



To celebrate the 25th Anniversary of Science and Technology co-operation between Canada and Japan, the Embassy of Japan presents the *Japan Science & Technology Newsletter*, a quarterly report on Japanese science and innovation highlights and news.

1. Japan-Canada S&T Cooperation

1.1 Canada-Japan Nanotechnology Workshop

The Waterloo Institute for Nanotechnology hosted the first Canada-Japan Nanotechnology workshop on November 21st and 22nd, at the University of Waterloo, in Waterloo, Ontario. H.E. Kaoru Ishikawa, Ambassador of Japan to Canada and the Honourable Gary Goodyear, Minister of State for Science and Technology participated in the opening ceremony, relaying messages from the Japanese and Canadian governments.

The Workshop is based on the discussion by the 11th Japan-Canada Joint Committee on Science and Technology Cooperation, held in November, 2010 and realized by both countries to celebrate the 25th anniversary of the Japan-Canada Science and Technology Cooperation. The Workshop was well-attended by Japanese and Canadian scientists and researchers, with about 60 distinguished participants from 13 organizations in Japan and Canada sharing information on the most advanced nanotechnology research in both countries, and exchanging views to strengthen further cooperation for future research. (Nov 21 and 22)

<http://www.nano.uwaterloo.ca/japan-canada-nanotechnology-workshop/>



1.2 Ambassador Ishikawa visits Waterloo

Ambassador Ishikawa visited the University of Waterloo and met Dr. Feridun Hamdullahpur, University President and Vice-Chancellor in October. Ambassador Ishikawa also visited the Waterloo Institute for Nanotechnology in the University of Waterloo and exchanged opinions on the Canada-Japan Nanotechnology Workshop held in November, 2011. During his visit to the Centre for International Governance Innovation (CIGI), Ambassador Ishikawa appeared in a video entitled "Challenges and Opportunities Facing Japan." The video is available on You Tube and the URL below. (Oct 28)

<http://www.cigionline.org/videos/challenges-and-opportunities-facing-japan>



1.3 Dr. Shizuo Akira awarded Canada Gairdner International Award

Dr. Shizuo Akira, Director and Professor of the WPI Immunology Frontier Research Center, at the University of Osaka, was awarded a 2011 Canada Gairdner International Award for "ground breaking discoveries and definition of the family of Toll like receptors and the array of microbial compounds that they recognize to provide innate resistance to infection." Ambassador Ishikawa participated in the Canada Gairdner Awards ceremony held on October 27th, to celebrate Dr. Shizuo Akira and his splendid achievement. The Canada Gairdner International Award is awarded to scientists who have conducted significant research in the field of medical science. (Oct 27)



2. Japanese S&T

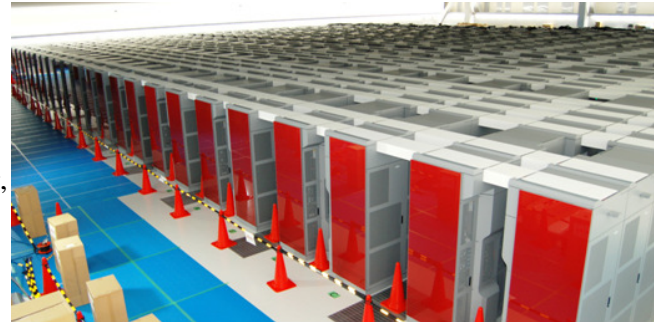
2.1 8th annual Science and Technology in Society (STS) forum held in Kyoto

The 8th Annual Meeting of the Science and Technology in Society (STS) forum took place on October 2nd to 4th in Kyoto, Japan with the theme of “The Lights and Shadows of Science and Technology, “ seeking to ensure further progress of S&T while keeping inherent risks under proper control. Almost 800 attendees from 80 countries, regions and international organizations participated in the forum. The meeting focused on future energy supplies that not only adhere to the best safety, environmental and social compatibility standards but are also available at competitive prices, the importance of sustainability for humanity’s continued existence and prosperity, the need to address nuclear safety and strengthen nuclear safety measures, and the importance of collaboration between academia, industry, and government to maintain social and economic viability. (Oct 2 to 4)

<http://www.stsforum.org/>

2.2 K-Computer wins fastest supercomputer in second consecutive world ranking

The supercomputer "K computer" achieved the world's fastest processing speed of 10.51 petaflops (quadrillion floating-point operations per second) and 93.2% operating efficiency, and is in first place on the 38th TOP500 international ranking of supercomputers for the second consecutive time as it again achieved the world's best LINPACK benchmark performance. The K computer, jointly developed by RIKEN and Fujitsu Ltd., has 864 computer racks equipped with a total of 88,128 interconnected CPUs. With its execution efficiency of 93.2%, the system further exceeded its first place winning performance on the 37th TOP500 list published in June 2011, where it scored 93.0%. Although the K-Computer, which is part of the High-Performance Computing Infrastructure (HPCI) initiative led by Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT), is still under development, it has achieved the goal of a LINPACK score of 10 petaflops, a performance target set as a national core technology as part of Japan's 3rd Science and Technology Basic Plan. (Nov 2 and 14)



<http://www.riken.go.jp/engn/r-world/info/release/press/2011/111114/index.html>

2.3 Japanese Astronaut returns to Earth

After 165 days in space Dr. Satoshi Furukawa returned to Earth on the Soyuz Spacecraft (27S/TMA-02M) on November 22nd, landing in Kazakhstan. Astronaut Furukawa completed his long-duration mission on the International Space Station (ISS), performing science experiments aboard the ISS and operating ISS systems. The Japan Aerospace Exploration Agency (JAXA) is working to advance Japan’s technology to enable manned space activity in the future, and Astronaut Furukawa’s experience operating technologies for manned spacecraft will prove useful. (Nov 22)

http://www.jaxa.jp/press/2011/11/20111122_27s_e.html



2.4 Kyoto University establishes new division for iPS Cell application development

Kyoto University Hospital establishes an iPS Cell application development division beginning December 1st, 2011. The new division, which will collaborate with the Centre for iPS Cell Research and Application (CiRA) at Kyoto University, will conduct disease specific iPS Cell research in addition to developing infrastructure to create regenerative medicines using iPS Cell technology. (Nov 18)

Related Links

Japan Science and Technology Agency <http://www.jst.go.jp/EN/>

Science Links Japan <http://sciencelinks.jp/>

Japan Aerospace Exploration Agency http://www.jaxa.jp/index_e.html

Japan Today – Technology <http://www.japantoday.com/category/technology/page/2>