



JSPS US Fellows Alumni Association

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Editor: Blanca Chattin-Kacouris, DDS., PhD. Associate Editor: Yoke Khin Yap, PhD.

US-JSPS Fellows Alumni Association Leadership Meeting at Washington, DC

On February 10, 2007, alumni members from all over the United States met in Washington, DC to discuss special topics related to the activities of the alumni association. Members of the Executive Committee, Science Group Coordinators, and former Executive Committee members convened the meeting.

In the morning, Executive Committee members met together with the staff of JSPS Washington Office. The topics at the morning meeting were about various alumni association business, such as the newsletter, bylaws, and guidelines for alumni symposia and annual meetings. With the input of JSPS Washington Office, the Executive Committee was able to construct a good plan of procedure for their activities.

Participants began to arrive for the Saturday meeting by noon. The Executive Committee wrapped up their morning meeting session and everyone joined in on a working-lunch. It was a good chance for alums to catch up with one another.

After lunch, the meeting began with an address by Arup Neogi, chair of the alumni association, and a few words of welcome from Akira Masaike, director of the JSPS Washington Office. Wael Zatar, vice-chair, made a few remarks and mentioned that the alumni association had gained one hundred new members in recent months!



Participants are working hard in the meeting.

After the announcements, the meeting began with some serious discussion among all attendees. The main topic of discussion for the day was drafting guidelines for both an alumni association science symposium and an annual meeting of alumni association members. After much discussion, by the end of the day, guidelines were successfully drawn up. Jan Zeserson, Northeast region representative to the Executive Committee, took down the official notes of the meeting. This report appears on the [jpsusa.org website](http://jpsusa.org), and we encourage you all to read it.

Besides this important achievement at the meeting, other business was also accomplished. James Kuffner from the Robotics Institute at Carnegie Mellon University proposed to lead a project to link the JSPS Washington Office alumni webpage to individual alumni web pages.

A reception followed the meeting in the evening. The reception was preceded by our keynote guest speaker, Anne Emig, program manager for Japan, National Science Foundation (NSF) Office of Science and Engineering. She spoke about the latest news and information from NSF. After her presentation, alumni members took advantage of the chance to ask many questions. It was a very informative Q&A session. Afterwards, everyone joined for a lively social hour over dinner and a commemorative photo.



A Group photo of the attendance.

Scientific Groups Categories and their Coordinators

In December 2005, thirty fellows from all over the United States gathered in Chicago to establish the Scientific Groups (SGs). This event was honored by the presence of the Directors of the JSPS Office in Washington DC, Prof Akira Masaïke, and the Director the JSPS Office in San Francisco, Prof Seishi Takeda.

The Scientific Groups is one of the activity units of the Alumni. Fellows are invited to join the SGs of their preference according to their area of study/research. These groups were created to encourage fellows in close areas of research to know each other, establish collaborations and expand their network.

The Scientific Group categories and their coordinators are as follows:

Biology and Medical Sciences:

Amanda Persaad dr_persad@yahoo.com and Yurong Lai laiyurong@yahoo.com

Chemistry:

Abhijit Sarkar sarkar@mmi.org and Chris Palmer Christopher.Palmer@umontana.edu

Engineering: Hui Hu huhui@iastate.edu

Physics and Math: Anil Patnaik anil@tamu.edu

Social Sciences and Humanities: Dajin Peng peng@cas.usf.edu and Louis Esparza louis.esparza@gmail.com

We would like to invite you to join the Scientific Groups of your preference. You can join several. Please, contact the Coordinators who will warmly welcome you.

You can also join the Alumni Internet group at jspsusa@yahogroups.com. Meeting announcements, job search, call for newsletter contributions, etc. are done through this yahoo group.

Message from the Chair of the French JSPS Alumni Association Marie-Claire Lett, PhD, Prof. ULP

The French JSPS Alumni Association was set up in 2004 and now has 230 members. The aim of the association is to promote scientific exchanges between Japan and France. We have already set up a network of JSPS fellows for advising young researchers going to Japan and to support Japanese post-docs staying in France. In collaboration with the JSPS office in Strasbourg, we organize regular meetings in different doctoral schools all over the country to advertise the JSPS fellowship program. More details on our activities can be found on our web site: <http://assoc-jsps.u-strasbg.fr/>.

We wish the JSPS USA Alumni Association a successful development and we are looking forward to collaborating with you in the future.

Message from the JSPS San Francisco Office

I am Seishi TAKEDA, Director of JSPS San Francisco Office. It is a great honor to have this opportunity to celebrate JSPS US Alumni Associations' strong connections and activities.

As you may know, JSPS San Francisco is one of the liaison offices of JSPS, developing various projects and programs eagerly. Most recently, we have attained the new important role as member of JUNBA, Japanese University Network in the Bay Area. The mission of JUNBA is to help Japanese Universities' internationalization movements. Its current core members include officers of Kagoshima University, Kyushu University, Osaka University, and Tohoku University, all of which have US offices now. If you have any relations to not only JSPS, but also to these Japanese Universities, you are strongly recommended to contact us, as some of the universities organize their own Alumni Associations, it would fulfill an important mission for JSPS and JUNBA to promote and to create new relationships between Japan and the U.S..

Please drop by our office in Berkeley, anytime!



Smiling Faces from Left to Right:

Caroline Bahr: Liaison Officer

Mitsuru Mizuno: Program Coordinator (from Nagoya Institute Technology)

Kazusa Toda: Deputy Director (from MEXT)

Seishi Takeda: Director (from KEK)

Noriko Yokoi: Program Coordinator (from Kyoto University)

Eiji Kotani: Program Coordinator (from Yokohama National University)

Ryuji Koyama: Advisor Management (from MEXT)

An Alumnus Received NSF CAREER Award

An JSPS alumnus, Dr. Hui Hu, has received the Faculty Early Career Development (CAREER) Award from National Science Foundation (NSF) for his project, “*Development of a Molecule-based Diagnostic Technique to Study Joule Heating and Micro-scale Heat Transfer Process in Electrokinetically-driven Microfluidics*”. The NSF-CAREER award is the most prestigious award in support of the early career-development activities of those teachers-scholars who most effectively integrate research and education within the context of the mission of their organization. Dr. Hui Hu was a JSPS Research Fellow at the Institute of Industrial Science, the University of Tokyo (1997-1999) under the supervision of Prof. Toshio Kobayashi. He is currently an Assistant Professor in the Department of Aerospace Engineering at Iowa State University (<http://www.public.iastate.edu/~huhui/>). Dr. Hu’s research interests include 1). Development of advanced laser-based diagnostic techniques for fluid flow and heat transfer sensing, 2) Conducting fundamental studies to elucidate the underlying physics of complex fluid flows and heat transfer phenomena. Recently, Dr. Hu led a delegation to visit the University of Tokyo, Tohoku University, Japanese Automobile Research Institute, the University of Electro-Communications under an international collaboration project of “Development of a U.S.-Japan Research and Education Integrated Partnership for Automobile Aerodynamics Studies”.



An Alumnus Appointed as a Co-Editor of an International Journal, *Carbon*

Professor Yury Gogotsi (JSPS Fellow 2002/2003, Tokyo Institute of Technology) has been appointed as a Co-Editor of CARBON, which is among the top materials journals in the world with the impact factor of 3.42. Its impact factor has been constantly increasing over the past 5 years and Prof. Gogotsi has been assigned with the task to further increase the impact of this journal and steer it towards advanced carbon materials and nanomaterials. CARBON is published by Elsevier and is in the top few percent of more than 2000 journals published by this powerhouse. It has grown enormously as a journal in the last few years, as the world is moving from the Silicon Age to the Carbon Age. Prof. Y. Gogotsi's appointment starts on April 1, 2007 and is initially for 3 years.



Yury received his D.Sc. degree from the National Academy of Sciences in 1995. The following year he moved to the University of Illinois at Chicago, and in 2000 he assumed the position of Professor of Materials Science and Engineering at Drexel University. As cited by the Editor of *Carbon*: Yury’s research interests are wide-ranging and have truly been at the “cutting edge”. We expect him to handle many of the submissions dealing with surface chemistry, wetting, electron microscopy and Raman analysis, nanotubes, carbide-derived carbons and carbons for energy-related applications, especially hydrogen storage and supercapacitors.

An Alumni Obtains a Research Grant

Dr. Abhijit Sarkar will lead Oxazogen's efforts in the research, working in collaboration with the US Army's Tank Automotive Research, Development and Engineering Center (TARDEC) and Aquarius, Inc., a Las Vegas-based photonics company to research methods to design new methods of eye and sensor protection. The grant is part of the U.S. Department of Defense's Small Business Innovative Research program.



“The advent of affordable, available lasers has led to cases of serious misuse,” Sarkar said. “In some instances, they're even being used as weapons with the capability of causing harmful radiation damage to human eyes and to a multitude of light-sensitive receptors employed for both military and civilian applications.” “You have people directing lasers at aircraft pilots and through the sights of tank gunners,” he added. “This can do tremendous damage, both to human operators and the equipment. The DoD is understandably interested in solutions to the threat, and we think we have a viable approach.”

Sarkar said new optical materials must provide increased protection from a variety of lasers with a broad range of wavelength and laser pulse speeds. Additionally, these protection systems must not compromise other properties, such as high linear transmission across the response bands of sensors, fast response time, resistance to permanent optical damage and stability in the working environment.

“Right now, there are no materials for use in eye and sensor protection that properly integrate with existing essential equipment,” he said. “We've developed a hyperbranched polymer that forms excellent optical films; that's the basis for the coating that will serve as the host material in our research.”

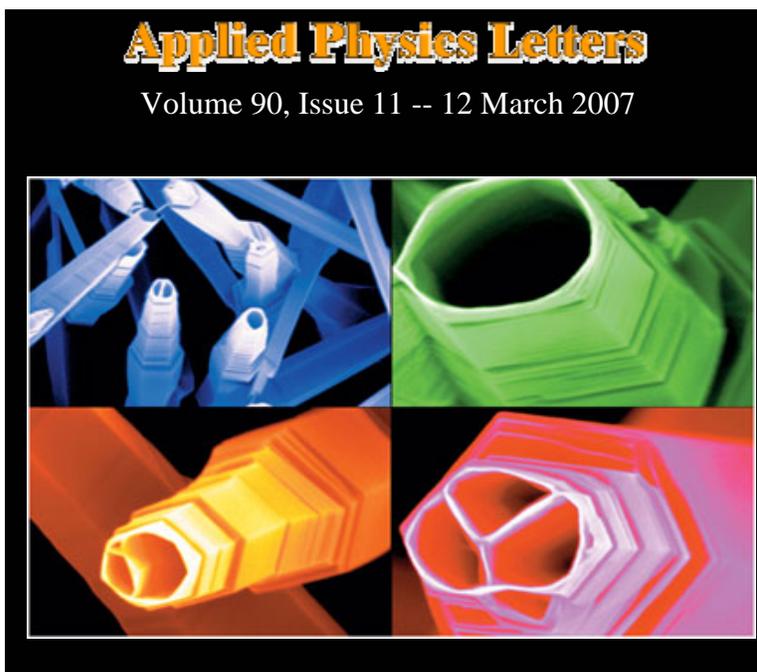
Oxazogen is an employee-owned company that works with Michigan Molecular Institute (MMI) to secure grant funding. Its mission is to commercialize advanced films, coatings and specialty materials for a variety of applications. MMI, founded in 1970, is a non-profit organization dedicated to polymer research and education.

Dr. Abhijit Sarkar is the Chemistry scientific group coordinator of the US-JSPS Alumni Association. He worked at Professor Hachiro Nakanshi's laboratory at Erstwhile Institute of Chemical Reaction Science, Tohoku University at Sendai, Japan during 1995 to 1999. At present Dr. Sarkar is affiliated with MMI at Midland, Michigan. He lives in Midland with his wife Sucharita, daughter Aparna and son Satyajit.

Research of an Alumnus Makes Cover of a Top Journal, *Applied Physics Letters*

Professor Yoke Khin Yap (Michigan Tech University) published a paper in *Applied Physics Letters* (APL) on the growth of single crystalline ZnO Nanotubes. Images of the ZnO nanotubes are highlighted as the cover image of the March 12, 2007 issue (http://apl.aip.org/apl/covers/90_11.jsp). This paper is now available at *APL* **90**, 113108 (2007) entitled, “*Formation of single crystalline ZnO nanotubes without catalysts and templates.*” *APL* is published by the American Institute of Physics and is ranked as the most highly cited journals in the area of applied physics by ISI (<http://apl.aip.org/apl/brochure.pdf>).

The unique structures of nanotubes provide large surface areas for biological and chemical sensing. Nanotubes of nitrides and oxides offer interesting properties unavailable from carbon nanotubes. These nanotubes are hydrophilic and offer better chances of functionalization for sensing and nanofluidic applications. Based on the theory of nucleation and the vapor-solid growth mechanisms, Yap research group have gained atomic scale control on the nucleation and growth of ZnO nanotubes (ZnO NTs) on the top surfaces of ZnO nanorods (ZnO NRs). This technique did



not involve the use of multiple processing steps or templates. A rapid cooling of the growth temperatures forced the ZnO growth species to confine their nucleation at the edges of the top surfaces of ZnO NRs. When the temperature is just right to do so and yet sufficient to sustain continuous growth along the rod axis of the wurzitic ZnO NRs, ZnO NTs can thus be grown. Experiments show that ZnO NTs with single and multiple channels can be grown and that they are single crystalline. This technique could be a universal route to transform other NRs into NTs.

Yoke Khin was a JSPS fellow at Osaka University (2000-2002) under the supervision of Professor Takatoma Sasaki at the Department of Electrical Engineering. He is currently an Associate Professor in the Department of Physics (<http://www.phy.mtu.edu/yap/index.html>). His research group is currently supported by the U.S. Department of Army (DOA), National Science Foundation (NSF), Department of Energy (DOE), Defense Advanced Research Programs Agency (DARPA), the U.S. Department of Agriculture (USDA), and the Center for Nanophase Materials Sciences (CNMS) at Oak Ridge National Laboratory (ORNL).

Updates from JSPS Alumni

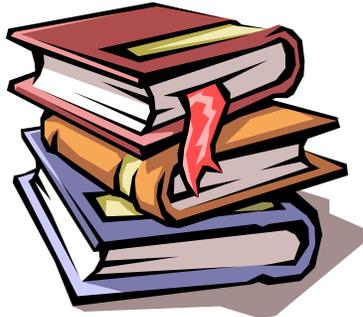
Louis Esparza

Louis Esparza is W. Burghardt Turner Fellow in the Department of Sociology at Stony Brook University where he is pursuing his doctoral degree. Louis was a part of the NSF-JSPS East Asia and Pacific Summer Institute in 2004, where he researched Japanese understandings of farm subsidies at Sophia University in Tokyo with Professor Daishiro Nomiya. This was a part of his work on the 2003 World Trade Organization Ministerial meetings. Currently, Louis co-teaches a graduate seminar on Social Movements with Professor Michael Schwartz and his projects include writing on the rise of private armies in Colombia and the NGO accountability debate in the United Nations. He also sits on the Boards of two journals, *Contexts* and *Societies Without Borders*.

Looking for Contributions

Please continue sending your articles/updates for our upcoming issues

Thank you



JSPS USA AA Newsletter Team

Editor: Blanca Chattin-Kacouris, DDS., PhD.
gquil66@yahoo.com

Associate Editor: Yoke Khin Yap, PhD, Associate Professor of Physics
ykyap@mtu.edu

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