

# JSPS Quarterly

Japan Society for the Promotion of Science



## FEATURE: JSPS Prize

### TOPICS

● JSPS Prize .....	2
● JSPS President Attends G8-HORCs Meeting .....	5
● New Project Selected for JSPS-NSF Collaboration .....	6
● Japan-Korea Joint Committee for Basic Scientific Research .....	6
● International Symposium Held under JSPS London Scheme .....	6
● "Science in Japan" Forum Held in Washington, DC .....	7
● Joint Forum Held on Functional Organic Chemicals in Strasbourg .....	7
● Alumni Meetings Held in Finland .....	7
● JSPS-RSAS Conference Held on Solar Energy .....	8
● JSPS Program Briefing Held at Chongqing University .....	8
● Briefings Given at National Institutes for Research in Thailand .....	8
● JSPS Reporting Meeting Held in Bangkok .....	9
● Meeting Held of Japanese University Faculty in the US .....	9
● Annual Japanese-German Symposium Held in Berlin .....	10
● Japan Weeks Held at German Universities .....	10
● Welcome to JARC-Net .....	10
● Introducing the German JSPS Club .....	11
● JSPS Summer Program .....	12
● Science Dialogue .....	14
● Recent Visitors to JSPS .....	15
● "The 110 <sup>th</sup> Anniversary Exhibition of the Nobel Prize" Scheduled .....	15

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## Seventh Award of JSPS Prize

On 3 March, a ceremony was held to award the seventh JSPS Prize. Selected were 25 talented young researchers with excellent records of scientific inquiry and exceptional promise as trailblazers of scientific research in Japan. The ceremony for the FY2010 Prize was held at the Japan Academy in the presence of Their Imperial Highnesses Prince and Princess Akishino.

In the selection process, JSPS sent out requests for Prize nominations to 3,073 Japanese research institutions and academic societies, from which it received 241 in May 2010. Adding the carryovers from the prior year, 373 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 (1973 Nobel laureate in physics) and comprising 12 members, made the final decision on the 25 awardees.

The ceremony for awarding the JSPS Prize was held in conjunction with the awarding of the Japan Academy Medal. At the ceremony, 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. Keimei Kaizuka, 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 them, Prince Akishino offered remarks and Mr. Yoshiaki Takaki, 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. Eiji Saitoh, professor, Institute for Materials Research, Tohoku University.

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.

See list of awardees at [http://www.jps.go.jp/english/e-jps-prize/awards\\_7th\\_01.html](http://www.jps.go.jp/english/e-jps-prize/awards_7th_01.html)

## Awardees Speak about Their Work and Aspirations

### Humanities and Social Sciences

#### Allegoresis of Alexander: From Antiquity to the Mediaeval Islamic World

During his short but intense life, Alexander of Macedon crossed numerous geographical frontiers and left his mark in the collective memory of peoples living between Greece and India. Even after the tide of Hellenism had receded, his legend survived in many regions, adapting to new political, religious, and cultural currents: Alexander was glorified as a hero, venerated as God's envoy, or cursed as a demon.

In my book, *Allegoresis of Alexander: From Antiquity to the Mediaeval Islamic World* (*Arekusandorosu hensō: kodai kara chūsei isurāmu e*), I have investigated the ways in which the Muslim community, which occupied most of the territories once conquered by Alexander, made use of this figure to strengthen its own existence. Before Islam, the image of Alexander had already been exploited by previous civilizations and religions for the consolidation of their community consciousness and the propagation and defense of their beliefs. As Muslims

rapidly gained military and political control over West Asia, the figure of Alexander gained importance in their religious and historical discourse. I examined texts in Arabic and Persian, from the beginnings of Islam in the 7<sup>th</sup> century to the Mongol invasion in the middle of the 13<sup>th</sup> century, with the aim of understanding the transformation of the image of Alexander, and its place in the faith, political ideas, and historical consciousness of mediaeval Muslims. By placing the literary manifestations of Alexander in their socio-historic contexts, I elucidated the process of allegorisation; a mechanism of interpretation that makes him into a symbol that satisfies a certain political or intellectual demand of a particular society or epoch.

As for my recent research endeavors, I have embarked on the study of "wonders," as a principal investigator in a Grant-in-Aid for Scientific Research project titled "A comparative study of *mirabilia* in the Middle East and Europe," which was launched last year.



#### Dr. Yuriko Yamanaka

2009-present: Associate Professor, National Museum of Ethnology, National Institutes for the Humanities

2007: Received Ph.D. from The University of Tokyo

1998: Assistant Professor, National Museum of Ethnology, National Institutes for the Humanities

1994: JSPS Postdoctoral Fellow for Research Abroad, Centre National de la Recherche Scientifique (CNRS), France

1993: Research Fellow, Institute of Oriental Culture, The University of Tokyo

1992: JSPS Doctoral Course Fellow, The University of Tokyo

1988: Graduated from Kalamazoo College, USA

## The Right of Self-Defence in International Law: From the *Caroline* Incident to the United Nations Charter

The primary purpose of my study is to examine the long-standing dispute on the prerequisites for exercising the right to self-defence, provided for in the Article 51 of the United Nations Charter. I take an historical perspective on the development of the concept of the right to self-defence from the mid-19<sup>th</sup> century to 1945, and offer a possibly better alternative for interpreting the significance of its preconditions. The study also fills a number of gaps in the literature, which, since the early-1960s, has not re-examined the historical development of that concept.

I divide the concept of the right to self-defence during this period into two main types: a "policing" concept and a "counter-war" concept. The latter can be subdivided into two types: "collective self-defence" and "individual self-defence," each having a different function and prerequisite. The policing concept justifies the violation of the territory or flag-state jurisdiction of another state to repel attacks by private persons, and the counter-war concept justifies the use of force against another state to resist attacks by that state. The prerequisite for

collective self-defence was the occurrence of an armed attack and for individual self-defence the use of force, including that short of an armed attack. This differentiation of the preconditions was regarded as essential because collective self-defence was considered a potential cause for a conflict of jurisdiction with the collective security system of the League of Nations, and even the potential cause of a world war.

These distinctions between policing and counter-war concepts and between collective and individual self-defence are not explicitly articulated in the provisions of the Charter, but can be found in its *travaux préparatoires*. I suggest that only by recognizing the existence of these distinctions can the significance of the preconditions provided for in the current Article 51 of the Charter be accurately understood. Thus, my study works to define the right of self-defence as understood in and before 1945. My future topic of pursuit will be to analyze the state of practice of the right to self-defence since 1945, which is required to clarify its concept in contemporary international law.



### Dr. Tadashi Mori

2010-present: Associate Professor, Graduate Schools for Law and Politics, The University of Tokyo  
2008: Professor, Graduate School of Social Sciences, Tokyo Metropolitan University  
2008: Received Ph.D. from The University of Tokyo  
2003: JSPS Postdoctoral Fellow for Research Abroad, University of Oxford  
2000: Associate Professor, Faculty of Law, Tokyo Metropolitan University  
1997: Assistant Professor, Institute of Social Science, The University of Tokyo  
1996: Received LL.M. from Georgetown University  
1992: Graduated from The University of Tokyo

## Mathematics; Physical Sciences; Chemistry; Engineering Sciences

### Exploring Spin-current Physics

Electronics is entering a new era of "spintronics," where electron spins are exploited as well as charge. Spin current, a flow of electron spins, appeared as a new physical concept during the recent development of spintronics. A spin current is generally created through phenomena called spin injection and spin accumulation, and it is expected to carry and manipulate physical signals effectively in condensed matters. However, the fundamental properties of spin current are still unclear, in contrast to electric current whose physics were elucidated in the previous century.

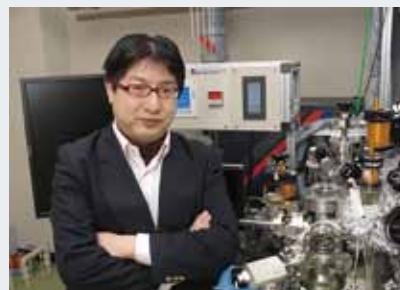
We have explored the physics of spin current and discovered the following phenomena:

- (1) *Inverse-spin-Hall effect*: We found that a spin current generates electric voltage perpendicular to the spin-current propagation direction. We named this phenomenon "inverse-spin-Hall effect." Since this effect is the reciprocal of the spin-Hall effect, the generation of a spin current from electric current, it allows us to directly detect a spin current.

- (2) *Spin-Seebeck effect*: We found a spin-Seebeck effect, the generation of a spin current and spin voltage from a heat flow. We utilized the inverse-spin-Hall effect as a spin-current probe and demonstrated spin voltage generation from the heat flow. Surprisingly, the spin-Seebeck effect was found to appear also in magnetic insulators. This achievement enables the use of insulators, with less energy loss due to heat transfer, for thermoelectric conversion elements.

- (3) *Spin current propagation in insulators*: A spin current that can propagate over a long distance in insulators was successfully injected into an insulator. Using this injection, we have shown that even an insulator can transmit DC electric signals via the inverse-spin-Hall effect. This enabled, for the first time, the use of spin current in an insulator.

We are now starting new research on systematizing the physics of spin currents. Our goal is to fully elucidate spin-current



### Dr. Eiji Saitoh

2009-present: Professor, Institute for Materials Research, Tohoku University  
2007-present: Japan Science and Technology Agency PRESTO Researcher  
2006: Senior Assistant Professor, Faculty of Science and Technology, Keio University  
2001: Assistant Professor, Faculty of Science and Technology, Keio University  
2001: Received Ph.D. from The University of Tokyo  
1996: Graduated from The University of Tokyo

physics so as to contribute to the development of information technologies and industries.

## Atomically Controlled Processes for Next-Generation Electronics

State-of-the-art integrated circuits (ICs) have been driving today's digital world, and their future possibilities will expand with the help of various emerging technologies. Metal-oxide-semiconductor (MOS) stacked structures are key components in cutting-edge ICs. Aggressive scaling has made it possible for a billion transistors to be integrated on a small chip, but the ultimate thinning of insulators ( $\text{SiO}_2$ ) down to several atomic layers causes significant leakage current through the oxides, leading to wasted electric energy and transistor performance deterioration.

I was part of a national project at the Joint Research Center for Atom Technology (JRCAT) from 1994 to 1998, where I investigated Si surface oxidation for determining the guidelines for the ultimate scaling of  $\text{SiO}_2$  gate insulators in future MOS devices. We succeeded in revealing layer-by-layer Si oxidation using a newly developed interface observation technique, and established an initial oxidation model. After leaving JRCAT, I began basic research on alternative high-

permittivity gate insulator—that is, high-k dielectrics—aiming at further scaling and reducing gate leakage current. I proposed a new method for fabricating high-quality high-k dielectrics using a solid phase interface reaction based on my knowledge of surface and interface reactions. This target-oriented basic research greatly contributed to the implementation of the world's first high-k devices.

I have recently been working on creating next-generation electronics based on surface and interface science, focusing my efforts on maximizing energy efficiency, such as advanced high-k gate stacks, high-mobility Ge channels, and SiC-based MOS power devices. Atomic-level characterization and interface-reaction control are essential in designing and optimizing hetero interfaces, heralding next-generation electronics that advance leading-edge technology even further. I want to continue trying to develop atomically controlled processes and contribute to the progress of green electronics.



### Dr. Heiji Watanabe

2007-present: Director, Research Center for Ultra-Precision Science and Technology, Osaka University

2006-present: Professor, Graduate School of Engineering, Osaka University

2004: Associate Professor, Graduate School of Engineering, Osaka University

1994: Researcher, Joint Research Center for Atom Technology (seconded from NEC until 1998)

1994: Received Ph.D. from Osaka University

1990: Researcher, NEC Corporation

1988: Graduated from Osaka University

## Biological Sciences; Agricultural Sciences; Medical, Dental, Pharmaceutical Sciences

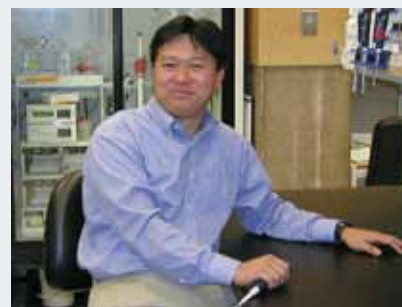
### Biosynthetic Machinery for Bacterial Isoprenoid

Our research interests lie in gaining a comprehensive understanding of the biosynthetic machinery underlying bacterial isoprenoids.

Isoprenoids are a diverse group of molecules found in all organisms, where they serve such important biological functions as hormone signaling (steroids) in mammals, antioxidation (carotenoids) in plants, electron transport (ubiquinone or menaquinone), and cell wall biosynthesis intermediates in bacteria. All isoprenoids are synthesized by the consecutive condensation of the five-carbon monomer isopentenyl diphosphate (IPP) to its isomer, dimethylallyl diphosphate—both of which are essential metabolic precursors for isoprenoid biosynthesis. The biosynthetic pathway for the formation of IPP from acetate (the so-called mevalonic acid (MVA) pathway) had been established mainly in a yeast *Saccharomyces cerevisiae*. Curiously, most prokaryotic microorganisms lack orthologues of the MVA pathway genes even though IPP is essential in most bacteria for isoprenoid biosynthesis. This observation

provided one of the impetuses to search for an alternative pathway to IPP, ultimately leading to the discovery of the independent 2-C-methyl-D-erythritol 4-phosphate (MEP) pathway. We contributed significantly to a comprehensive understanding of the MEP pathway by cloning its genes, making functional assignments of the gene products, and identifying the biosynthetic intermediates in this novel pathway. In addition, we found by identifying its molecular target that the antibiotic fosmidomycin is a potent and specific inhibitor of the MEP pathway. Furthermore, we discovered novel enzymes associated with isoprenoid biosynthesis and elucidated their structural basis. These results have exerted a wide impact on natural product chemistry, biochemistry, and microbiology, as related to isoprenoid biosynthesis. In addition, we demonstrated the possibility of developing innovative drugs that target the MEP pathway.

Yet-undiscovered alternative routes for isoprenoids may be buried in the enormous quantity of genome sequences. We will continue to investigate isoprenoid biosyn-



### Dr. Tomohisa Kuzuyama

2004-present: Associate Professor, Biotechnology Research Center, The University of Tokyo

1995: Assistant Professor, Institute of Molecular and Cellular Biosciences, The University of Tokyo

1995: Received Ph.D. from The University of Tokyo

1994: JSPS Doctoral Course Fellow, The University of Tokyo

1990: Graduated from The University of Tokyo

thesis in microorganisms so as to illuminate the interplay between functional convergence and divergence in the evolution of metabolic pathways.

## Opening the New Era of Termite Biology

My research focuses on the social system and evolution of termites. I am primarily interested in understanding their reproductive mechanism and the evolution of their chemical communication and defensive strategies against various parasites and predators. I have been characterizing the molecular, physiological, behavioral, and ecological factors that regulate these processes. On the basis of these basic findings on termite biology, I have also developed novel technology to effectively control termites by using their social behaviors.

Egg protection is one of the most fundamental social behaviors in social insects. We discovered the termite-egg mimicking fungus "termite-ball." Along with their eggs, *Reticulitermes* termites often harbor sclerotia of the fungus *Fibularhizoctonia* sp., giving the fungus a competitor-free habitat within termite nests. We identified the termite egg-recognition pheromone and revealed the sophisticated morphological and chemical mimicry by the fungus. Using the mechanism of egg mimicry, we developed a novel technology for introducing pesticide

into the centre of termite nests, efficiently destroying the colonies.

Many termite species undergo royal succession, in which the primary reproductives who formed colonies are replaced by secondary reproductives from within the nest. We found that termites use sexual and asexual reproduction conditionally, where secondary queens are exclusively produced parthenogenetically by the original primary queen, while workers and alates are produced by sexual reproduction. By asexual succession, the queen maintains her full genetic contribution for the next generation of primary reproductives.

Recently, we identified a termite queen pheromone that inhibits the differentiation of new neotenic reproductives (secondary queens). This opened new avenues for elucidating the developmental pathways leading to reproductive and non-reproductive castes. I will continue to pursue this quest to reveal the beauty of social evolution by challenging a lot of unsolved enigmas in social insect biology, including ultimate and



### Dr. Kenji Matsuura

2008-present: Associate Professor, Graduate School of Environmental Science, Okayama University

2004: Assistant Professor, Graduate School of Natural Science and Technology, Okayama University

2003: JSPS Postdoctoral Research Fellow, University of the Ryukyus

2002: Postdoctoral Fellow, Harvard University

2002: Received Ph.D. from Kyoto University

2000: JSPS Doctoral Course Fellow, Kyoto University

1998: Graduated from Kyoto University

proximate factors determining the extremely long life span of reproductives (i.e., kings and queens).

## JSPS President Attends G8-HORCs Meeting

On 11-12 July, the 30<sup>th</sup> meeting of the Heads of Research Councils of the G8 Countries (G8-HORCs) was held in Warwick, England. This year's meeting was hosted by Research Councils UK. JSPS president Prof. Motoyuki Ono represented Japan in the meeting. Held once a year, G8-HORCs meetings are attended by the heads of leading science-promotion organizations in the G8-member countries; namely, Canada, France, Germany, Italy, Japan, Russia, the UK, and the US. At them, the representatives engage in candid discussions of global issues, S&T policies and practices, and other topics of shared interest.

On the first day of this year's meeting, each representative presented a report on recent trends in research and technology policy in his/her respective country. Prof. Ono first explained the situation in the wake of the Great East Japan Earthquake, its impact, and actions being taken by JSPS in response. Then, he described recent developments in Japan's S&T policy and how a Fund has been established within JSPS to allow researchers multi-year use of Grants-in-Aid. After these reports, four specialists gave presentations on the subject "Access to Research Data," followed by a discussion on such topics as how to protect individual information and to make effective use of government statistics. In the late afternoon, the participants divided into two groups and visited the Shakespeare Institute at the University of Birmingham and the Warwick Innovative Manufacturing Research Centre.

The first item of business on the second day was the G8 Research Councils Initiative, which had been proposed and established by the G8-HORCs for advancing multilateral joint research



on prominent global issues. The German Research Foundation (DFG) reported on the overall implementation of the first application call, and JSPS reported on the issuing of the second call. Then, a series of spirited discussions were carried out on the following themes: "Evaluation of international cooperation activities, including roles of overseas offices," "Mobility of researchers (international)," and "What constitutes an effective innovation system?"

The next G8-HORCs meeting is scheduled to be held in Germany around July of next year.

— Research Cooperation Division I

## New Project Selected for JSPS-NSF Collaboration

A project has been selected for implementation from FY 2011 under the program JSPS-NSF International Collaborations in Chemistry (ICC). Titled “Synthetic Organic Approaches to Carbon Nanotubes with Well-defined Structure,” its principal investigator on the Japan side is Dr. Yoshito Tobe, professor, Osaka University.

ICC is an international program carried out between Japan and the US upon an agreement between JSPS and the National Science Foundation (NSF) aimed at achieving a highly synergetic effect in challenging new realms and vistas in chemistry. For its part, JSPS supplies funding over a 3-year period for joint research projects undertaken by excellent researchers from Japanese institutions and

their American counterparts.

In selecting this year’s project, NSF carried out a preliminary screening of the applications, winnowing them down to three, which were reviewed by JSPS’s International Program Committee, the final selection being made in consultation with NSF.

Upon completion of the necessary processing, Dr. Tobe and Dr. Yves Rubin, professor, University of California, Los Angeles, the US-side principal investigator, will start their joint project under the ICC program.

— Research Cooperation Division I

## Japan-Korea Joint Committee for Basic Scientific Research

The 21<sup>st</sup> meeting of the Japan-Korea Joint Committee for Basic Scientific Research was held in Seoul on 2 June. It was co-chaired by Prof. Kunio Takayanagi, Tokyo Institute of Technology, on the Japan side, and Prof. Mancheol Suh, president, Kongju National University, on the Korea side. The committee meeting was convened with cooperation by the National Research Foundation of Korea. Attending the meeting for the first time since his appointment as NRF president, Prof. Se-Jung Oh emphasized the importance of partnership between his Foundation and JSPS and expressed expectation for yet-new dimensions in advancing Korea-Japan scientific exchange.

In the meeting, joint research projects and seminars conducted in FY 2010 were reviewed based on their implementation reports, and new activities to be conducted in FY 2011 were selected. Out of 94 applications for joint projects, 22 were adopted, while 11 of the 30 seminars proposed were selected. It was also decided to hold the FY2011 Asian Science Seminar in the field of medicine.



— Asian Program Division

## International Symposium Held under JSPS London Scheme

On 27-29 June, the JSPS York-Tohoku Research Symposium on “Magnetic Materials and Spintronics” was held at the University of York. It was selected for implementation under the London Office’s symposium scheme for Japanese researchers based in the UK. Addressing research on magnetic materials being advanced in Japan, the UK and Germany, the symposium attracted some 136 attendees.

The first day saw a special lecture titled “Spintronics meets semiconductor integrated circuits” by Prof. Hideo Ohno, Tohoku University, delivered as part of the University of York’s Cantor Nanoscience Lecture program. Under this program, top-class

researchers in related fields are invited to give lectures, last year’s being delivered by Sir Harold Kroto (1996 Nobel laureate in chemistry).

On the second day, a Research Promotion Session was held in which representatives of JSPS, the Engineering and Physical Sciences Research Council, and Japan Science and Technology Agency gave briefings on funding programs oriented to cooperation between Japanese and British researchers. The London Office provided an outline of JSPS’s operation and introduced its international exchange programs.

As the finale of this engrossing 3-day event, the participants were given an opportunity to visit and hold discussions in three of the university’s research laboratories.

The JSPS London Office supports UK-Japan joint symposiums coordinated on an institutional or departmental level and held under the Office’s schemes for Japanese researchers based in the UK and for the UK JSPS Alumni Association. The Office is currently issuing a call for FY2012 symposiums, while simultaneously launching “Phase 2” of the program. Through it, researchers who have in the past been selected for symposiums under either of the two schemes are eligible to apply for another symposium or small seminar as a continuum of their bilateral exchange initiatives.

— JSPS London Office



Prof. Ohno giving a special lecture

## “Science in Japan” Forum Held in Washington, DC

On 21 June, the 16<sup>th</sup> “Science in Japan” Forum was held in Washington, DC. Its topic this year was “Immune System and Cancer.” The Forum opened with remarks by Dr. Richard Krause, senior investigator (retired) of the National Institutes of Health (NIH), who as the US co-organizer is a strong supporter of this Forum. After remarks from Mr. Takashi Inutsuka, science counselor of the



Embassy of Japan, and Dr. Hirota Sugawara, director of the JSPS Washington Office, Dr. Hiroo Imura, president of the Foundation for Biomedical Research and Innovation and the Forum’s Japanese co-organizer, explained the research advances and imperatives that underlined the choice of this year’s Forum theme.

Sessions were held in the morning and afternoon, with Dr. Louis Staudt, NIH, and Dr. Tasuku Honjo, Kyoto University, serving as their respective conveners. In the morning, Dr. Honjo gave a talk on the “Dilemma of Activation-Induced Cytidine Deaminase (AID): Infection or Cancer,” followed by three more presentations and attendant discussions. The afternoon also saw four presentations, including Dr. Staudt’s on “Malignant Pirates of the Immune System.”

The Forum assembled some 100 science administrators, university researchers and other interested individuals, who listened with keen interest amplified by their volleys of questions and comments to the speakers.

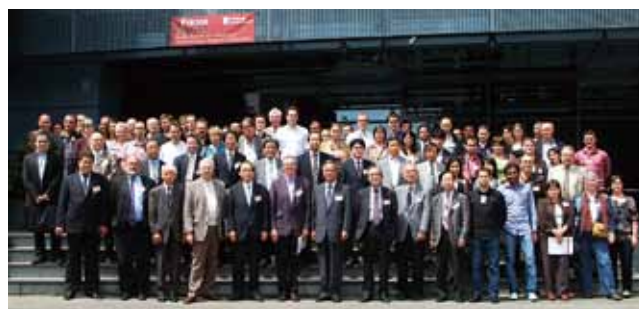
— JSPS Washington Office

## Joint Forum Held on Functional Organic Chemicals in Strasbourg

The JSPS Strasbourg Office held, in cooperation with the University of Strasbourg and the Centre National de la Recherche Scientifique (CNRS), a Franco-Japan joint forum, titled “Chemistry of Functional Organic Chemicals,” in Strasbourg on 23-25 June. The forum was coordinated by Prof. Jean-Pierre Sauvage, University of Strasbourg, and Prof. Kazuhiko Saigo, Kochi University of Technology.

It started off with remarks from Mr. Hiroshi Karube, Consul General of Japan in Strasbourg; Prof. Régis Réau, director, Institute of Chemistry, CNRS; Dr. Henri Dreyfus, vice-president, Communauté Urbaine de Strasbourg; Mr. François Loos, vice-president, Conseil Régional d’Alsace; Prof. Saigo; Prof. Motoyuki Ono, president, JSPS; and Prof. Éric Westhof, vice-president, University of Strasbourg.

During the 3-day event, more than 500 attendees had the opportunity to hear talks given by 22 prominent French and Japanese chemists. Their highly advanced content made these lectures as stimulating as they were challenging to young postdoctoral researchers and doctoral students in attendance.



In the 21<sup>st</sup> century world, there are growing social and medical demands for organic chemicals applied to such fields as pharmacology, agriculture, biology, energy conversion, nanotechnology, and info-communication. In this vein, the forum strengthened the foundations for advancing these vital scientific fields, while encouraging ever-closer cooperation between French and Japanese researchers.

— JSPS Strasbourg Office

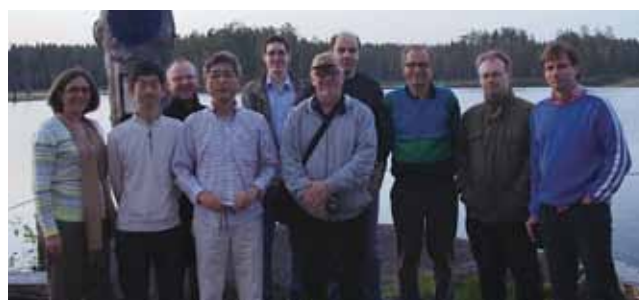
## Alumni Meetings Held in Finland

On 1-2 June, the JSPS Alumni Club in Finland held a seminar and general assembly in Joensuu, a zesty university town that seats the capital of Finland’s picturesque North Karelia region.

Among the presentations at the seminar one was given by Dr. Seiichi Yamamoto, professor, Doshisha University, who had hosted Finnish club member Dr. Kristiina Jokinen, professor, University of Tampere, during her visit to Japan under the BRIDGE Fellowship Program. Dr. Yamamoto described an intelligent English tutorial system, termed CALL (Computer Assisted Language Learning), being developed for students who will use English as a second language. In Japan, people find it difficult to carry on unbroken English conversation that requires thinking while talking and talking while thinking. The CALL system, he explained, is being designed to aid the learner through computer interaction in carrying out a running dialogue. As learners in Finland experience similar difficulties in mastering English conversation, Dr.

Yamamoto’s presentation kindled the interest of all in attendance.

The club’s general assembly was attended by its board members and both regular and associate members, who discussed the agenda of future club activities, the BRIDGE Program, and the club charter.



— JSPS Stockholm Office

## JSPS-RSAS Conference Held on Solar Energy

On 30-31 May, a conference titled “Capturing the Sun” was held jointly by JSPS and the Royal Swedish Academy of Sciences. Venued at RSAS, it celebrated the 10<sup>th</sup> anniversary of the JSPS Stockholm Office. The conference was proposed by former RSAS permanent secretary Dr. Gunnar Öquist and convened in cooperation with the RSAS Energy Committee.

Among the remarks kicking off the meeting were those from RSAS permanent secretary Dr. Staffan Normark followed by JSPS president Prof. Motoyuki Ono, who first expressed appreciation to RSAS and Swedish participants for the care and concern they extended when eastern Japan was struck by the mega-earthquake. He, then, described how a Fund has been established within JSPS to enhance the flexibility of Grant-in-Aid use by researchers. The nuclear plant destruction that had just occurred in Japan brought to the fore the increasing need for alternative sources of electricity, making this conference on solar energy a very timely catalyst for expanding research collaboration between Sweden and Japan.

Some 100 people filled the hall to hear the lectures from front-line researchers, who addressed the theme from the varying perspectives of their respective fields of physics, chemistry and



biology, while overarching them in advancing the dialogue.

The event also featured a poster session by young Swedish and Japanese researchers who will shoulder the future of scientific advancement in the renewable energy domain, giving them a good opportunity to share ideas and network with each other.

— JSPS Stockholm Office

## JSPS Program Briefing Held at Chongqing University

On 25 June, the JSPS Beijing Office held a briefing on JSPS programs at Chongqing University. So as to achieve a wide understanding of the programs and the opportunities they provide among the students and researchers, members of the Chongqing branch of the JSPS Fellow Alumni Association in China participated in car-



Dr. Sasaki describing JSPS programs

rying out the briefing. In conjunction with it, they also held an academic symposium, attended by about 30 alumni members, researchers and students from universities in the Chongqing area.

The briefing began with remarks from the Beijing Office director Dr. Mamoru Sasaki, who described JSPS’s program offerings using handouts and slides and introduced the Office’s activities and initiatives. While jotting down notes the attendees listened attentively to his presentation, which centered on programs such as JSPS’s invitational fellowships and bilateral collaborations that are of high interest to researchers.

Then, Mr. Takaya Yamazaki, vice-consul, Consulate-General of Japan at Chongqing, and other speakers offered remarks. A lecture was delivered by a former JSPS postdoctoral fellow on the subject “Precision Nanometrology and Its Applications to Precision Manufacturing.”

Finally, a discussion on JSPS programs spawned a spirited exchange of views, the intensity of which augured the future advancement of Sino-Japanese exchange.

— JSPS Beijing Office

## Briefings Given at National Institutes for Research in Thailand

In 2009, nine Thai universities were selected as “national institutes for research.” During the period from 2010-2012, the Thai government has allocated 3 billion baht a year in support of the research activities of these universities.

As part of its program agenda for FY 2011, the JSPS Bangkok Office will give briefings on JSPS programs at these nine universities. Over the past 30 years, the National Research Council of Thailand has been a valuable partner in carrying out the RONPAKU (Dissertation PhD) Program, Core University Program, and other JSPS programs in Thailand. Thai researchers who have participated in these and JSPS fellowship programs already

possess a high degree of familiarity with JSPS; however, other members of the Thai academic community are less or even unfamiliar with JSPS’s program. Therefore, to widen the field of people who are knowledgeable about JSPS and its collaborative initiatives in Thailand, the Office staff slated in-person visits to the nine universities to speak directly to their vice presidents in charge of research and international exchange.

To list them, these universities are as follows: Chiang Mai University, Chulalongkorn University, Kasetsart University, Khon Kaen University, King Mongkut’s University of Technology, Mahidol University, Prince of Songkla University, Suranaree University of



Technology, and Thammasat University. By the end of June, the staff had already visited four of these universities, including Kasetsart and Thammasat Universities, where they explained the lopsidedness that exists in both the universities and fields of past Thai participants in JSPS programs, and suggested that proposals be submitted that reflect the distinctive characteristics of each university.

At Kasetsart University, a reporting meeting was held by Thai participants in JSPS programs, including the revisit Japan BRIDGE Fellowship Program. At Thammasat University, a briefing was given by the Office staff to young researchers. These briefings were convened and configured based on each university's request.

— JSPS Bangkok Office



JSPS briefing at Kasetsart University

## JSPS Reporting Meeting Held in Bangkok

On 21 June, the JSPS Bangkok Office held a briefing on JSPS programs in combination with a reporting meeting on the BRIDGE Fellowship Program and the RONPAKU (Dissertation PhD) Program. Both venues at Kasetsart University (KU), they were attended by more than 80 young Thai researchers.

The reporting meeting was held on the request of Dr. Sornprach Thanisawanyangkura, vice president for research at KU, and Dr. Uthairat Na-Nakorn, director of the KU Research and Development Institute, who had earned her PhD through JSPS's



RONPAKU Program and is a member of the JSPS Alumni Forum of Thailand (JAFT). At it, a general briefing was given on JSPS programs, followed by reports from Thai researchers who had participated in them. Hearing firsthand their rich experiences sparked enthusiasm in the attending young researchers about pursuing research in Japan.

JAFT president Dr. Busaba Yongsmith, professor, KU, who had gone to Japan as a FY2010 BRIDGE fellow, described her abundant research experiences with Japan over a 30-year period from the time her receiving a PhD from Kyoto University was covered in a newspaper article to her stay this year at Osaka University under the BRIDGE Program. Then, Dr. Danai Tiwaweche, National Cancer Institute, who will go to Japan as a FY2011 BRIDGE fellow, described his research plan at his destination, University of Tokyo. Following him, Dr. Sukanya Aimimtham, from Khon Kaen University, elaborated her experiences as a RONPAKU fellow at Komazawa University. These presentations and their attendant Q&A discussions offered a valuable learning opportunity for the young researchers.

Next year the reporting meeting is scheduled to be held at the National Cancer Institute in Thailand.

— JSPS Bangkok Office

## Meeting Held of Japanese University Faculty in the US

On 15 July, the JSPS San Francisco Office convened its second meeting of Japanese university faculty members in the US. It advanced by another step the initiative that the Office had taken last year to build a network among Japanese university educators and researchers staying in the United States. The meeting was attended by six faculty members of Japanese universities on short stays to do research at UC Berkeley and Stanford University. Joined by four staffs from the San Francisco Office of Tokyo University of Science and JSPS's San Francisco Office, altogether 10 people attended this year's event.

At it, Office director Dr. Seishi Takeda offered opening remarks, followed by self-introductions from the participants, in which they briefly described their research activities. They, then, engaged each other in a discussion on the state of higher education in Japan, with an especially spirited exchange of views on the condition of university faculty, and on the digitization of research resources.

Afterwards, the participants expressed happiness over the op-



portunity the meeting accorded them to form networks with other Japanese researchers whom they normally would not have a chance to meet.

— JSPS San Francisco Office

## Annual Japanese-German Symposium Held in Berlin

On 20-21 May, the JSPS Bonn Office and the German JSPS Club held their 16<sup>th</sup> Japanese-German Symposium, jointly organized by the German Research Foundation (DFG). Venued in Leibniz Hall of the Berlin-Brandenburg Academy of Sciences and Humanities, the symposium addressed the theme “Japan-German Science Cooperation: Past, Present, Future” at this 150-year juncture of Japanese-German exchange. Thanks to cooperation accorded by the Embassy of Japan in Germany, this year’s symposium drew an exceptionally large attendance of some 250 people each day.

The opening ceremony featured keynote talks by two Nobel laureates: JSPS executive director Dr. Makoto Kobayashi and Max Planck Institute for Solid State Research director Prof. Dr. Klaus von Klitzing. Memorial talks were then given by JSPS’s Research Center for Science Systems senior advisor Dr. Shiro Ishii and two gifted young Japanese and German researchers. After them, a special session was held on the Great East Japan Earthquake, in the solemn atmosphere of which the participants discussed the situation in the aftermath of the quake and possible courses of action in response.

Turning to the second day, scientific lectures were delivered by



frontline Japanese and German researchers in fields of the humanities and social sciences, life sciences, and natural sciences. The keen interest evoked by these presentations bespoke the high appraisal given them by the participants.

As a side note, the German JSPS Club’s membership rose to over 300 people during the 2-day symposium.

— JSPS Bonn Office

## Japan Weeks Held at German Universities

Over the period from April through December, Japan Week events are being held at 18 German universities for the purpose of strengthening collaboration between them and Japanese universities. As this program supports university projects to send more students and researchers to Japan and to network with Japanese

universities, the Federal Ministry of Education and Research (BMBF) is providing it funding along with financing events to commemorate the 150<sup>th</sup> anniversary of German-Japanese exchange. During the period from April through June, the JSPS Bonn Office was invited to take part in the Japan Weeks of eight universities, which had designed creative events to excite interest in Japan among their students and faculties.

At the University of Applied Sciences Osnabrück, for example, a student bus tour was held to Japanese corporations and various Japan-related organizations, culminating in a visit to JSPS’s Office, where the students received a briefing on life and research in Japan and on fellowships for young researchers to work with colleagues in Japan. The opening ceremony at Martin Luther University Halle-Wittenberg enjoyed a large attendance of about 200 people. Bonn Office director Prof. Dr. Keiichi Kodaira participated in a panel discussion on the theme “Doing Research and Earning a PhD in Japan.” At other universities as well, the Office staff explained JSPS’s fellowship and exchange programs to highly interested audiences of under- and postgraduate students.

— JSPS Bonn Office



Dr. Kodaira giving a talk about Japan to university students

## Welcome to JARC-Net

JSPS operates the Japan-Affiliated Research Community Network (JARC-Net) database. Its purpose is to support the maintenance and expansion of working networks forged between Japan and other countries over long years of implementing JSPS’s various international exchange and fellowship programs.

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 activities by mobilizing past colleagues, such as university or JSPS program alumni. Members are also provided an information mail service on JSPS’s international exchange and cooperation programs.

Registration in JARC-Net is open to all who are interested in

research exchange between Japan and other countries, including but not limited to overseas students and researchers who have experienced stays in Japan, Japanese researchers interested in research exchanges with colleagues in other countries, international exchange program administrators in universities and research institutions, and corporate R&D personnel.

At present, some 900 people are registered in JARC-Net. As we would like to assist more and more researchers in expanding their networks with or between Japan, if you haven’t already, we invite you to register on and make active use of JARC-Net’s database.

To register on JARC-Net or peruse the database, please visit its website: <http://www.jsps.go.jp/english/e-affiliated/>.

— Asian Program Division

# Introducing JSPS Alumni Associations



## German JSPS Club

In 1995, eleven founding members established the German alumni association, officially titled "Deutsche Gesellschaft der JSPS-Stipendiaten e.V." Because this name is too long to remember, the members just call our association the "JSPS Club." In the German title, "e.V." means that the Club is registered as a judicial entity in Germany. At the time of the Club's launching, the founding members adopted the association's by-laws and elected its first board. In 2011, the Club's membership has surpassed the 300 mark. All former JSPS and STA fellows are eligible to obtain full membership, while others who are interested in the Club's activities and purposes may join as extraordinary members. An annual membership fee of 50 euro is applied to both membership categories. In addition, the Club offers an institutional membership for organizations that share its perspectives.

The board, chaired by Dr. Heinrich Menkhaus, professor of law at Meiji University in Japan, comprises seven officers, each tasked with certain responsibilities. The board is elected every two years at the Club's annual assembly.

In pursuit of its mandate to "promote scientific exchange between Japan and German-speaking countries" stipulated in the bylaws, the Club carries out a range of activities. They feature the following:

**Yearly scientific symposium** is held on a selected topic in collaboration with JSPS. Club members actively participate in designing the program for these symposiums, which are attended by about 250 people, including science managers, representatives of Japan/Germany-related administrative organizations, and interested members of the public. The object of these events is to strengthen awareness within the science and science-administration communi-



Participants of FY2011 Japanese-German Symposium in Berlin

ties and to disseminate information on collaborations between researchers in Germany and Japan. In the past, these symposiums have been held over ten times on such themes as "Food Science and Society," "Robotics," and "Marine Research."

**Yearly "Members Invite Members" meeting** provides an opportunity for alumni to invite the other members to their workplaces. The event is designed to introduce the members to different research environments and strengthen collaborative networks among them, while bolstering the Club's presence and promoting its Japan-network at the visited institutes. Around 60 persons participate in these meetings.

**Yearly "Junior Event,"** held as an adjunct to Members Invite Members meeting, provides follow-up for participants of the JSPS Summer Program. During the Summer Program the participants are given several opportunities for networking. Keeping in touch beyond the program is a strong wish of these young scientists, who are just starting their academic careers. This event also offers junior researchers a valuable opportunity to meet and interact with experienced, Japan-connected senior scientists.

**Other activities** of the Club include providing financial support for Japanese scientists invited by members for a stay in Germany using a special fund set up by the Club; publishing the quarterly newsletter *Neues vom Club*; and making contributions to the quarterly magazine *Wissenschaft und Forschung—Japan*. The Club also co-organizes together with the Tokyo office of the German Academic Exchange Service (DAAD) the "Wissenschaftlicher Gesprächskreis," a science roundtable held six times a year in Tokyo.

As is easy to imagine, all these activities require plenty of work, which cannot all be done by the Club members alone. For more than 15 years now, the JSPS Bonn Office has lent us a helping hand and is the most vibrant supporter of the Club's activities. Besides jointly held symposiums, information sessions on study and research in Japan and pre-departure orientation meetings for newly selected JSPS fellows are conducted by the Bonn Office with the Club's assistance.

Within Europe, the German Club maintains regular contact with its sister alumni associations in France, the UK, Sweden and Finland. A highlight of this liaison was a symposium in Strasbourg organized by the JSPS offices in France and Germany jointly with the alumni associations of the two countries. It was held in 2010, the year of the German Club's 15<sup>th</sup> anniversary. The Club also makes contact with other JSPS alumni associations around the globe.

Over its more than 15-year operation, the German JSPS Club has been actively promoting partnership with Japan as a country of high-quality research and science and top-ranking universities. Moreover, we are convinced that the Japanese science and academic communities will not be harmed by the recent calamities and will recover soon. We are happy to see a growing number of JSPS alumni associations in countries around the world. Why not network all of them in a way that forms a "JSPS Alumni Family" across the globe? *Gambarimasho!*

Please visit the following website for more information on the German JSPS Club.  
<http://www.jspc-club.de/>

— German JSPS Club



Alumni visit to "EKŌ-House" Japanese cultural center in Düsseldorf

# JSPS Summer Program

Attended by 99 young pre- and postdoctoral researchers from the US, the UK, France, Germany and Canada, the JSPS Summer Program, cosponsored by the Graduate University for Advanced Studies (Sokendai), was successfully held over a 2-month period from 14 June to 24 August unimpeded by the after-effects of the 11 March earthquake and tsunami.

Featuring a research internship for the participants at a host institution, the program began with a one-week orientation held in the seaside 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.

— Overseas Fellowship Division

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 respective fields. The following are comments offered by two of the fellows on their research and culture experiences.

## Dr. Christopher Buckley

(Postdoctoral researcher, University of Sussex) at RIKEN Brain Science Institute  
His host: Dr. Taro Toyozumi

"My work environment here in the RIKEN Brain Science Institute couldn't be better. It is full of enthusiastic people, Japanese and international visitors alike, who work hard during the week but like to have a drink in an *izakaya* on the weekend. Because of the earthquake many of my JSPS colleagues expressed a need to show support for Japan. For my part I became involved with a volunteer group who regularly take bus trips from Tokyo to the tsunami-damaged city of Ishinomaki. I spent one weekend cleaning stinking sea sludge from drains and stripping crumbling plaster from houses that had been briefly submerged. While it was hot and hard work, the atmosphere and optimism of the volunteers, and the local people returning to rebuild their lives, was uniquely rewarding.



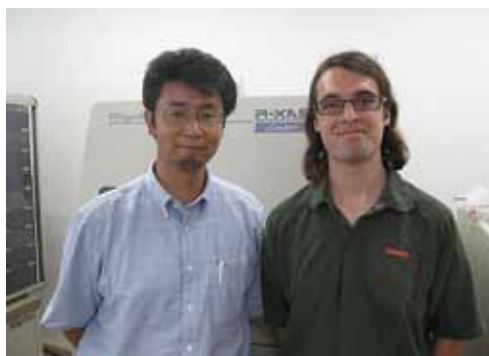
Dr. Buckley working as a volunteer in the disaster area

Japan is a fantastic place to work with a commitment to science we should envy in the west and a rich and diverse culture that you could spend a lifetime exploring."

## Mr. Thomas Gaudisson

(Graduate student, Université Paris Diderot) at Tohoku University  
His host: Dr. Kozo Shinoda

"The introduction to Japanese culture and language provided in the orientation session was good preparation for my internship to follow. The week concluded in a 2-day stay with a host family. Their hospitality made me feel like I was in my own home. I discovered Kamakura, a city with a lot of beautiful temples and shrines and the famous Kamakura Daibutsu (Big Buddha). It was the beginning of my total immersion in Japanese life. My host laboratory is located in Sendai, which remains a dynamic city despite the recent earthquake and tsunami within the prefecture. Its summer festival was an amazing experience, with the people's traditional dress and dances being so beautiful. I also discovered a large variety of Japanese cuisine. Indeed, the language barrier hasn't prevented me from enjoying Japanese life. My research centers on the synthesis of an alloy used in high-density storage of information. I've



Mr. Gaudisson with his host

been given the chance to access XAFS (X-ray absorption fine structure) spectroscopy in the lab, which enables me to enrich my scientific culture. I'm sure this program will be a very advantageous in advancing my career as a scientist."

## Washington, DC

### Orientation for Summer Fellows Held in Washington

On 3-5 April, the JSPS Washington Office assisted the National Science Foundation (NSF) in holding an orientation for its "2011 East Asia and Pacific Summer Institutes" program.

Affected by the Great East Japan Earthquake that struck on 11 March, it was feared that some of the US researchers selected for Summer Program fellowships might withdraw from them; however, at the time of the orientation all 64 still intended to go to Japan.

At the meeting, Washington Office deputy director Ms. Fumiyo Kaneko gave a talk on Japanese culture and conducted a simple language lesson, followed by a mes-

sage from Washington Office director Dr. Hirotaka Sugawara, who described the situation with regard to radiation emitting from the damaged Fukushima plants and, explaining the environment outside the imme-



diately affected areas to be safe, encouraged the researchers to come to Japan as scheduled. Then, NSF Tokyo Regional Office director Dr. Anne Emig and JSPS Overseas Fellowship Division staff Ms. Eri Nakamura briefed the new fellows on the processing required for going to Japan and the details of the Summer Program.

Though some of the participants showed apprehension about going to Japan just after the disaster, they were basically very positive, even expressing, what was very heartening for us, a desire to participate in the relief efforts.

— JSPS Washington Office

## Bonn

### Summer Program Pre-Orientation Held in Bonn

A pre-departure orientation for young German researchers selected to participate in the JSPS Summer Program was held in the Conference Centre of the Gustav Stresemann Institute in Bonn on 6 May.

This orientation is held every year by JSPS's Bonn Office to give the outgoing fellows information that will be a catalyst to a fruitful research experience in Japan. As some of the young researchers withdrew from the program due to the Great East Japan Earthquake, this year's meeting was attended by seven of the 14 selectees.

The meeting began with remarks by JSPS Bonn Office director Prof. Dr. Keiichi

Kodaira and a representative of the German Academic Exchange Service (DAAD), followed by self-introductions from the participants. The Office staff provided a briefing on the Summer Program and the JSPS fellowships the participants will be eligible to receive after finishing it, while two former fellows described their summer experiences in Japan and fielded questions. Then, a member of the German JSPS Club's executive board described the alumni association's activities. Finally, Dr. Kodaira held a Q&A discussion on the east Japan earthquake and resultant nuclear plant damage, stating that the situation had been over-



reported and that there is no need for unnecessary concern before departing for Japan, explaining what dangerous radiation levels would be using concrete values.

— JSPS Bonn Office

## London

### Pre-Departure Seminar and Alumni Evening Held in London

On 20 May, the JSPS London Office held a pre-departure seminar for UK researchers who would soon go to Japan to participate in JSPS's Postdoctoral Fellowships and Summer Program. Thirty-four Japan-



bound researchers participated in this year's always-popular seminar.

During the event, information about JSPS programs was given, and the Japan exchange programs of the Royal Society and the Engineering and Physical Sciences Research Council were introduced. A member of the UK JSPS Alumni Association and a participant in last year's Summer Program talked about their experiences in Japan.

After the seminar, an Alumni Evening was held to spawn a network between the new fellows and the alumni members. The Association chair Dr. Martyn Kingsbury offered opening remarks in which he described

the BRIDGE Fellowship and FURUSATO Award, which support revisits to Japan by alumni members, and the development of a new scheme for holding UK-Japan symposia.

The participants said that they were happy to receive practical advice on research and living in Japan from past fellows and that they garnered a lot from the Q&A briefing on the situation in the aftermath of the Great East Japan Earthquake, while appreciating the opportunity to get to know other fellows and alumni members.

— JSPS London Office

## Aichi Prefectural Atsuta High School

Date: 25 May

**Dr. Carlos B. Zavalaga** (Peru)  
Host institution: Nagoya University  
Title: "An Introduction to the World of Biologging"



## Fukui Prefectural Fujishima Senior High School

Date: 23 May

**Dr. Adeline A. J. Wall** (France)  
Host institution: Kyoto University  
Title: "Testate Amoeba Communities in Lakes: Water-Sediment Interface"



## Gifu Prefectural Gizan Senior High School

Date: 20 May

**Dr. Surawut Chuangchote** (Thailand)  
Host institution: Kyoto University  
Title: "Various Kinds of Solar Cells"



Date: 27 May

**Dr. Daniel M. Packwood** (New Zealand)  
Host institution: Kyoto University  
Title: "Probability and Molecules"



Date: 10 June

**Dr. Richard C. Bardoux** (France)  
Host institution: Kyoto University  
Title: "Light Sources in Our Daily Life"

## Junior High and Senior High School at Komaba, University of Tsukuba (Tokyo)

Date: 11 June

**Dr. Seung-hoon Heo** (Korea)  
Host institution: The University of Tokyo  
Title: "Facing Cultural and Ethnic Diversity: The Life of a Researcher in International Relations"



Date: 18 June

**Dr. Mathew Kallumadil** (Austria)  
Host institution: Tokyo Institute of Technology  
Title: "Nanotechnology in Cancer Treatment"



Date: 25 June

**Dr. Craig R. Ferguson** (USA)  
Host institution: The University of Tokyo  
Title: "Hydrology from Space: Overview of a Career in the Physical Sciences"



## Kumamoto Prefectural Daini High School

Date: 16 June

**Dr. Shirin Farzadfar** (Iran)  
Host institution: Saga University  
Title: "Plant Virology and Symptoms"



## Shizuoka Kita High School (Shizuoka)

Date: 9 May

**Dr. Antonio De Felice** (Italy)  
Host institution: Tokyo University of Science  
Title: "Introduction to Cosmology"



## Kyoto Prefectural Yamashiro High School

Date: 4 June

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



Date: 11 June

**Dr. Jean-Michel Fustin** (Belgium)  
Host institution: Kyoto University  
Title: "What Is the Biological Clock?"



## Shizuoka Prefectural Iwata Minami High School

Date: 22 June

**Dr. Matthew J. Lake** (UK)  
Host institution: The University of Tokyo  
Title: "Cosmic Strings (...+ Life in the UK)"



**Dr. David Orozco Suarez** (Spain)  
Host institution: National Astronomical Observatory of Japan  
Title: "The Sun, A Natural Laboratory"



## Recent Visitors to JSPS (May-July 2011)

### Eminent Scientist Prof. Anthony J. Leggett

On 9 June, Prof. Anthony J. Leggett (2003 Nobel laureate in physics) paid a courtesy visit to JSPS president Prof. Motoyuki Ono. He was in Japan as a recipient of the JSPS Award for Eminent Scientists, under which program he is scheduled to spend about one month a year in Japan over a period of three years. During this Prof. Leggett's first visit, he was giving an intensive graduate lecture series at the University of Tokyo. From next year, he is slated to deliver lectures at other Japanese uni-

versities. He said that he is enjoying giving the lectures as the young Japanese researchers are inquisitive and probing with their questions. In fact, they have even decided to gather their lecture notes and, under Prof. Leggett's tutelage, compile them into an English textbook and make it available over the world-wide net.

Grieved over calamity caused by the Great East Japan Earthquake, Prof. Leggett set aside a portion of his allowances to make a donation toward the relief effort



through the University of Tokyo.

— Overseas Fellowship Division

### Deputy Director-General, CAS Bureau of International Cooperation

On 4 July, Mr. Hua-Sheng Qiu, deputy director-general, Bureau of International Cooperation, Chinese Academy of Sciences (CAS), paid a courtesy visit to JSPS president Prof. Motoyuki Ono. Mr. Qiu is a long-time friend of JSPS, having received a year of training here from 1983. He expressed condolences over the losses caused by the Great East Japan Earthquake, having personally observed the

affected area in April soon after the quake.

Prof. Ono mentioned to Mr. Qiu that there had been a decline in Chinese researchers coming to Japan in the wake of the earthquake, and asked for CAS's positive support in encouraging them back to Japan to do research with Japanese colleagues.

— Asian Program Division



## “The 110<sup>th</sup> Anniversary Exhibition of the Nobel Prize” Scheduled



This year, the Nobel Museum's traveling exhibition, which rotates around the world, will be held in Japan on the 110<sup>th</sup> anniversary of the Nobel Prize.

The Nobel Museum in Sweden carries out this world-traveling exhibition, entitled “Alfred Nobel—Networks of Innovation,” that displays and introduces documents and materials associated with the life and work of Alfred Nobel. This December marks the 110<sup>th</sup> anniversary of the Nobel Prize, at which juncture the traveling exhibition will be held in Japan.

JSPS and the National Museum of Nature and Science are working with the Nobel Museum in preparing for the upcoming event to be held under the title “The 110<sup>th</sup> Anniversary Exhibition of the Nobel Prize,” which will also feature a display of the achievements of Japanese Nobel laureates. In carrying out the event, JSPS will work to strengthen public awareness and understanding of science and technology and their vital function within society.

The Nobel Museum's traveling exhibition will be held at the National Museum of Nature and Science in Ueno Park, Tokyo, from 1 November through 22 January 2012.

— Research Cooperation Division I



### Cover photo:

Autumn moonviewing, *o-tsukimi*, with decorative pampas grass and festive rice dumplings.

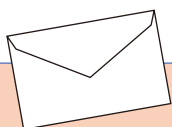
## About JSPS

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

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Please let us have your comments and impressions about the newsletter.

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Fax: +81-3-3263-1854

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

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