

**S&T News Articles**  
**NSF Tokyo Regional Office**  
**February 2008**

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**JAPAN**

1. **[Companies establish a foundation at University of Tokyo]** Fifteen (15) major Japanese companies, including Toyota, Mitsubishi-Tokyo-UFJ Bank, and Tokyo Electric, contributed a total of Yen 12 billion (~\$113 million) to establish a foundation at the University of Tokyo. This is part of their effort to strengthen Japan's international competitiveness. A portion of the profit from investment made with the fund will be donated to the University of Tokyo, which will use it to provide scholarships for foreign students and other purposes. It is expected that the investment will annually yield approximately Yen 250 million (~\$2.3 million) to the University. This is the first of its kind in Japan and belatedly follows similar efforts in EU, US, and China. (Summary translation of an article in Nihon Keizai Newspaper – 2/23/08)

2. **[HOPE meeting]** JSPS (Japan Society for the Promotion of Science) held its first HOPE meeting in Tsukuba Science City on February 25-26. HOPE is not an abbreviation. They named it HOPE, wishing it to give "hope" to young researchers in the Asia Pacific region and "hoping" to develop future S&T communities in the region. The meeting brought together about 80 outstanding graduate students from 13 countries in the Asia Pacific region, including Japan, China, India, Korea, Australia, and provided them with opportunities to

network. Meeting activities included the opportunity for students to mingle with Nobel laureates and other prominent scientists. The theme for this year was “Nano Science/Nano Technology.” The participating graduate students were recommended by funding agencies in the region, and 20 were Japanese. The Nobel laureate lecturers included Drs. Leo Esaki, Alan Heeger, Robert Laughlin, Heinrich Rohrer, and Hideki Shirakawa. (Nihon Keizai Newspaper – 2/18 and JSPS Homepage)

**3. [WPI WEB Updated]** The WEB site for the World Premier International Program (see <http://www.nsftokyo.org/rm07-07.pdf>) has been updated as [http://www.jsp.go.jp/english/e-toplevel/04\\_centers.html](http://www.jsp.go.jp/english/e-toplevel/04_centers.html). New information includes their selection of a Program Officer for each center and one Program Director who oversees the whole program, and the award amount for each center. (MEXT Press Release – 2/7 and WPI WEB)

**4. [RIKEN Genome Center to Close]** RIKEN's Genome Science Center at Yokohama will be dissolved as a research unit at the end of March 2008. Established in 1998, the Center participated in the international human genome sequencing project among others. With considerable investments in high performance and high throughput instrumentation worth about Yen 57.8 billion (~\$545 million), the Center has been the flagship facility for state-of-the-art genome science in Japan. It has made significant contributions to advancement of genomics world-wide. Within Japan, the Center's work has helped to bring about the genomics era in a wide area of science including medicine, agriculture, and environment. About 40 NMRs at the Center will be made available to the general scientific community for their research. Access to the machines will be free of charge if the analysis result is to be shared, and with charge if the result is not to be shared. (Summary translation of an article in Nihon Keizai Newspaper – 2/4/08)

**5. [Earth Simulator to be Upgraded]** The Earth Simulator that has made great contributions to predicting global warming will stop half of its operation at the end of September 2008 in order to replace half of the computers with the upgraded version. The upgraded version will be able to calculate at twice the speed of the original one. Replacement is estimated to take half a year through March 2009 and the detailed plan after that has not been announced yet. [Tokyo Office will follow on this.] (Summary translation of an article in Nihon Keizai Newspaper – 2/25, and phone interview with JAMSTEC (Japan Agency for Marine-Earth Technology))

**6. [Research In and Out of Japan]** MEXT (Ministry of Education, Culture, Sports, Science and Technology) revealed that a record 140,000 researchers went abroad in JFY 2005. This is the largest number of Japanese scholars and scientists ever sent abroad to investigate the world outside Japan, and 10 percent more than in JFY 2004. The researchers were from universities, public and private research institutes/centers. A majority of them went to Europe and North America, but the number going to Africa jumped nearly 35 percent. At the same time, foreign researchers have been coming to Japanese institutions in ever-larger numbers, with nearly 40,000 coming to Japan in 2005, a 10 percent increase over the previous year. The article concludes that Japan is no longer just receiving, but offering a great deal to the global research community. (Summary of an article in Japan Times – 2/10)

**7. [Less number of Ph.D. Program Applicants]** MEXT's survey revealed that in 2007 the number of slots for students in Ph. D. programs at all the graduate schools in Japan was about 23,400, whereas the number of total applicants was about 20,800. Especially undersubscribed were Ph.D. programs in engineering and sciences. The number of applicants to Engineering programs was 3,560 for the available slots of 5,503. The number of applicants for Science programs was 1,419 for the available slots of 2,070. This reflects declining interests among young people in Ph.D. programs, primarily because of the low employment rate after obtaining a Ph.D. MEXT will analyze the data further by collecting more data from graduate universities before developing a strategy to reverse the trend. (Summary translation of an article in Nihon Keizai Newspaper – 2/27)

## **KOREA**

**8. [Experimental Equipment to Space]** MOST (Korean Ministry of Science and Technology) and Korean Aerospace Research Institute (KARI) announced that seven pieces of experimental space equipment would be loaded for the first time in history on the un-manned space ship named "Progress" that was launched from Kazakhstan on February 5. The rest of the equipment will be loaded on "Soyuz" space ship in April. The Korean astronauts will finish their training at the Gagarin Space Flight Training Center in March to be ready to be on board Soyuz Space Ship. (Summary translation of an article in Daily Watcher on JST Homepage – 2/4)

**9. [MOST to Establish Brain Research Institute]** MOST announced the establishment of Korea National Brain Research Institute (tentative English name). The brain research in Korea started in 1998 as a national project when the law for promoting

brain research and the basic plan for promoting brain research were established. MOST will study and analyze the activities at relevant institutions overseas before developing a long-range plan for the institute. (Summary translation of an article in Daily Watcher on JST Homepage – 2/19)

## Malaysia

**10. [Rice Husk into High-tech Insulator]** Dr. Halimatun Hamdan, a University of Cambridge-trained chemistry professor, made a breakthrough to an inexpensive way to turn discarded rice husks into a high-tech material, aerogel, that could reduce electricity bills, protect buildings from bomb blasts and make airplanes and tennis rackets lighter. Aerogel is the lightest solid, but its high cost has limited its use. Her process cuts the cost of producing aerogel by 80 percent. The Malaysian government is funding a \$62.5 million project at her university, Universiti Teknologi, to try to demonstrate that it can be produced on a large scale. 100grams of the material will cost \$60 to make, compared to \$300 by conventional methods. Aerogel can withstand mechanical pressure 2,000 times its own weight, making it suitable for bombproof panels. It also can absorb oil spills and pollutants in the air. (Summary of an article on Japan Times – 3/1/08)