

Creative research at the world highest level Give our inherited and accumulated knowledge back to society

New “Fluctuation Free Facility for New Information Industry” research building of the New Industry Creation Hatchery Center completed

A new research building the “Fluctuation Free Facility for New Information Industry” of the New Industry Creation Hatchery Center (NICHe) for industry-academia collaborative research has been completed at the new Aobayama Campus. This new building was built with a fund from the Ministry of Economy, Trade and Industry. It is designed to provide facilities to develop human resources to support approaches to form and develop regional industrial clusters. It is also the first step toward the “approaches to realizing the Science Park Plan” of Tohoku University for further engagement in joint research with private enterprises.

In order that the most advanced research results can be assimilated into industry and rapidly put into practical applications, joint research activities linking to the university's basic research will be facilitated among university researchers and researchers/engineers/skilled workers from major businesses/local small and medium sized businesses/Japanese small and medium sized businesses that are looking for global niches.

This research building will be located next to the new Aobayama Station (tentative name) on the Sendai Tozai subway line, which will open in 2015 and increase accessibility.



Highly Ranked Achievements in Industry-University-Government Collaborations: two faculty members of Tohoku University received the award for Persons of Merit in Industry-University-Government Collaboration.

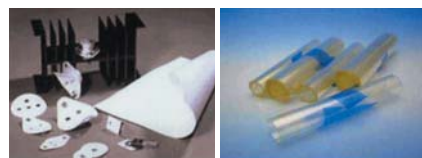
The Government has commended people who have made great accomplishments and taken leading approaches in industry-university-government collaborative activities among universities, public research institutions and the private sector, aiming at further development of collaboration in Japan since FY2003. Two faculty members of Tohoku University were honored with the Minister of Education, Culture, Sports, Science, and Technology Award in 2009.

Minister of Education, Culture, Sports, Science, and Technology Award

Development of Superhybrid Materials

Professor Tadafumi Adschiri
Advanced Institute for Materials Research (WPI-AIMR)

Prof. Adschiri invented supercritical hydrothermal synthesis that enables continuous synthesis of organic-inorganic hybrid nanoparticles. Based on this technology, he jointly and successfully developed composite materials where contradictory properties are made compatible with each other in a new collaborative project by the Ministry of Economy, Trade and Industry and New Energy and Industrial Technology Development Organization (NEDO). The technology is expected to diffuse as a technological base for various industries.



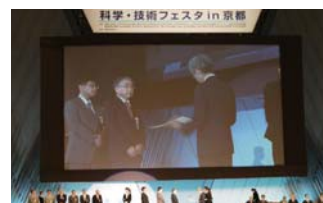
High thermal conductivity materials (heat dissipation sheets) Optical materials (anti-reflection films)

Minister of Education, Culture, Sports, Science, and Technology Award

Development of a casting CAE system named ADSTEFAN

Professor Koichi Anzai
Graduate School of Engineering

Prof. Anzai researched and developed a casting CAE system called “Stefan 3D” for casting engineers. This technology was transferred to Hitachi, Ltd., and further made into a software system product named “ADSTEFAN.” It is now widely used in Japan as well as other Asian countries. It has contributed to improved quality and cost performance of cast products, and has been upgraded every year since it was launched. It is an excellent case of meeting the needs of society through collaboration.



A practical casting throttle chamber and results of flow analysis

The 2nd Tohoku University International Industry-University Collaboration Symposium

The 2nd Tohoku University International Industry-University Collaboration Symposium was held in Tokyo, on February 22, 2010, as a part of the Ministry of Education, Culture, Sports, Science and Technology (MEXT) “Project for the Strategic Development of Industry-University-Government (I-U-G) Collaboration.” The event featured lectures on the current state of industry-academia collaboration in Japan and other countries. It also included Tohoku University's reports on world-leading collaborative activities, and case reports by its researchers who took principal roles in the development of international collaborations. Through the program, Tohoku University's global competitiveness in various research fields was promoted to participants from Japanese and international businesses and other sectors.

The Symposium started with opening remarks by Akihisa Inoue, President of Tohoku University, and Takashi Yanagi, Director, Research Environment and Industrial Cooperation Division, Research Promotion Bureau of MEXT. Following the remarks, Marc M. Wall, Minister-Counselor for Economic Affairs, Embassy of the United States, made a keynote speech entitled “United States' Perspectives on the Government's Role in Fostering Private Sector - University Collaboration.”

The event closed with an enthusiastic gathering of about 120 participants, including many Industry-University relations representatives and experts from government, private sectors, academic institutions, and other foreign agencies.

Tohoku University will continue to promote its international industry-academia collaborative activities, and further contribute to the development of the country's international collaborations as a whole.



2nd Prize of the German Innovation Award, “Gottfried Wagener Prize 2009” Won

The presentation ceremony of the German Innovation Award, “Gottfried Wagener Prize 2009” was held in Tokyo on February 8, 2010. At this ceremony, Takafumi Fukushima (Assistant Professor at Koyanagi Laboratory, Department of Biorobotics, Graduate School of Engineering) was honored with the 2nd Prize for his research “Surface-Tension-Powered Chip Self-Assembly Technology for Three-Dimensional IC Fabrication” and its innovative physical and chemical approaches.

Inspired by the work of Gottfried Wagener, a German scientist who had close links with Japan, this award has been initiated by twelve technology-focused German companies and the German Chamber of Commerce and Industry in Japan to promote cooperation between Germany and Japan in industry and academia.

This was the second time that a young researcher from Tohoku University has won this prize, following the previous year. There are great expectations that the university will continue to make great contributions to the promotion of industry-academia collaborative activities both for Germany and Japan.



Hints for Industry-Academia Collaborative Activities: Tohoku University Research Profile Search—Now Available in Web Format (English/Japanese)

The Tohoku University Office of Cooperative Research and Development released the Tohoku University Research Profile Search, web version, to increase opportunities for using research results and resources of our researchers by people in industry and other sectors. It supports the collecting of information with useful facilities such as a list of research areas of life science, information communication, environment, nanotechnology, materials, energy, manufacturing technologies, infrastructure, frontier, and others; various navigation functions; and abundant links to related information. This Search can also be used to explore subjects related to joint research and development.

<http://www.rpip.tohoku.ac.jp/seeds/lang:en/>

