



Weekly Wire
News from East Asia and Pacific
National Science Foundation
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AUSTRALIA: Zero Emissions Long Term

The Government announced a new post-2020 emissions target of between 26 and 28 percent reduction from 2005 levels by 2030. In a submission to the government earlier this year, the Australian Academy of Science recommended deeper cuts of 30 or 40 percent below 2000 levels by 2030. The Academy President says, “The science tells us that, in the medium term, if we don’t reduce our emissions we will see serious consequences for our planet, our health and our society. That’s why this target needs to be a stepping stone, as part of global efforts, towards a target of zero emissions by mid-century.”

Source: <https://www.science.org.au/news/emissions-targets-need-deliver-zero-emissions-long-term-academy>

JAPAN: Cybersecurity Project Director

Based on the decision to add a Cybersecurity project to the Strategic Innovation Promotion (SIP) program (see program details: http://www.nsf.gov/od/oise/tokyo/articles/Weekly%20Wire-2014_0605.pdf), the Council for Science, Technology and Innovation (CSTI) has announced that Dr. Atsuhiro Goto, Professor of the Institute of Information Security, will manage the project from the basic research stage to commercialization. The details of the Cybersecurity project, including the budget and personnel, are to be made public by the end of JFY2015 (March 2016).

Source: A summary translation of an article on the Cabinet Office website

JAPAN: Defense Ministry Competitive Research Fund

The Ministry of Defense (MOD) has established, for the first time in history, a competitive research fund which Japanese public and private research institutions can apply for. MOD has long conducted R&D on an intramural basis, only contracting out the manufacturing process. However, realizing both the serious need for innovative new technologies and the increasingly blurry borderline between civilian and defense technologies, MOD has made this epoch-making decision. Named the National Security Technology Research Promotion Fund (provisional translation), the new fund had an application period of July 8-August 12, 2015. Its JFY2015 budget is Yen 300 million (\$2.5 million) and funded PIs will receive roughly Yen 30 million (\$250,000) for up to 3 years. Any Japanese researchers at a Japanese research institution may apply to the fund, through their affiliation institution. Applications were invited to any of 28 research themes identified by MOD, including Sound Reflection Control by Meta Material Technologies; Advancement of the Laser System Light Source; Visualization of Shock Waves in the Air; Use of Big Data to Solve Social Security Issues; Effective Under-water Energy Transmission; and Advancement of Materials Functions by Nano Fiber. Review results will be announced at the end of October 2015 and will be available on the MOD homepage.

Source: A summary translation of an article on MOD website: <http://www.mod.go.jp/trdi/funding/h27pamphlet.pdf>

JAPAN: S&T Indicators Update

The National Institute of Science and Technology Policy (NISTEP) presented the updated S&T indicators to the Council for Science and Technology Policy (CSTI) members. In summary, (1) the ratio of Government R&D investment to the total is low among major nations; the ratio of industry's investment in university R&D to the total university-based R&D is the lowest among major nations; (2) the ratio of researchers to the total labor force is high among major nations; (3) new enrollments in Ph.D. programs peaked in 2003 and has been declining ever since; (4) the number of research papers produced by researchers based in Japan has been stable for the past decade, while it has been increasing in other countries; (5) Japan continues to account for a large share of patent families, and Korea and China are catching up Japan in IT and electric engineering fields; (6) the competitive advantage of high-tech industries is being undermined, while that of the medium high-tech industries keeps high standard; and (7) viewed by gender, more male researchers are employed by industry, while more female researchers are employed in universities; and more researchers with Ph.D. degree, regardless of gender, are employed by universities than by industry.

Source: A summary translation of a NISTEP report on S&T indicators and Bench Marking of Scientific Research-2015: <http://www8.cao.go.jp/cstp/qaiyo/yusikisha/20150820/siryu1.pdf>

SINGAPORE: 10 Years of Collaboration with Japan's RIKEN

The Agency for Science, Technology and Research (A*STAR) and RIKEN, Japan's one of the largest comprehensive research institute in the natural sciences, have marked the 10th year of research partnership. A*STAR and RIKEN signed their first MOU in 2005 with two renewals afterwards. The partnership has enabled many joint projects in a variety of fields from biomedical to physical sciences and engineering. Examples of collaborative research include a new method of cell detachment using a novel temperature-sensitive biomaterial, which enabled scientists to study adult human stem cells more efficiently; and characterization of novel lymphoid populations in the epidermis, which eventually provided new insights into the skin immune system. Both the A*STAR Chairman and RIKEN President expressed hope for many more fruitful years of collaboration.

Source: <http://www.a-star.edu.sg/Media/News/Press-Releases/ID/4240/ASTAR-and-RIKEN-celebrate-10-years-of-research-collaboration.aspx>