



Science & Technology News from Japan, August 2014

1. Swiss Related News

HSG Students Tour Japan with Hitotsubashi University Colleagues

(S&T Office Tokyo, August 08, 2014)

From August 2 to 12, University of St. Gallen (HSG) students participating in the Asian Culture Transfer (ACT) program visited their counterparts of Hitotsubashi University's GET (global energy transfer) program. As Switzerland and Japan are celebrating the 150th anniversary of diplomatic relations this year, ACT decided to go back to its roots; 16 years ago, the first exchange was with Hitotsubashi in Tokyo, this year's partner. During their visit, the HSG students stayed in a temple in Fukushima Prefecture where they met locals to learn first-hand from their experiences. Thereafter, the students held a joint symposium on energy related issues such as fossil fuel, renewable energy, policy and eco-friendly city. The cultural program included a boat ride in Tokyo Bay wearing traditional Japanese yukata. Later in the month, the Japanese students returned the favor and visited Switzerland to enjoy a full program organized this time by the HSG students.



Symposium on Drug Development between Japan's and Switzerland's Pharma-Clusters

(Science & Technology Office Tokyo, August 13, 2014)

While Basel is Europe's pharmaceutical headquarter, the same can be said about Toyama Prefecture in Asia. On August 12, the "3rd Toyama-Basel Joint Symposium on Pharmaceutical Research and Drug Development" was held in Toyama. The invited delegation from Basel was led by Prof. Dr. Jörg Huwyler from the University of Basel. He was accompanied by Prof. Dr. Antonius G. Rolink of the same university, Dr. Eric J. M. Meier, Novartis Pharma Ltd., as well as Prof. Huwyler's final-year PhD-student Mrs. Helene Kettiger. The symposium was opened by Toyama Prefecture's Governor Mr. Takakazu Ishii. Other high-level guests included the president of Toyama University, Prof. Dr. Shunro Endo, and the president of the Pharmaceutical Association of Toyama Prefecture. As a representative of the Swiss government the head of the Science and Technology Office Tokyo of the Embassy of Switzerland in Japan gave a short welcome speech, highlighting the 150-year anniversary of diplomatic relations of the two countries and the many similarities between the two regions. Prof. Huwyler opened the symposium with his keynote speech after which an enthusiastic participant stood up and exclaimed: "Your presentation is very important for our region, thank you very much!" Many of the following Japanese presenters had strong contacts with Switzerland, either through research exchanges or countless business trips to Basel. The nearly 350 participants from academia as well as industry enjoyed the broad program of the symposium and the opportunities for networking.



2. Science and Technology Policy in Japan

- Ministry to help start-ups to collaborate with big firms
- Japan to create international framework for Arctic research
- Japan taking steps to fuel entrepreneurial spirit

3. Education

- Government recognition to boost vocational school standards

4. Life Science / Health Care

- STAP cells paper co-author Sasai commits suicide, notes found: police
- 'K' supercomputer key for cancer drug
- Tokyo Marine Nichido to insure regenerative medicine research

- Group aims to detect 13 cancers in a single test
- Suicide further muddles already confusing STAP cell probe
- Kyoto professor pursues Parkinson's treatment based on iPS cells
- Ebola outbreak turns spotlight on Fujifilm's medical business
- Medical device firms 'to get boost'
- Japan to lower cap on juvenile bluefin tuna catches
- Riken team has not reproduced STAP cells: interim experiment report
- 2 more people found to have contracted dengue fever in Japan
- Olympus teams with hospitals to promote GI endoscopy in Asia
- Stem cell study in Japan planned for newborns with encephalopathy

5. Nano and Micro Technology / Material Science

- For Japan's electronics industry, silicon carbide wafers may be savior
- Japan to import rare earths from India

6. Information & Communications Technology

- Electronics makers hoping farm IT will grow profits
- Google Invests In \$300M Submarine Cable To Improve Connection Between Japan And The US
- World's Fastest Camera Takes 4.4 Trillion Frames Per Second
- Machines to talk via mobile networks
- Analysis of 'big data' to cut medical costs
- NEC to supply optical cable for new line across Pacific
- Toshiba creates leap in 'unbreakable' cryptography communication tech

7. Software / Mobile Services & Applications

- New '.tokyo' Web domain proving popular
- Hyper Japan hails digital-age 'Genji' opera
- Chinese censorship hindering Line's ambition to become No. 1
- Cybersecurity 'experts' lacking in numbers, skill
- Sony hopes to lasso gamers with streaming PlayStation Now service
- Tokyo Metro plans app contest to make subway user-friendly
- Nintendo still unable to solve smartphone puzzle
- hour predictions for heavy rain eyed
- Line hoping to parlay user network into big e-commerce payout
- With New 3DS Model, Nintendo Continues to Woo Hardcore Gamers

8. Energy / Environment

- Ministry seeks to focus on individual radiation exposure
- Chubu Electric to buy US shale gas a year early
- Energy firms to reward top user power savings
- Tepco to pump up toxic groundwater, dump in ocean after treatment
- Major biomass power plant to supply 100,000 homes in Kyushu
- Scientists devise new technology to identify eel, curb false labels
- Japan, U.S. plan unmanned sub
- Chugoku Electric to invest in Aussie coal
- Tepco to build advanced coal-fired power plant near Tokyo
- Hitachi Zosen to turn trash into power in Indonesia, Vietnam
- Over 20-meter tsunami could hit Sea of Japan coast: gov't panel
- Mitsubishi Heavy gas turbines to boast best energy efficiency
- SoftBank branching out into farm support

9. Space Development

- H-IIA rocket's greater burn to lend satellites longer life span
- JAXA, ADB to keep tabs on Asian floods
- NEC to support Mexico's satellite development
- Japan throttles up work on homegrown fighter jet
- Japan's defense ministry looks to launch new space surveillance unit
- Advanced optical satellite in works

10. Engineering / Robotics / Automotive

- Yoshiyuki Sankai / Humans, robots can help each other: Scientist
- High-tech farm machines adopt eye-catching forms
- Kawasaki Heavy to develop a large tank for liquid hydrogen
- Nursing facilities pin hopes on robots
- Nissan, Mitsubishi to join hands on low-cost electric car
- Is Toyota's new hydrogen car about to 'change society'?
- Japanese machinery companies raising R&D spending 13%
- Obayashi to put robots to work in foundation excavation
- Sony breaking into automotive image sensor market
- Japanese, foreign automakers join forces on new sports cars
- Govt to take initiative on next-generation jet
- MHI wins order for Brazil metro system
- Japanese carmakers eye turbo boost in race to downsize engines
- Osaka Gas to extract hydrogen from LPG
- Panasonic preps cheaper, lighter wearable assist robot
- New tech promises to make bullet trains even speedier
- Fuji Xerox printer 'comes to your desk' with documents
- Robot wheelchairs would read users' minds
- JR Tokai's maglev project sees boost from healthy shinkansen business

11. Nuclear Development

- Tech hurdles high as Japan seeks final resting place for nuclear waste
- Hokuriku Electric submits documents for reactor safety checks
- Government eyes basic price for N-power generation
- Environment Ministry to seek ¥300 billion budget for fallout decontamination

12. Physics

- Diamonds are a quantum computer's best friend
- Electrons moving in a magnetic field exhibit strange quantum behavior
- A new, tunable device for spintronics
- Particle physics to aid nuclear cleanup

13. Intellectual Property Rights / Technology Transfer / Alliances

- Japan fund, companies to churn out cutting-edge display panels
- With Tesla deal, Panasonic sees risk and reward
- Japan to supply nuclear energy tech to Kazakhstan
- Chat app Line to spend big on smartphone games
- More Japanese companies stepping up overseas R&D
- UMC, Fujitsu form chip partnership
- Panasonic, Tata working on water purification system for India

14. General Interest

- Japan gives names to 158 remote islets
- New 'intelligence center' to gather data on foreigners
- Japan Inc. trying new ways to put women in executive suites
- Japan Communications preps cheap smartphone plan for visitors
- Science Olympiads to be coordinated with 2020 Games
- Japanese sake exports reach new record high
- Japan to offer free wireless hot spots at tourist sites
- Gurunavi, Michelin to launch gourmet website in Japan
- Abe seeks long-term plan for reviving small-town Japan

Calls

> **IMD Executive MBA Program**

For the IMD **EMBA** program there are now two Master stage sessions per year: one graduating in June and one in November. The new session launched will kick-off in April 2014 and will run in addition to the current November session. For further information: <http://www.imd.org/executive-mba/#/home/>

> **Master of Advanced Studies in Intercultural Communications**

The Master of Advanced Studies in Intercultural Communication (MIC) is a part-time post-graduate program for professionals engaged in managing operational or strategic situations in a multicultural context and in managing multicultural human resources.

For further information: <http://www.mic.usi.ch>

Deadline: As class size is limited, candidates are advised to apply as early as possible and at least two months before the beginning of the Master's program.

> **EPFL International Institute for the Management of Logistics "Creating Supply Chain Excellence"**

The study program "Global Supply Chain Management" has been designed to provide all participants with the know-how, the competence and confidence necessary for the planning and implementation of logistical and supply chain projects at the strategic as well as the operational levels. The participants will develop a broad logistical culture based on technical, economical and managerial knowledge enabling project evaluation to be made by adding considerations from an entrepreneurial point of view.

Program 2015 is now available. <http://iml.epfl.ch>

Upcoming Science and Technology Related Events in Japan

> **Contemporary Japanese Architecture in Switzerland, October 8-15, 2014**

Exhibition and lecture series with four major Japanese architects active in Switzerland: Shigeru Ban Architects, Kengo Kuma and Associates, SANAA, Riken Yamamoto.

Spiral Garden in Tokyo, October 8-15, 2014

<http://www.jparchitecture.ch>

> **150 Years Anniversary: Switzerland-Japan Friendship Year 2014**

The year 2014 will mark a milestone in the friendly relations between Switzerland and Japan which will celebrate the establishment of diplomatic relations 150 years ago.

<http://www.eda.admin.ch/anniversary2014>

>> More events on the Science and Technology Office Tokyo homepage:

<http://www.stofficetokyo.ch/events/upcoming-events/>

Background Reports

> **Selection:**

- WPI – The World Premier International Research Center Initiative
- Induced Pluripotent Stem (iPS) Cells

- Japan SERI Policy Update
- > **Further Background reports:**
 - <http://www.stofficetokyo.ch/japan-news/reports/>

Information Contact

If you wish to receive more detailed information or would like to introduce new readers, please feel free to contact the Science & Technology Office Tokyo. Email: tok.science@eda.admin.ch
Thank you for your interest!