibition featured a speech by Philippine President Gloria Macapagal-Arroyo on the importance to

the region of advancing science and technology. At the Exhibition, JSPS had a booth to introduce its programs. It was operated by JSPS's Bangkok Office director Dr. Kou Ikejima and his staff during the Exhibition. Members of RONPAKU alumni club also used the booth to exhibit the group's activities and the excellent research achievements of its members.

JSPS Bangkok Office



JSPS Summer Program

Attended by 114 young pre- and postdoctoral researchers from the US, UK, France, Germany and Canada, the JSPS Summer Program, cosponsored by the Graduate University for Advanced Studies (Sokendai), was held over a 2-month period from 17 June to 21 August.

Featuring a research internship at a host institution, the program began with a one-week orientation held at the Shonan Village Center 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 young researchers 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 reports on their summer research activities.

For more detailed information on the JSPS Summer Program, please see our website: http://www.jsps.go.jp/english/e-summer/ — Overseas Fellowship Division

respective fields. The following are comments offered by two of

the fellows on their research experiences.

Research Activities

The centerpiece of the JSPS Summer Program is the fellows' internship at a host research institution, where they take part in research activities with frontline Japanese researchers in their

Ms. Nicole K. Einsporn

(PhD student, European University Viadrina Frankfurt (Oder)) at Hosei University Her host: Prof. Akira Suzuki

"Thanks to introductions by my host advisor, I was able to meet researchers from leading Japanese labour and policy institutions, many of whom were economists, social scientists, lawyers and historians, and discuss with them interdisciplinary fields germane to my dissertation. I attended international law dialogues that helped to expand the vistas of my research. My advice to new fellows is to keep an open mind and learn at least some Japanese, as it will be very helpful to you in your daily life, especially in breaking the ice and mingling with Japanese people. Making Japanese friends is the best way to experience the Japanese lifestyle, traditions and pop culture. Besides building a web of professional contacts by visiting as many labs or institutes connected to your research field as possible, you should also enjoy Japanese cultural events and nightlife."



Ms. Einsporn with Prof. Suzuki

Mr. Denton K. Shanks

(MSc student, Drexel University) at Nagasaki University His host: Prof. Nozomu Mori

"My experience in the JSPS Summer Fellowship Program has been incredible and enlightening!! This program provided me the opportunity to come to Japan and live, not as a mere tourist, but as a global scientist surrounded by devoted and intelligent people. I was accepted as a



Mr. Shanks with Prof. Mori and group

true member of the lab, and thus had an amazing opportunity to absorb the great characteristics of Japanese science and culture, as well as to share my culture with people who showed a great interest in it. I encourage anyone who is drawn towards this type of experience to go ahead with an open mind and realize that endless benefits can be reaped through your new global connections."

Washington, DC

Washington Office Holds Orientation for Summer Fellows

On 31 March to 1 April, the JSPS Washington Office assisted the National Science Foundation (NSF) in holding an orientation for its "2008 East Asia and Pacific Summer Institutes" program. Under it, about 195 graduate students from US universities would be dispatched to Japan, China, Korea, Australia and other Asia-Pacific countries for summer training and interning. Sixty-five of the attendees were slated to participate in the JSPS Summer Program. For them, Dr. Akira Masaike and his Washington Office staff prepared two specially tailored sessions.

The first day's session was held on the

theme "Living and Doing Research in Japan." Lectures were given on how the students should prepare themselves to do research in Japan by Dr. Tatsushi (Tats) Arai from SIT Graduate Institute, and Ms. Christine Ho, an alumna of the 2007 Summer Program. They were followed by two members of JSPS's Overseas Fellowship Division, Ms. Sachiko Mitsui and Ms. Chihiro Yamanaka, who explained JSPS's activities and briefed the students on the details of summer schedule and answered their questions. The session discussions were facilitated by Dr. Machi Dilworth, director, NSF Tokyo Regional Office, and Mr. Kotaro Kodera, deputy director, JSPS Washington Office.

In the second day's session, Mr. Masami Watanabe, science counselor at Embassy of Japan, introduced Japan's science and technology policies and activities, after which, Mr. Kodera's wife Aoi gave a lesson on Japanese language fundamentals, teaching the students some basic phrases useful in daily living. She was followed by Mr. Thet Win, who offered advice on Japanese culture and customs from the



perspective of his own experience. The session was not a mere listening exercise, but a dynamically interactive one in which the students put their newly acquired Japanese to the test, and those with some prior knowledge of Japanese tutored others around them.

The 2-day orientation is thought to have been very meaningful in helping the Japan-bound students in overcoming any anxiety they may have had about living and doing research in Japan.

- JSPS Washington Office

Bonn

Summer Program Pre-Departure Orientation Held by Bonn Office

On 5 June, the JSPS Bonn Office held a pre-departure orientation for young German researchers selected to go to Japan to participate in this year's JSPS's Summer Program. It was also attended by past participants in the program, who conveyed their research experiences in Japan to the departing participants, strengthening the bonds of colleagueship between them. Taking this opportunity, presentations were given to better familiarize the young researchers with the German-Japan collaborative programs of the German Academic Exchange Service (DAAD), which assists JSPS and its Bonn Office in recruiting applicants for the Summer Program and other JSPS fellowships.

The meeting started with welcome remarks from the Bonn Office director Prof. Yasuo Tanaka, followed by DAAD admin-

istrator Ms. Karin Möller, who briefed the participants on researcher exchange programs between Germany and Japan. Each of the participants then introduced themselves. Three researchers who participated in last year's Summer Program told about their experiences. They were Dr. Melanie Wurm, Hannover Medical School; Dr. Andreas Orth, German Aerospace Center; and Mr. Hendrik Steigerwald, University of Bonn. They used a plethora of pictures to vividly describe their host laboratories and the research they conducted with Japanese colleagues at them along with their experiences of living in a Japanese community, giving the new participants a concrete image of what they could look forward to experiencing when they get to their host destinations in Japan. A spirited give-and-take of questions and answers followed these presentations.



The departing fellows said afterwards that they found this interaction with the former participants to be very meaningful.

Finally, JSPS Club executive Prof. Dr. Ingrid Fritsch introduced the German alumni association, which the departing fellows would be eligible to join upon their return home. After the meeting, a dinner was held for all the participants, at which they continued their inquiries and discussions about life, culture and customs in Japan late into the evening.

- JSPS Bonn Office

London

Pre-Departure Seminar and Alumni Evening in UK

On 23 May, the JSPS London Office held a pre-departure seminar for British graduate students and junior researchers going to Japan under the JSPS Summer Program and short-term postdoctoral fellowships. Eighteen Japan-bound scholars attended the seminar held at JSPS's London Office. The seminar provided the new JSPS fellows with advanced information on research and life in Japan and introduced them to programs they can join after returning home to continue their collaborative activities with Japanese colleagues.

The seminar started with opening remarks

from the Office director Prof. Yuko Furukawa. The seminar also featured the following presentations: An introduction of JSPS was given by Mr. Takeshi Sekiguchi, deputy director of the London Office, followed by talks on research experience in Japan by Ms. Jessica Langer and Dr. Che Connon. An introduction was given to the Royal Society by Dr. Hans Hagen, senior manager of the Society. Following an introduction of the Daiwa Anglo-Japanese Foundation, a briefing was delivered on the Great Britain Sasakawa Foundation by its chief executive Mr. Stephen McEnally.



Following the seminar, the UK JSPS Alumni Association held an Alumni Fellowship Evening with about 35 attendees. The event gave new JSPS fellows an excellent opportunity to converse face-to-face with former fellows who have considerable firsthand experience in and knowledge on doing cooperative research in Japan.

JSPS London Office



The following fellows participated in JSPS's Science Dialogue Program during the period from May through July 2008. For details about the program, please see its webpage at: http://www.jsps.go.jp/english/e-plaza/e-sdialogue/ — Overseas Fellowship Division

Akashi National College of Technology (Hyogo)

Date: 2 July Dr. Christopher J. Rasmussen (USA) Host institution: Kyoto University Title: "Shapely Numbers"



Fukui Prefectural Fujishima Senior High School

Date: 26 June **Dr. Tanvir T. Chowdhury** (Bangladesh) Host institution: Shiga University of Medical Science Title: "Meet Bangladesh; Being Epidemiologist — The Medical Detective"



Gifu Prefectural Gizan Senior High School

Date: 2 June Dr. Aaron W. Hunter (UK) Host institution: The University of Tokyo Title: "Fossils, Palaeontology, and the Lost World of the Jurassic"



Ikeda High School (Kagoshima)

Date: 14 July

Dr. Grigor T. Zehirov (Bulgaria) Host institution: Kagoshima University Title: "Bulgaria, Tradition and Culture; Nitrogen Fixation, a Benefit for Legume Plants"



Kumamoto Prefectural Daini High School



Date: 11 June Dr. Russell S. Deacon (UK) Host institution: The University of Tokyo Title: "Nanoscience and Nanotechnology"

Kumamoto Prefectural Kumamoto Kita High School

Date: 7 July Dr. Paul Kuad (France) Host institution: Osaka University Title: "A Look on Chemistry"



Miyazaki Prefectural Miyazaki Kita High School

Date: 23 July Dr. Amgad S. A. Salama (Canada) Host institution: Kyushu University Title: "Environmental Progress in Our Era with Application to Groundwater"



Ritsumeikan Senior High School (Kyoto)

Date: 15 July Dr. Pradeep Verma (India) Host institution: Kyoto University Title: "Biofuels and Future Challenges"



Saga Prefectural Takeo High School

Date: 12 June Dr. Choon Kiat Sim (Singapore) Host institution: The University of Tokyo Title: "Science Education in Singapore"



Saitama Prefectural Warabi High School

Date: 18 June Dr. K.B.Shameen N. Jinadasa (Sri Lanka) Host institution: Saitama University Title: "Introduction to Constructed Wetlands"



Senior High School Attached to Kyoto University of Education (Kyoto)



Date: 21 June Dr. Julie K. Pearce (UK) Host institution: Nagoya University Title: "Atmospheric Chemistry, My Research and My Home Country England"

Shizuoka Kita High School (Shizuoka)

Date: 26 May Dr. Jan Jurcak (Czech Republic) Host institution: National Institutes of Natural Sciences Title: "Solar Atmosphere as Observed by the New Japanese Satellite HINODE"



Shizuoka Prefectural Iwata Minami High School

Date: 4 June Dr. Yannick Klein (France) Host institution: Waseda University Title: "Superconducting Materials"





Date: 16 July Dr. Abid A. Shah (Pakistan) Host institution: Tokyo Institute of Technology

Title: "Introduction to Pakistan and Research on Non-Linear Ultrasonic Testing of Damaged Concrete"



Date: 16 July Dr. Dirk Spengler (Germany) Host institution: Kyoto University Title: "The Role of Plate Tectonics in Earth Sciences"



Yamanashi Prefectural Tsuru High School

Date: 13 May Dr. Kittiphong Paiboonsukwong (Thailand) Host institution: Saitama Medical School Title: "An Introduction to Gene Therapy"

Date: 10 June **Dr. Beatriz Prieto Simon** (Spain) Host institution: Tokyo Engineering University Title: "Biosensors: Screening Tools for Food Assessment"





Recent Visitors to JSPS (May-July 2008)

Dr. Serge Daan Pays Visit to JSPS

JSPS seeks the assistance of Nobel laureates and other distinguished scientists in advancing scientific research at institutions throughout Japan. For this purpose it operates the JSPS Award for Eminent Scientists, under which awardees are invited to make multiple visits to Japan during a set period. Dr. Serge Daan, professor, University of Groningen, the Netherlands, was granted an award under this program in FY 2008. On 11 July, he and his wife visited JSPS and engaged in a cordial conversation with JSPS president Prof. Motoyuki Ono.

Dr. Daan was the recipient of the 2006 International Prize for Biology. Building upon his past affiliation with JSPS, this visit under the Award for Eminent Scientists saw Dr. Daan participate in symposia at venues across the length of Japan. He also paid



courtesy visits to His Majesty Emperor Akihito and His Imperial Highness Prince Akishino.

- Overseas Fellowship Division

Botswanian University Delegation Visits JSPS

On 14 May, a delegation from Botswana International University of Science and Technology (BIUST), headed by Prof. S.F. Mpuchane, executive chairman of BIUST Council, visited JSPS's headquarters in Tokyo. They met with JSPS executive director Mr. Naoki Murata. The purpose of their visit to Japan this time was to seek advice and assistance on sending BIUST researchers and staffs to Japan for training and on ways to enhance the university's operation and curricula. Their reason for making these enhancements was not only to improve the university's education and research programs but also to encourage Botswanian students to go on to college.

- Asian Program Division



Tunisian Officials Pay Courtesy Visit to JSPS

On 17 June, a visit to JSPS was made by a delegation headed by Mr. Mohamed Kerkeni, Ministry of Higher Education, Scientific Research and Technology. They met with JSPS president Prof. Motoyuki Ono. Thanking JSPS for its assistance, through funding bilateral seminars, in support of research collaboration between Tunisia and Japan, the delegation introduced a new science park currently under construction in Tunisia and talked about the state of joint research with Japan and of MEXT's scholarship program for foreign graduate students studying in Japan.

Asian Program Division





Cover photo:

An autumn arrangement of tree-shed chestnuts with a scattering of fan-shaped ginkgo leaves

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.



New Subscribers, Address Changes, Reader Comments

Please contact us at the below email address or fax number if you are not a current subscriber and would like us to mail you the *JSPS Quarterly*, or are a subscriber but have changed your mailing address, or if you wish to let us know your impressions of the newsletter.

E-mail: fellowsplaza@jsps.go.jp Fax: +81-3-3263-1854 For further information on JSPS's organization and programs, please visit our website [www.jsps.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.

JSPS Fellows Plaza

6 Ichibancho, Chiyoda-ku, Tokyo 102-8471 Tel: +81-3-3263-1872 Fax: +81-3-3263-1854 http://www.jsps.go.jp/english/e-plaza/

Information can also be obtained from our regional offices listed below.

• JSPS Washington Office

1800 K Street N.W., Suite 920, Washington, D.C. 20006, USA Tel: +1-202-659-8190 Fax: +1-202-659-8199 E-mail: info@jspsusa.org http://www.jspsusa.org/

• JSPS San Francisco Office

2001 Addison Street, Suite 260, Berkeley, CA 94704, USA Tel: +1-510-665-1890 Fax: +1-510-665-1891 E-mail: webmaster@jspsusa-sf.org http://www.jspsusa-sf.org/

JSPS Bonn Office

Wissenschaftszentrum, Ahrstr. 58, 53175, Bonn, GERMANY Tel: +49-228-375050 Fax: +49-228-957777 E-mail: jsps-bonn@t-online.de http://www.jsps-bonn.de/

JSPS London Office

14 Stephenson Way, London, NW1 2HD, UK Tel: +44-20-7255-4660 Fax: +44-20-7255-4669 E-mail: enquire@jsps.org http://www.jsps.org/

• JSPS Stockholm Office

Retzius Vag 3, S171 77 Stockholm, SWEDEN Tel: +46-8-5088-4561 Fax: +46-8-31-38-86 E-mail: info@jsps-sto.com http://www.jsps-sto.com/

JSPS Strasbourg Office

Maison Universitaire France-Japon 42a, avenue de la Forêt-Noire, 67000 Strasbourg, FRANCE Tel: +33-3-9024-2017 Fax: +33-3-9024-2014 E-mail: jsps@japon.u-strasbg.fr http://jsps.u-strasbg.fr/

JSPS Bangkok Office

113 TWY Office Center, 10th Fl., Serm-mit Tower, 159 Sukhumvit Soi 21, Bangkok 10110, THAILAND Tel: +66-2-661-6453 Fax: +66-2-661-6454 E-mail: bkk03@jsps-th.org http://www.jsps-th.org/

• JSPS Beijing Office

616 Library of Chinese Academy of Sciences (CAS) 33 Beisihuan Xilu, Zhongguancun, Beijing 100190, CHINA Tel: +86-10-6253-8332 Fax: +86-10-6253-8664 E-mail: beijing@jsps.org.cn http://www.jsps.org.cn/

JSPS Cairo Research Station

9 Al-Kamel Muhammad Street, Flat No.4, Zamalek, Cairo, EGYPT Tel & Fax: +20-2-27363752 E-mail: webmaster@jspscairo.com http://jspscairo.com/

JSPS Nairobi Research Station

209/346/39 Riverside Drive Chiromo, Nairobi, KENYA Tel: +254-20-4442424 Fax: +254-20-4442112 E-mail: jsps1@africaonline.co.ke http://www.jspsnairobi.org/