

JSPS Quarterly

Japan Society for the Promotion of Science



FEATURE: JSPS Prize

TOPICS

● JSPS Prize	2
● Thirty Projects Supported under FIRST Program	6
● Two Frontiers of Science Symposia Held in FY 2009	7
● New Long-term Young Researcher Overseas Visit Program Launched	8
● Second JSPS-DFG Roundtable Held in Tokyo	8
● FY2009 ESF-JSPS Frontier Science Conference for Young Researchers	8
● Thirteenth India-Japan Science Council Held	9
● Third HOPE Meeting to be Held in March 2011	9
● Landmark Meetings for Thai Fellows Held in Bangkok	10
● Third China-Japan Science Forum Held	11
● Joint Symposium Held on Cell Biology and Neuroscience in London	11
● Symposium on Aging and Stem Cells Held in the US	12
● Symposium on Science Education Held in the US	12
● Gathering of JSPS Japanese Fellows Held in San Francisco	12
● Sixth Japan-Germany Colloquium "World Heritage for Tomorrow"	13
● Recent Visitors to JSPS	13
● Science Dialogue	14

No. **32**
2010
Summer

Sixth Award of JSPS Prize

On 1 March, a ceremony was held to award the sixth JSPS Prize. Selected were 25 talented young researchers with excellent records of scientific inquiry and exceptional promise to be trailblazers of scientific research in Japan. The ceremony for the FY2009 Prize was held at the Japan Academy in the presence of Their Imperial Highnesses Prince and Princess Akishino.

Selection of JSPS Prize Awardees

JSPS sent out requests for Prize nominations to 3,085 Japanese research institutions and academic societies, from which it received 250 in May. Adding the carry-overs from the prior year, 364 nominees were screened by the researchers of JSPS's Research Center for Science Systems. Based on the results, the JSPS Prize Selection Committee, chaired by Dr. Leo Esaki (chairman of the Science and Technology Promotion Foundation of Ibaraki and president of Yokohama College of Pharmacy) and comprising 12 members, made the final decision on the 25 awardees.

Award Ceremony

The ceremony for awarding the JSPS Prize was held in conjunction with the awarding of the Japan Academy Medal. At the cere-



mony on 1 March, JSPS president Prof. Motoyuki Ono offered an opening message, followed by a report on the selection process from Dr. Esaki. Then, Prof. Ono presented the 25 recipients with a certificate of merit, a medal and a purse of ¥1.1 million.

A tandem ceremony was held to confer the Japan Academy Medal on six of the JSPS Prize recipients. First, Japan Academy president Prof. Masaaki Kubo delivered welcoming remarks, after which Prof. Teruhiko Beppu, chairman of the Academy's selection committee, explained the vetting process. Then, Prof. Kubo presented the medal and a commemorative gift to each of the awardees.

Following it, Prince Akishino offered remarks and Mr. Masaharu Nakagawa, Senior Vice Minister of Education, Culture, Sports, Science and Technology, gave a congratulatory message. To conclude the meeting, a message of appreciation on behalf of the Prize recipients was delivered by Dr. Kazushige Touhara, professor, Graduate School of Agricultural and Life Sciences, the University of Tokyo.

After the ceremony, a celebration party was held. Attended by Prince and Princess Akishino, the Prize recipients, their guests, and the ceremony attendees, an atmosphere conducive to pleasant conversation was enjoyed by all.

Report and Remarks by Dr. Leo Esaki at JSPS Prize Award Ceremony

As chair of the JSPS Prize Selection Committee, I wish to describe the selection process for the sixth annual JSPS Prize and to offer some words of encouragement to the young recipients.

In April 2009, a request for referrals was sent out to universities, research institutes and related academic societies. Altogether 364 individuals were nominated to the Selection Committee. For a period of approximately five months from June 2009, the Research Center for Science Systems, established within the Japan Society for the Promotion of Science, carried out the preliminary screening, based on the results of which the 12-member Selection Committee chose the recipients for the sixth JSPS Prize.

Meeting on 25 November, the Committee selected you, the 25 gifted young researchers gathered here, as the 2009 JSPS Prize recipients. In coming up with to-

day's result, the members of the Committee did all within the limits of our knowledge and wisdom to evaluate fairly the research accomplishments and future prospects of each person within the very rich field of nominees. On your selection for this prestigious award, I wish to extend both you and the colleagues who support your work a most hearty congratulations. Unmistakably, each of you is an exceptionally talented researcher. I look forward to this Prize giving you added impetus in advancing your research initiatives.

Looking back at the screening process, due to limits in the members' ability to make perfect choices, there is a possibility, however remote, that we could have erred in our selection of some of you. If this should be case with any of you, I hope you will use your receipt of this Prize as a stepping stone to making, through valiant effort, wonderful achievements in

the future—achievements that will correct our mistake.

Speaking of evaluations, in November Japan's S&T community received a stringent assessment in the budget screening/streamlining sessions of the "Government Revitalization Unit." Some of you may have incurred a negative impact from this process. For researchers to have their budgets cut is a serious problem, one over which a howl of indignation is only natural. Nonetheless, Japan's science and technology could benefit from more open, public assessment: In that context, I believe the current government "screening" process may be a good start in a positive direction.

Progress driven by an ongoing process of doing and receiving evaluation is an essential characteristic of a competition-enriched democratic society. However, the extremely rapid pace at which the Revitalization Unit is carrying out its task dimin-

ishes the quality of its evaluation results. For an evaluation process to be effective, candor and open-mindedness are essential. The Japanese, however, show a strong inclination toward conducting evaluations based on preconceived notions. If the quality of Japan's science and technology is to be enhanced, we will first need to improve our evaluation skills and techniques.

Please indulge me a moment to speak about myself. What gave birth to the "Esaki tunnel diode" was the support I received from the Tokyo Telecommunications Engineering Corporation, now the Sony Corporation, and a high appraisal

given the diode by members of Bell Labs which had developed the transistor. A paper I had written on the discovery of the Esaki diode was carried in the *Physical Review* of the American Physical Society, through which it was disseminated worldwide, ultimately, finding its way to Stockholm.

By the way, I was born in 1925, a good 40 or 50 years before you, the Prize recipients. Nevertheless, a research report I penned will very soon be published in the correspondence column of *Nature*. Retrogressing 50 years, it was in February 1960 that I went to America, having transferred to the IBM Thomas J. Watson Research

Center on the outskirts of New York. The several dozen Esaki diodes I brought with me would become the material for that *Nature* article on what had happened to those diodes—what forms of longevity they took—over these 50 years.

Well, it is only natural for you young scientists to devote your thoughts to today's and tomorrow's research; but when you hit a dead end or get bogged down in your work, pondering what your research will be like in 50 years might offer you some mental diversion and a fresh restart. With that suggestion, I conclude by praying for your utmost happiness and success.

FY2009 JSPS Prize Awardees

Humanities and Social Sciences		
Takanori Ida	Professor, Graduate School of Economics, Kyoto University	"Behavioral Economic Study of Consumer Preference on Information and Health"
Masao Kashinaga	Associate Professor, National Museum of Ethnology, National Institutes for the Humanities	"A Study on the Transmission of the Tai Dam Culture"
Nobuyuki Kawai	Associate Professor, Graduate School of Information Science, Nagoya University	"Comparative Psychology on the Origin of Cognition and Learning"
Ryo Nishimura	Research Fellow, The Eastern Institute	"The Buddhist Thoughts in Early Modern Japan Focusing on the Scholar-Monk Fujaku 1707-1781"
Mathematics; Physical Sciences; Chemistry; Engineering Sciences		
Takeo Igarashi	Associate Professor, Graduate School of Information Science and Technology, The University of Tokyo	"Intuitive Design Interface for 3D Computer Graphics"
Narutaka Ozawa	Associate Professor, Graduate School of Mathematical Sciences, The University of Tokyo	"Theory of Discrete Groups and Operator Algebras"
Kazuya Kikuchi	Professor, Graduate School of Engineering, Osaka University	"Design, Synthesis and Biological Application of Chemical Probes, Which Convert Biological Signals to Chemical Output"
Osamu Sato	Professor, Institute for Materials Chemistry and Engineering, Kyushu University	"Development of Tunable Magnetic Materials"
Masaru Shibata	Professor, Yukawa Institute for Theoretical Physics, Kyoto University	"Numerical Relativity and Its Application"
Michinori Suginome	Professor, Graduate School of Engineering, Kyoto University	"Study on New Catalytic Organic Syntheses Based on the Design of Novel Boron Reagents"
Shigeki Takeuchi	Professor, Research Institute for Electronic Science, Hokkaido University	"Realization of Quantum Information Processing and Communication Using Photons"
Shoji Takeuchi	Associate Professor, Institute of Industrial Science, The University of Tokyo	"Nanobio Research Based on Microfluidic Device Technologies"
Shigeru Chiba	Professor, Graduate School of Information Science and Engineering, Tokyo Institute of Technology	"A Programming System with Load-time Reflection"
Kenji Hata	Team Leader, Nanotube Research Center, National Institute of Advanced Industrial Science and Technology	"Research on Carbon Nanotube Syntheses and Its Applications"
Satoshi Fujii	Professor, Graduate School of Engineering, Kyoto University	"Social-science Based Engineering Research on Social Dilemmas and Its Practice for Real World Problems"
Takuro Mochizuki	Associate Professor, Research Institute for Mathematical Sciences, Kyoto University	"Study on the Asymptotic Behavior of Harmonic Bundles"
Shinji Yuasa	Group Leader, Nanoelectronics Research Institute, National Institute of Advanced Industrial Science and Technology	"Development of High Performance Magnetic Tunnel Junction Devices"
Biological Sciences; Agricultural Sciences; Medical, Dental, Pharmaceutical Sciences		
Yukiko Gotoh	Professor, Institute of Molecular and Cellular Biosciences, The University of Tokyo	"Elucidation of Signaling Molecules Regulating Cell Fate"
Hitoshi Sakakibara	Group Director, RIKEN Plant Science Center	"Biosynthetic Mechanisms and a Novel Function of a Plant Hormone, Cytokinin"
Michiko Shirane	Associate Professor, Medical Institute of Bioregulation, Kyushu University	"Regulation of Neuronal Function by Vesicular Trafficking"
Kiyoshi Takeda	Professor, Graduate School of Medicine, Osaka University	"Regulation of Homeostasis in Intestinal Mucosal Immune System"
Kazushige Touhara	Professor, Graduate School of Agricultural and Life Sciences, The University of Tokyo	"Studies on Molecular Mechanisms Underlying Odorant and Pheromone Reception"
Tetsuya Higashiyama	Professor, Graduate School of Science, Nagoya University	"Behavior and Molecular Mechanism of Plant Reproduction Commencing with Pollen Tube Guidance"
Shigeo Murata	Professor, Graduate School of Pharmaceutical Sciences, The University of Tokyo	"Functional Analysis of Mammalian Proteasomes and Their Diversity"
Toshihide Yamashita	Professor, Graduate School of Medicine, Osaka University	"Molecular Mechanisms Regulating the Regeneration and Plasticity of Injured Central Nervous System"

Titles and affiliations current as of 1 January 2010

Young Researchers at Vanguard of Science in Japan

Awardees Speak about Their Work and Aspirations

Humanities and Social Sciences

Evolution of Human Intelligence

My main interest has been to address why humans are so intelligent. I have been conducting learning, memory and attention studies on humans and non-humans to discover the key to human-specific intelligence. I am also interested in finding which aspects of human cognition are shared with other non-human animals, especially primates. In order to determine the boundaries of human cognition, I have conducted psychological experiments from developmental and evolutionary perspectives.

We investigated the behaviors of crayfish (an invertebrate animal) to clarify a simple form of learning. We found that crayfish can learn to avoid an electric shock, though their behavior was not as flexibly changeable as vertebrate animals. We have also explored the origins of learning and memory from developmental perspectives. We found that a chimpanzee fetus can form an association between an extra-uterine tone and vibroacoustic stimulation using a classical conditioning procedure.

We also focused on the higher cognitive processes of non-human animals. Employing the language- and numerical-trained

chimpanzee-Ai, we tested her short-term memory span, which is essential for humans to engage higher cognitive processes such as mental calculation and conversation. We found that Ai had a memory span comparable to that of human adults. This research was published in *Nature*. Fortunately, some of my research has also been introduced in newspapers and TV programs both in Japan and other countries.

Humans are highly intelligent in not only physical but also social domains. Humans can discern others' intentions by subtle cues such as gaze directions or voice inflections. Humans can even tell the subtler difference between a real and fake smile. I plan to study how such affective information is communicated, and to clarify this mechanism as well as to elucidate the psychological and physiological changes that occur in the communication of various affective messages. In doing this, I will measure brain functions (e.g., by electroencephalogram) and physiological reactions like heart rate in combination with psychological experiments. I hope to eventually reveal how and why humans have evolved to become what we are today.



Dr. Nobuyuki Kawai

2004-present: Associate Professor, Graduate School of Information Science, Nagoya University

2001: Assistant Professor, Graduate School of Human Informatics, Nagoya University

1999: COE Postdoctoral Research Fellow, Primate Research Institute, Kyoto University

1998: Received Ph.D. from Kwansai Gakuin University

1996: JSPS Postdoctoral Research Fellow, Kwansai Gakuin University

1995: Kwansai Gakuin University (completed doctoral course)

1994: JSPS Doctoral Course Fellow, Kwansai Gakuin University

1990: Graduated from Kwansai Gakuin University

The Buddhist Thoughts in Early Modern Japan Focusing on the Scholar-Monk Fujaku (1707-1781)

My study focuses on the scholar-monk Fujaku (1707-1781) and presents him as a pioneer of Buddhist philosophy in early modern Japan. Despite his importance in the history of early modern Buddhist philosophy, Fujaku has not received due scholarly attention for two reasons. First, previous scholarship on Japanese Buddhism has tended to concentrate on the ancient and medieval periods leaving the early modern period relatively unexplored. Second, studies of modern Japanese thought have tended to focus on the political philosophies of Confucianism and *kokugaku* (Japanese classics) thereby largely neglecting Buddhist philosophy. This study fills this lacuna by examining Fujaku's works, and sheds new light on the intellectual history of early modern Japanese Buddhism.

More specifically, my study of Fujaku presents a strong example to counteract the image of "degenerate Buddhism" in the Edo Period (1600-1867). Buddhism in this period is often considered to be a formalized, lifeless religion led by a degenerate clergy. In order to stop the

diffusion of Christianity and detect hidden Christians, the Tokugawa Shogunate instituted the official temple registration system as well as that of the "main and branch temple" system. Scholars have traditionally assumed that the establishment of these systems contributed to the decline of Buddhism in this period, and led to the suppression of Buddhism in the subsequent Meiji Period (1868-1912). However, my study suggests otherwise—there was significant philosophical development in the Edo Buddhism as exemplified in Fujaku's works.

For future research, I will expand the scope of my study to include the medieval period. By examining the transformation of Buddhist thought from the medieval to the early modern period, I intend to reveal unique characteristics of early modern Buddhism. Furthermore, I will investigate the relationship between Japanese Buddhism in the Edo Period and Chinese Buddhism in the late Ming Period (1368-1644).



Dr. Ryo Nishimura

2008-present: Research Fellow, The Eastern Institute

2005: JSPS Superlative Postdoctoral Fellow, The University of Tokyo

2004: Research Fellow, The Eastern Institute

2004: Received Ph.D. from Tohoku University

1996: Graduated from Tohoku University

Carbon Nanotube Synthesis by Super-Growth Method

Throughout the history of materials, synthesis has always been a limiting factor, and often a breakthrough in synthesis paved the way for breakthroughs throughout an entire field. We have developed an extremely efficient method of chemical vapor deposition synthesis of single-walled carbon nanotubes where the activity and lifetime of the catalysts are enhanced by controlling the ambient temperature of the CVD furnace—a growth mode we call “Super Growth.” The enhanced catalytic activity of super growth results in massive growth of super-dense and vertically-aligned single-walled nanotubes forests with heights up to 2.5 millimeters. In addition, these SWNT forests were easily separated from the catalysts, producing the most pure SWNT material (over 99.98%) ever made, amazingly through an all-dry process without any purification. Moreover, patterned highly organized intrinsic single-walled nanotube structures were successfully fabricated. Super Growth simultaneously addresses many critical issues such as scalability, purity and cost, while opening up

innumerable opportunities ranging from fundamental research to real applications.

Since the development of water-assisted chemical vapor deposition in 2004, we have extensively pursued the possibility of synthesis so as to understand its mechanisms and kinetics, to expand the CVD world, to improve yield, and to control the structure of nanotubes, while devising a post-growth process to develop various forms such as carbon nanotube solid and nanotube wafers. The SWNTs formed by this super-growth method possess exceptional properties of high purity, high surface area, long length, and alignment. These properties have opened up new applications for carbon nanotubes (CNTs), exemplified by CNT black body absorbers, light mechanical beams, stretchable conductors, high power and density super-capacitors, fast-moving, low-voltage actuators, and the possibility of mass production.



Dr. Kenji Hata

- 2008-present: Team Leader, Nanotube Research Center, National Institute of Advanced Industrial Science and Technology (AIST)
- 2005: Team Leader, Research Center for Advanced Carbon Materials, AIST
- 2003: Senior Research Scientist, Research Center for Advanced Carbon Materials, AIST
- 2001: Postdoctoral Fellow, Harvard University
- 1998: Postdoctoral Fellow, Japan Science and Technology Corporation
- 1996: Teaching Assistant, University of Tsukuba
- 1996: Received Ph.D. from The University of Tokyo
- 1995: JSPS Doctoral Course Fellow, The University of Tokyo
- 1991: Graduated from The University of Tokyo

D-module and Harmonic Bundle

I have been interested in D-modules on algebraic varieties for many years. The D-module was introduced for the study on linear differential equations. Since then, it has been investigated intensively, and turned out to be related to various fields of mathematics. Many Japanese mathematicians, in particular M. Sato, M. Kashiwara, T. Kawai and M. Saito, have played leading roles in creating and developing the theory of D-modules.

I was able to show that the category of semisimple regular holonomic D-modules is preserved by various procedures. This constituted a supreme variant of the fundamental theorem formulated by A. Beilinson, J. Bernstein, P. Deligne and O. Gabber. It had been conjectured by Kashiwara, and was expected to take a long time to solve.

Luckily, I was able to solve this challenging problem with the help of progress made in a different field. Before attacking it, I investigated

a generalization of C. Simpson's work on harmonic bundles. Namely, I studied the asymptotic behaviour of a harmonic bundle around singularity. I applied it to the theory of pure twistor D-module, which was introduced by C. Sabbah based on Saito's pure Hodge module, and I established the correspondence between semisimple regular holonomic D-modules and regular polarizable pure twistor D-modules. Then, I arrived at the affirmative solution of Kashiwara's conjecture.

Recently, I have been working on holonomic D-modules, which are not necessarily regular singular. I proved a more general version of Kashiwara's conjecture. I have also investigated holonomic D-modules with some enriched structures, such as Betti structure and mixed twistor structure. I hope this will form part of the foundation of an interesting research area. I also want to challenge other subjects that are still new for me.



Dr. Takuro Mochizuki

- 2008-present: Associate Professor, Research Institute for Mathematical Sciences, Kyoto University
- 2004: Associate Professor, Graduate School of Science, Kyoto University
- 1999: Research Associate, Osaka City University
- 1999: Received Ph.D. from Kyoto University
- 1994: Skipped to Graduate School of Kyoto University

Sense of Smell and Pheromone

Animals are attracted by general odorants derived from food or by pheromones released from the opposite sex. These ecologically and biologically important volatiles are recognized by chemosensory receptors expressed by peripheral olfactory sensory neurons. Our research interests include the elucidation of molecular mechanisms underlying odorant and pheromone perception in both vertebrates and invertebrates.

We discovered an insect pheromone receptor in silkmoths that responds to bombykol, the sex pheromone released by female moths. We also identified a silkworm olfactory receptor that plays a role in sensing cis-jasmone, a potent chemoattractant for silkworms emitted by their food, mulberry leaves. These insect chemosensory receptors work as a ligand-gated channel, unlike those in vertebrates whose receptors are G protein-coupled. These studies have marked a new milestone in the insect olfactory field.

To understand how the mouse olfactory system can discriminate thousands of odorants

and how mice send socio-sexual information to other individuals by using specific pheromone molecules, we have focused on structural and functional aspects of odorant and pheromone receptors expressed respectively by olfactory and vomeronasal sensory neurons. Interestingly, we found that male mice release a sex peptide pheromone in tear fluids that activates the female vomeronasal neural system, leading to sexual behavior via a specific vomeronasal receptor. This specific pheromone-receptor interaction is in striking contrast to the situation in the main olfactory system, where odorants are typically recognized by multiple receptors in a combinatorial fashion.

I have been fascinated by the beauty of the chemosensory system in which thousands of structurally diverse odorants are strictly discriminated and also by the specific neural circuitry activated by a narrowly-tuned chemosensory receptor that in turn governs a distinct behavioral output crucial for survival or mating in various animal species.



Dr. Kazushige Touhara

2009-present: Professor, Graduate School of Agricultural and Life Sciences, The University of Tokyo

1999: Associate Professor, Graduate School of Frontier Sciences, The University of Tokyo

1998: Assistant Professor, Biosignal Research Center, Kobe University

1995: Assistant Professor, Faculty of Medicine, The University of Tokyo

1993: Postdoctoral Fellow, Duke University Medical Center

1993: Received Ph.D. from State University of New York at Stony Brook

1989: Graduated from The University of Tokyo

Thirty Projects Supported under FIRST Program

The launching of the Funding Program for World-Leading Innovative R&D on Science and Technology, or by way of acronym "FIRST Program," and selection of 30 projects was reported in the Autumn 2009 issue of *JSPS Quarterly*. On 9 March, the Cabinet Office's Council for Science and Technology Policy determined the amount of funding to be disbursed to each project and selected the research institutions that will provide primary operational support for each of them and their core researchers. Amidst a severe budgetary environment, the Cabinet Office took ample time to make a very careful examination of the projects' research plans when making these decisions.

On 10 March, JSPS notified each project of the amount of funding they will receive and, upon request from their operational support institutions, began disbursing it. The 30 projects are now getting their research activities off the starting blocks for what will be a run up to March 2014. Over this period, they will receive an aggregate ¥100 billion.

Most of the research-funding systems in Japan operate on a single-year basis. In contrast, the FIRST Program disburses its grants from a Fund established within JSPS, which gives the researchers a large measure of flexibility in using their funding by carrying it over from one fiscal year to the next across multi-years. Accordingly, the research projects were able to get off to a smooth

start even though their first accounting year ended later in the same month of March.

What may be touted as the FIRST Program's hallmark feature is that it allows the core researchers to choose their own operational support institutions. Most of the other research-funding programs in Japan are set up to have the researcher's own affiliated institution support the project. As a result, even when researchers believe that another institution could provide more effective and efficient support for their work, they are not able to ask that institution to do so.

To resolve this problem, the operational support institution under the FIRST Program is selected based on the core researcher's designation. Some of the core researchers of the selected projects have in fact chosen research institutions other than their own as their project's operational support institution. Introducing this system is expected to allow researchers to concentrate fully on their work and make optimal use of their capabilities in advancing cutting-edge research and development.

More information can be found on the FIRST Program's webpage (<http://www.jsps.go.jp/english/e-first/>), which outlines the scheme and lists the selected research themes.

— Special Research Funds Management Division I

Two Frontiers of Science Symposia Held in FY 2009

Held to pioneer new academic domains while fostering the next generation of research leaders, Frontiers of Science (FoS) Symposia are carried out by JSPS in cooperation with its partner agencies in the participating countries. Differing from the general symposium format, FoS Symposia do not attempt to reach conclusions or compile results; their aim is to further enrich the young researchers' ability to think freely and creatively so as to be better equipped to challenge and expand the frontiers of science. Concurrently, these symposia are meant to develop leaders who possess broad perspectives, transcending minutely defined boundaries among research fields, and who are capable of jelling colleagues across wide spectrums of science into collaborative undertakings.

In FY 2009, two FoS Symposia were held, one with Germany and the other with France. These symposia lodged 60-80 (30-40 from each side) talented young researchers from Japan and the counterpart country under one roof for a period of three days. Specializing in a wide range of research fields, the participants used this time together to engage in cross-disciplinary discussions on the leading edge of scientific pursuits.

In the symposium sessions, presentations were given on the appeal and potential of each of selected topics, followed by discussions that encouraged all the young researchers to venture across lines dividing their various specializations. These discussions proved to be so engrossing as to often carry over into lunch breaks or evening free time.

FoS Symposia assemble leading young researchers with ability to pioneer new frontiers in their respective fields. Uninhibited by today's highly partitioned research environment, they are expected to possess wide perspectives while focusing themselves upon their own research themes. By participating in these FoS Symposia, they not only broaden their scientific horizons but also discover new ideas and potential partners. This year as in others, many of the participants praised the program for the opportunity it accorded them to explore interdisciplinary possibilities with new colleagues.

Another feature of the FoS program is its planning groups, whose members are appointed from among the participants of the previous year's symposium. They plan and organize the following year's symposium, including the selection of its session topics and speakers.



JFFoS planning group meeting

For more program details, please see the FoS homepage: <http://www.jsp.go.jp/english/e-fos/>.

Japanese-German Frontiers of Science (JGFoS) Symposium

The JGFoS series was established as part of an agreement to strengthen bilateral scientific exchange, particularly among young researchers, made at a summit held in August 2003 between the Japanese and German heads of state. Launched in 2004, the program is implemented in cooperation with Alexander von Humboldt Foundation (AvH).

This sixth symposium in the series was held from 30 October through 1 November in Tokyo, Japan. On the first evening, a reception was hosted for the participants by Dr. Anna Prinz, Minister and Deputy Head of Mission, at the German Embassy in Tokyo. After the symposium, the members of the incoming planning group met and engaged in a spirited discussion on topic candidates for the seventh JGFoS.



Japanese-French Frontiers of Science (JFFoS) Symposium

The JFFoS series was established based on an agreement "to create a framework conducive to the development of exchanges" between the Japanese and French heads of state at their summit in March 2005. These symposia have been carried out since FY 2006 in cooperation with the French Ministry of Foreign and European Affairs (MAEE), French Ministry of Higher Education and Research (MESR), and Centre National de la Recherche Scientifique (CNRS).

This fourth symposium was held on 22-24 January in Futuroscope, France. After it, the incoming planning group met in Tokyo on 16 March, where the French and Japanese members spent an entire day deliberating and choosing the session topics for the fifth JFFoS.



— Research Cooperation Division II

New Long-term Young Researcher Overseas Visit Program Launched

The “Young Researchers Overseas Visits Program for Vitalizing Brain Circulation” seeks to advance science in Japan by taking a step beyond brain drain and gain in promoting the brain circulation of young researchers who engage in international joint research.

The program gives young Japanese researchers expanded opportunities to experience research at a high world level and to challenge various issues prevailing within the global arena, while strengthening networks between Japanese universities and research institutes and their overseas counterparts.

Within its FY2010 budget, the Ministry of Education, Culture, Sports, Science and Technology allocated a new fund to JSPS for this program, through which projects conducted by Japanese universities are financed. A call for FY2010 project proposals has been issued.

Under the program, the universities whose projects are selected for grants use them to cover the international travel costs of young researchers and the research expenses used by them to carry out

joint research at overseas universities and research institutes.

Details

Target fields: All fields of the humanities, social sciences and natural sciences

Eligible researchers: Researchers and doctoral students affiliated with an eligible Japanese university or research institute (up to 45 years of age, in principle)

Tenure of overseas visits: One year or longer, in principle

Period of projects: 1-3 years

Financial support for young researchers: Travel costs and research expenses

Project funding: Up to ¥30 million per year/project

The program’s website is <http://www.jsps.go.jp/english/e-zunoujuncan/>.

— Overseas Training Program Division

Second JSPS-DFG Roundtable Held in Tokyo

The Second JSPS-DFG Roundtable on “Cooperative Technology in Future: Cognitive Technical Systems” was held on 8-10 February at JSPS’s Tokyo Office. It was co-hosted by JSPS and the German Research Foundation (DFG).



This series of symposiums is aimed at strengthening ties between the Japanese and German scientific communities through a program of presentations and discussions on a topic of cutting-edge research, while seeding joint research with an eye to the future.

To this second Roundtable were invited a total of 35 researchers in fields related to cognitive technical systems from Japan and Germany. Their dialogue was advanced through five sessions: Vision and Interaction, Space and Action, Language and Semantics, Knowledge and Reasoning, and Social Interactions.

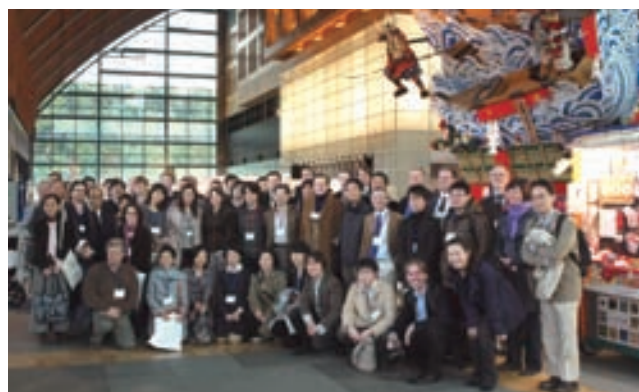
Though a little hesitant at first, the researchers from both countries gradually mixed and engaged each other in an animated discussion that integrated these various themes beyond the framework of their individual or group research into a Japanese-German collaborative context, even expanding the scope of their discussion to a global level. This was among the most significant outcomes of this Roundtable.

— Research Cooperation Division I

FY2009 ESF-JSPS Frontier Science Conference for Young Researchers Held in Kyushu

Over the period from 27 February through 4 March, the FY2009 ESF-JSPS Frontier Science Conference for Young Researchers, co-sponsored by JSPS and the European Science Foundation (ESF) and hosted by Kyushu University, was held in Fukuoka, Japan. Its theme was “Contact Zones of Empires in Asia and Europe: Complexity, Contingency, Causality.” Participating in the seminar were a faculty of 18 lecturers (nine from each Japan and Europe) and a “student body” of 26 young researchers from Japan and 30 from Europe.

Leading the list of cutting-edge researchers who gave lectures were Prof. Tadashi Nishitani, emeritus professor, Kyushu Univer-



sity, and Dr. Koji Mizoguchi, associate professor, Kyushu University. Listening attentively to the lectures, the young researchers from Japan and Europe took notes and asked many questions.

The young researchers also had a chance to highlight their own work by giving short presentations and exhibiting posters. Taking advantage of the opportunity that the seminar afforded them to meet with frontline researchers from Japan and Europe, the participants engaged the lecturers in sprightly exchanges of views and

information. This spirited interchange among the participants spilled over into an excursion to Kyushu National Museum in Dazaifu City.

In the free discussion held on the last day of the seminar, all indications were that the participants would continue to communicate with each other well into the future.

— Research Cooperation Division II

Thirteenth India-Japan Science Council Held

Cosponsored by JSPS and the Indian government's Department of Science and Technology (DST), the 13th India-Japan Science Council was held in Hyderabad, India, on 15 March. The Council comprises 14 members: the co-chairs and six coordinators on each side in charge of the six prioritized fields (Molecular and Supramolecular Science, Advanced Materials, including Polymers and Nanomaterials, Modern Biology and Biotechnology, Manufacturing Science, Astronomical and Space Science, and Surface and Interface Science, including Catalysis). This was the first Council meeting to be conducted by DST secretary Dr. Thirumalachari Ramasami as the Indian co-chair since the former co-chair Prof. C.N.R. Rao stepped down last year. Dr. Ramasami and Prof. Keitaro Yoshihara presided as co-chairs over proceedings that included the selection of topics for FY2010 joint projects and seminars and a review of the results of those carried out in FY 2009. A spirited discussion was also advanced in planning next year's Asia Academic Seminar to be held with India.

Another very positive outcome of the meeting was DST's agreement to play a more substantive role in carrying out the programs



of the Asian Heads of Research Councils (ASIAHORCs) and HOPE Meetings.

It was decided to hold the next, 14th meeting of the Council in January or February 2011 in Japan.

— Asian Program Division

Third HOPE Meeting to be Held in March 2011



JSPS has decided to convene the third in its series of HOPE Meetings, implemented to enrich the erudition of young leaders upon whose shoulders will rest the future of scientific research in Asia. It is scheduled to be held next March in Tokyo.

HOPE Meetings bring together excellent graduate students selected from Asian countries and regions in a discussion format with Nobel laureates and other eminent scholars laboring on the frontiers of knowledge. While interacting with peers from the region, the young scientists also receive cross-disciplinary lectures on themes in the humanities and social sciences and participate in cultural programs. In these ways, the meetings give the participants a unique opportunity to cultivate within themselves a depth of sensitivities that will refine their creativity as scientists.

The title "HOPE" signifies the promise held for bright young researchers and optimism for a vibrant future of S&T advancement in the Asian community. As HOPE Meetings are designed to give the aspiring young researchers a chance to experience for themselves the beauty and artistry inherent in science, they are themed "Art in Science."

The organizing committee of the third HOPE Meeting will be chaired by JSPS executive director Dr. Makoto Kobayashi (2008 Nobel laureate in physics). Held in the field of physics, the meeting will assemble over 100 doctoral students from more than a dozen countries and regions in Asia.

For more details about HOPE Meetings and how to participate in them, please see the program's webpage at <http://www.hopemeetings.jp/eng/>.

— Asian Program Division

Landmark Meetings for Thai Fellows Held in Bangkok, Including JSPS Bangkok Office's 20th Anniversary Ceremony

On 5 February, a day of events was held that included the JSPS-NRCT RONPAKU Medal Award Ceremony, a General Assembly to inaugurate the establishment of the JSPS Alumni Forum of Thailand (JAFT), a commemorative lecture, and a reception to celebrate the 20th anniversary of the JSPS Bangkok Office. Before the ceremony, a planning luncheon was held between the JAFT preparatory committee and the staff of the National Research Council of Thailand (NRCT).

Convened in the early afternoon at the Dusit Thani Bangkok Hotel, the JSPS-NRCT RONPAKU Medal Award Ceremony opened with remarks by NRCT acting secretary-general Mrs. Kanchana Pankhoingam and JSPS president Prof. Motoyuki Ono. He, then, presented the RONPAKU Medal to four Thai researchers who had successfully earned their PhDs from Japanese universities under the program. They, in turn, introduced themselves and described their research to everybody in attendance.



RONPAKU Medal recipients

Held later in the afternoon, the first JAFT General Assembly opened with remarks from JSPS Bangkok Office director Dr. Kou Ikejima, after which JAFT members officiated the meeting. Prof. Busaba Yongsmith, who chaired both the JAFT preparatory committee and ARAT (Association of RONPAKU Alumni of Thailand), told about what had transpired in the three preparatory meetings and described the association's charter that was drafted and sent out to Thai researchers who had participated in JSPS's programs. An animated discussion of the charter's details was held among the alumni members, who approved the charter and elected Prof. Yongsmith as the association's chair along with the executive committee members for the first fiscal year.

In the early evening, a lecture meeting was held as the first event to commemorate the 20th anniversary of the JSPS Bangkok Office. Prof. Yoneo Ishii, JSPS academic advisor and director general, Japan Center for Asian Historical Records, had been scheduled to deliver the lecture; regretfully, however, he fell suddenly ill, so Prof. Ono read the manuscript on his behalf. He also gave his own presentation on "University Internationalization—Japan's Higher Education Policy Challenges."

In the evening, the reception was held in the hotel's Dusit Thani Hall to celebrate the Bangkok Office's 20th anniversary and the alumni association's establishment. Dr. Ikejima and Prof. Ono offered welcoming remarks, followed by congratulatory messages from Mrs. Pankhoingam and Mr. Yuji



Participants of commemorative ceremony

Kumamaru, Envoy Extraordinary and Minister Plenipotentiary, Embassy of Japan in Thailand. Then, Prof. Yongsmith, who had just been elected JAFT chair at the preceding General Assembly, offered remarks in prelude to proposing a toast. After that, Prof. Ono gave commemorative mementos and JSPS alumni badges to Prof. Yongsmith to pass out to the members of the new Thai alumni association.

Dr. Ikejima gave a presentation on the history of the Bangkok Office's activities over the past two decades. Intermingled within his presentation were congratulatory messages by the third center director Prof. Osamu Akagi and the twelfth director Prof. Toshiomi Yoshida.

The commemorative lecture and reception were attended by altogether over 120 people, including former JSPS fellows and program participants, JSPS program operators at Thai universities, and Japanese embassy officials, among others. Both the JAFT inaugural General Assembly and the celebratory reception marked a forward-looking program milestone at the Bangkok Office's 20th year juncture. While also celebrating the start of the JSPS Alumni Forum of Thailand, the day's events afforded the Bangkok Office staff an ideal opportunity to ask for the sustained support of all involved with JSPS programs in Thailand.



Prof. Ono giving presentation

Prof. Yoneo Ishii passed away on 12 February. His great efforts had been instrumental in developing academic exchange between Japan and Thailand and in promoting the activities of the JSPS Bangkok Office. We offer our deepest condolences to his family and colleagues and to his many friends and associates in Thailand.

— JSPS Bangkok Office

Third China-Japan Science Forum Held

On 15-16 March, JSPS and the National Natural Science Foundation of China (NSFC) convened the third China-Japan Science Forum in Wuhan City, Hubei Province, China. This Forum, on the theme “Diseases Prevention and Control,” was implemented by the Wuhan Institute of Virology of the Chinese Academy of Sciences (CAS). Leading the dialogue were Dr. Tatsuo Miyamura, director-general, National Institute of Infectious Diseases, on the Japanese side, and Prof. Yumei Wen, academician, Chinese Academy of Engineering, and chief director, Institute of Pathogen, Shanghai Medical College of Fudan University, on the Chinese side. Altogether, about 120 people attended the Forum, including researchers laboring on the frontlines against infectious diseases in the two countries, university graduate students, and staffs of research-funding agencies.

The Forum was led off with opening messages from JSPS Beijing Office director Prof. Hiroshi Fukunishi; Dr. Yinglan Zhang, professor and division director, Bureau of International Cooperation, NSFC; Ms. Weiping Chen, senior program director, Bureau of International Co-operation, CAS; and Dr. Xinwen Chen, director,



Wuhan Institute of Virology, CAS. They each stressed the importance of scientific cooperation between Japan and China. Prof. Wen delivered a keynote address on the latest results of research on Hepatitis B in China, and Dr. Miyamura reported on collaborative initiatives being taken between Japan, China and other Asian countries in fields of infectious disease research. Their addresses were followed by sessions on hepatitis, tuberculosis, influenza, HIV/AIDS, and the bacteria genome. All evoked brisk discussions.

— JSPS Beijing Office

Joint Symposium Held on Theme “From Cell/Developmental Biology to Neuroscience” in London

On 15 March, a joint UCL-Tohoku University Symposium was held on the theme “From Cell/Developmental Biology to Neuroscience” by JSPS’s London Office, Tohoku University and the University College London (UCL). Tohoku University had been selected as one of the grant recipients under JSPS’s Institutional

Program for Young Researcher Overseas Visits. The symposium was held as a kickoff event for collaboration between it and UCL. The organizer on the UCL side was Prof. Shin-ichi Ohnuma, Institute of Ophthalmology. Seven researchers, led by Prof. Harukazu Nakamura, Graduate School of Life Sciences, came to London from Tohoku University to participate in the symposium.

The opening remarks were led off by Prof. Derek Tocher, provost for East and Southeast Asia, UCL, followed by presentations on theme-related cutting-edge research from the two universities’ researchers. The London Office gave a briefing on JSPS’s researcher exchange, joint research and other programs that could be of merit in advancing collaboration between the universities. The event enjoyed great success with the participation of about 100 people.

On the following day, Prof. Ohnuma took the Tohoku University researchers on a tour of UCL’s laboratories, offering a good chance for the researchers of the two universities to consider possibilities of initiating joint projects.

— JSPS London Office



Lecture by Dr. Yukiko Goda, UCL

Call for JARC-Net Registration

JSPS operates the Japan-Asia Research Community Network (JARC-Net) as a researcher information database. Its purpose is to support the maintenance and expansion of working networks between researchers in Japan and other countries of the Asian region, which have been cultivated over long years through JSPS programs, including fellowships, researcher exchanges, joint projects and seminars.

Registered members of the database are able to access other members’ profiles, including their names, affiliations, positions, research fields, and education/work histories. They can then use this information to look for new research partners or to broaden support for their activi-

ties by mobilizing past colleagues, such as university or JSPS program alumni, from Asian countries. Members are also provided an information mail service on JSPS’s exchange and cooperation programs within the Asian community. JARC-Net is open to all those who are interested in research cooperation and network building in Asia.

To register onto JARC-Net or peruse the site, please visit the following webpage:

<http://www.jps.go.jp/english/e-astrategy/jarcnet.html>

— Asian Program Division

Symposium on Aging and Stem Cells Held in the US

On 19 February, JSPS's Washington Office held a symposium with the National Institute on Aging (NIA) of the National Institutes of Health (NIH) and Johns Hopkins University. Entitled "Aging vs. Regenerative Medicine: How Much Can Stem Cells



Do?," it was venue at NIA in Baltimore, Maryland. The basic questions addressed in this symposium were as follows: As all systems decline with aging, why don't stem cells repair deficits, and how are species able to survive if germ cells age. The event was organized by Dr. Minoru Ko, chair of the symposium's program committee and chief of the Developmental Genomics and Aging Section at NIA.

The symposium opened with remarks by Dr. Hirotaka Sugawara, director of the JSPS Washington Office, and Dr. Jonathan Bagger, vice provost of Johns Hopkins University.

Before starting the sessions, Dr. David Schlessinger, chief of the Human Genetics Section at NIA, delivered the keynote speech titled "The Molecular Bases of Aging." Attended by some 170 people, the symposium was addressed by three researchers from Japan and six from the US.

— JSPS Washington Office

Symposium on Science Education Held in the US

On 12 March, the US JSPS Fellows Alumni Association co-sponsored a symposium with the JSPS Washington Office and Colorado State University (CSU). Entitled "Science Education in the 21st Century: Advantages, Pitfalls and Future Trends," it was held at CSU in Fort Collins, Colorado. The symposium was organized by four members of the alumni association—Dr. Ranil Wickramasinghe, Colorado State University; Dr. Shamim Mirza, University of California at Irvine; Dr. Shannon Bischoff, University of Puerto Rico at Mayagüez; and Dr. Arup Neogi, University of North Texas.

After the opening remarks from CSU vice president Dr. William Farland, vice provost Dr. James Cooney, and JSPS Washington Office director Dr. Hirotaka Sugawara, a keynote speech was delivered by Dr. Akito Arima, chairperson of the Japan Science Foundation, whose message focused on science education and training in Japan and the US. The symposium was addressed by nine speakers in three sessions: Engineering and Mathematics, Physics and Biology, and Social Sciences.



Dr. Arima in Q&A session

The annual general assembly of the US JSPS Fellows Alumni Association was convened on the following day.

— JSPS Washington Office

Gathering of JSPS Japanese Fellows Held in San Francisco

On 26 February, JSPS's San Francisco Office held its 13th Gathering of JSPS Japanese Fellows residing in the US. The confab was



attended by a total of 32 people, who included young Japanese researchers on JSPS Research Fellowships for Young Scientists and Postdoctoral Fellowships for Research Abroad, joined by other Japanese researchers residing in the US and visiting scholars from the Ministry of Education, Culture, Sports, Science and Technology. Attending also were staffs from the San Francisco Office of Tokyo University of Science, JSPS's Tokyo headquarters and San Francisco Office.

San Francisco Office director Dr. Seishi Takeda opened the meeting, followed by a briefing from a member of JSPS's Research Fellowship Division on Research Fellowships for Young Scientists and Postdoctoral Fellowships for Research Abroad. Afterwards, the fellows introduced themselves and gave presentations on their research.

During the meeting, the attending researchers from diverse fields enjoyed comparing notes on their various research activities and sharing stories and information on their lives in the US. All in all, the event more than achieved its objectives.

Adding to this success was the opportunity the meeting gave the

young researchers to deepen exchange with each other while organically building interpersonal networks. As the JSPS Office considers providing such periodical opportunities to be very meaningful, we will continue to do so in the future.

— JSPS San Francisco Office

Sixth Japan-Germany Colloquium “World Heritage for Tomorrow”

On 18-19 February, the sixth Japan-Germany Colloquium was held, this time on the topic “World Heritage for Tomorrow.” It was venues at Brandenburg University of Technology, the only university in Germany to offer a major in World Heritage Studies. The meeting brought together 25 young researchers mainly from Germany and Japan, but with a few coming from England, Ireland and Poland. They hailed from a wide range of



research specializations, including the architectural history, maintenance and restoration, social sciences, design, and environmental engineering.

Themed “What,” the first day’s session focused on factors for determining what are world-heritage sites and what the future value of such sites will be. The second day’s session was titled “How.” It advanced a case-study-based discussion on cultural property restoration activities along with methods and techniques employed in them. Bridging the two sessions was a more general discussion, entitled “For Whom.” It engaged the participants in a dialogue that included philosophical and ethical points of view.

As the value-determination and registration of world-heritage properties is heavily influenced by political factors, that the colloquium advanced an active discussion on what scientists can do to enrich this process may have been its most valuable outcome. The colloquium was also successful in accelerating the pace of German-Japanese research cooperation in the world-heritage domain.

— JSPS Bonn Office

Recent Visitors to JSPS (February-April 2010)

Deputy Minister of International Trade, Canada

On 3 March, Mr. Louis Lévesque, Canada’s Deputy Minister of International Trade, and Mr. Jonathan T. Fried, Ambassador of Canada to Japan, paid a courtesy visit to JSPS president Prof. Motoyuki Ono.

Prof. Ono described the bilateral scientific exchange programs that JSPS is steadfastly advancing in collaboration with its Canadian partner organizations. The Canadian visitors

asked several questions about JSPS’s programs including their funding systems along with Japan’s overall research-financing framework. Mr. Lévesque expressed gratitude for JSPS’s role, which he appraised highly, in advancing scientific collaboration between Japan and Canada, and said he looked forward to its continued growth in the future.

— Research Cooperation Division I



European Commission Delegation

On 14 April, JSPS received a visit from a delegation comprising Ms. Mary Minch, director, Directorate D - International Cooperation, and Mr. Philippe Vialatte, deputy head, International Dimension of the Framework Programme Unit, both from the Directorate-General for Research of the European Commission, along with Dr. Barbara Rhode, minister-counsellor, head of the Science and Technology Section of the EU Delegation

in Tokyo.

They made this visit in parallel with attending the Japan-EU Preparatory Meeting on Cooperation in Science and Technology at the Ministry of Foreign Affairs on the following day. At JSPS, they exchanged views with JSPS president Prof. Motoyuki Ono on promoting the exchange of young researchers between Japan and EU countries.

— Research Cooperation Division II



Aomori Prefectural Hachinohe Kita High School



Date: 11 March
Dr. Mohammad Al-Mamun
(Bangladesh)
Host institution: Iwate University
Title: "Unique Digestive System in Ruminant Animals"

Konko Gakuen Senior High School (Okayama)



Date: 20 February
Dr. Mazen T. S. Abualtayef
(Palestine)
Host institution: Tottori University
Title: "Ocean Dynamics"

Chiba Prefectural Kashiwa High School

Date: 22 January
Dr. Suraj C. Sharma (Nepal)
Host institution: Tokyo University of Science
Title: "The Himalayan Country Nepal and My Research on Surfactant Chemistry in Japan"



Kumamoto Prefectural Daini High School

Date: 25 January
Dr. Jaeil Cho (Korea)
Host institution: Kyushu University
Title: "How to Understand Global Warming?"



Fukui Prefectural Fujishima Senior High School

Date: 20 February
Dr. Derrick M. Mott (USA)
Host institution: JAIST
Title: "Life in Science and Research: Using Nanotechnology to Improve Our Lives"



Kumamoto Prefectural Kumamoto Kita High School



Date: 16 March
Dr. Bastien Chevalier
(France)
Host institution: Kumamoto University
Title: "Introduction to Soil Mechanics—Research about Arches in Soil"

Date: 23 February
Dr. Micah T. Ross (USA)
Host institution: Kyoto Sangyo University
Title: "History of Science; Why a Day Has 24 Hours?"



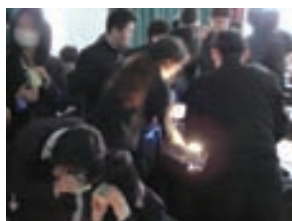
Saitama Prefectural Warabi High School

Date: 9 February
Dr. Ashutosh (India)
Host institution: Tohoku University
Title: "Heterosis Breeding and Its Use in Hybrid Crop Production"



Gifu Prefectural Gizan Senior High School

Date: 25 January
Dr. Heide N. Ibrahim (Germany)
Host institution: National Institutes of Natural Sciences
Title: "Light as a Key to Molecules"



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

Date: 12 February
Dr. Erik M. Muller (Australia)
Host institution: Nagoya University
Title: "Our Home Universe"



Ikeda High School (Kagoshima)

Date: 25 January
Dr. Mohammad M. Rahman
(Bangladesh)
Host institution: Kagoshima University
Title: "Poly-Eco-Aquaculture: Definition, Advantages and Design"



Shizuoka Prefectural Kakegawa Nishi High School

Date: 8 March
Dr. Yaron R. Silberberg
(Sweden)
Host institution: Kyoto University
Title: "Nanotechnology in Biological Research"



Shizuoka Kita High School (Shizuoka)

Date: 15 January

Dr. Lok K. Shrestha (Nepal)
Host institution: Yokohama National University
Title: "Colloid and Polymer Science: Fundamentals to Applications"



Date: 1 February

Dr. Yiping Zhao (China)
Host institution: Waseda University
Title: "Environmental Management"



Date: 18 February

Dr. Yaron R. Silberberg (Sweden)
Host institution: Kyoto University
Title: "Nanotechnology in Biological Research"



Shizuoka Prefectural Iwata Minami High School



Date: 10 February

Dr. Kamlesh K. Shrivastava (India)
Host institution: Hamamatsu University School of Medicine
Title: "Nanotechnology and Applications"



Dr. Jen-Chieh Hsieh (Taiwan)
Host institution: Kyoto University
Title: "Chemistry and Life"

Takada Senior High School (Mie)

Date: 20 March

Dr. Frederico M. Anacleto Arroja (Portugal)
Host institution: Kyoto University
Title: "Our Universe"



Wakayama Prefectural Hidaka High School

Date: 20 January

Dr. Herman Hidayat (Indonesia)
Host institution: Kyoto University
Title: "Introduction to Indonesia; I Love Indonesian Forest: How to Manage Sustainable Plantation Forestry in ASEAN?"



Tochigi Prefectural Utsunomiya Girls' High School

Date: 14 January

Dr. Monique Maurice ep Vialatte (France)
Host institution: RIKEN
Title: "Effect of Flickering Visual Stimulation on the Brain"



Dr. Louis J. Irving (UK)

Host institution: Tohoku University
Title: "My Life in Science"



Dr. Mei He (China)

Host institution: Tohoku University
Title: "RAGE in Lung Disease"



Dr. Antonio De Felice (Italy)

Host institution: Tokyo University of Science
Title: "Introduction to Cosmology"



Dr. Claire L. Dune (France)
Host institution: National Institute of Advanced Industrial Science and Technology
Title: "Robot Vision from France to Japan"



Dr. Mohammad L. Rahman (Bangladesh)
Host institution: Utsunomiya University
Title: "My Home Country Bangladesh and My Research on Avian Color Vision"

Dr. Yuri Bolshan (Canada)

Host institution: The University of Tokyo
Title: "Methodology and Total Synthesis in Organic Chemistry"



Yamanashi Prefectural Tsuru High School

Date: 10 February

Dr. Marek Bundzel (Slovakia)
Host institution: Waseda University
Title: "On Computational Intelligence"





Cover photo:

Boarded floor of outer corridor of traditional Japanese house adorn with things that make one feel cool on a summer day.

About JSPS

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



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@jps.go.jp

Fax: +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.

● JSPS Fellows Plaza

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

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

● JSPS Washington Office

2001 L Street, N.W., Suite 1050,
Washington, D.C. 20036, USA
Tel: +1-202-659-8190 Fax: +1-202-659-8199
E-mail: info@jpsusa.org
<http://www.jpsusa.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@jpsusa-sf.org
<http://www.jpsusa-sf.org/>

● JSPS Bonn Office

Wissenschaftszentrum, Ahrstr. 58, 53175,
Bonn, GERMANY
Tel: +49-228-375050 Fax: +49-228-957777
E-mail: info@jps-bonn.de
<http://www.jps-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@jps.org
<http://www.jps.org/>

● JSPS Stockholm Office

Retzius Vag 3, S171 77 Stockholm, SWEDEN
Tel: +46-8-5248-4561 Fax: +46-8-31-38-86
E-mail: info@jps-sto.com
<http://www.jps-sto.com/>

● JSPS Strasbourg Office

Maison Universitaire France-Japon
42a, avenue de la Forêt-Noire,
67000 Strasbourg, FRANCE
Tel: +33-3-6885-2017 Fax: +33-3-6885-2014
E-mail: jps@japon.u-strasbg.fr
<http://jps.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: bkk02@jps-th.org
<http://www.jps-th.org/>

● JSPS Beijing Office

616 Library of Chinese Academy of Sciences (CAS)
33 Beisihuan Xilu, Zhongguancun,
Beijing 100190, P. R. CHINA
Tel: +86-10-6253-8332 Fax: +86-10-6253-8664
E-mail: beijing@jps.org.cn
<http://www.jps.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@jpscairo.com, jpscairo@hotmail.co.jp
<http://jpscairo.com/>

● JSPS Nairobi Research Station

209/346/39 Riverside Drive Chiromo,
Nairobi, KENYA
Tel: +254-20-4442424 Fax: +254-20-4442112
E-mail: jps1@africaonline.co.ke
<http://www.jpsnairobi.org/>