

## Intellectual Properties

In order to utilize technology effectively in society, Tohoku University actively promotes academic-industrial alliances in collaboration with Tohoku Technoarch Co., Ltd. established in 1998, which is a Technology Licensing Organization (TLO) and aims to assist patents and technology transfer activities owned by academic researchers in the Tohoku District. After April 2004, all the national universities in Japan became incorporated bodies, and the attribution from intellectual properties became that of the universities. The University then adopted the following policy for royalty distribution: 30% (higher limit) to the inventor; 30% to a University account for the inventor to support his/her research; and 40% to the University Administration. Up to the present, Tohoku University has obtained 149 national patents and 44 international patents including 20 US patents, and its royalty income is increasing year by year. The latest statistics on intellectual properties at Tohoku University are as follows.

	(FY2007)
National Applications Filed	387
International Applications Filed *	157
National Patents Awarded	22
International Patents Awarded	7
No. of Licenses & Options Yielding Royalty	32
Royalty Income (unit: thousand yen)	16,448

\* Tohoku University generally adopts the system of the Patent Cooperation Treaty (PCT), a 1970 international constitution for properties, to apply for its international applications.

## Cooperation with Community

### Science Café

The Science Café provides an opportunity for everyone, the high school students and others, to chat over a cup of coffee with the scientists; listen to them carry on about their studies, enjoy the fun in science and understand how it contributes to society.

Date	Theme
Apr. 20, 2006	Simultaneous Pursuit of Enrichment of Life and Environmental Preservation — Current Status and Future Perspective from the Viewpoint of Environmental Economics and Environmental Engineering
May 22, 2006	Let's Talk about Education Scientifically — Textbook and the Latest Education Trend
Jun. 30, 2006	Brain Forming Recipe, "Gene"
Jul. 21, 2006	Is Functional Food Delicious? — Securing and Development of Food Products in the Near Future
Aug. 25, 2006	Conversion to Earth-Friendly Energy — Challenges and Problems
Sep. 29, 2006	How Far Can We Reach into the Universe with Plasma Engine? — Plasma Science Leading to the Future
Oct. 27, 2006	Life and Machine Connected by Nanotechnology — Development of Biodevice
Nov. 17, 2006	True Meaning of T.E.A.M
Dec. 15, 2006	Mechanism of Mobile Phone — You Can Talk Anywhere
Jan. 26, 2007	Space Exploration with "Subaru" Telescope and Gravity Lens
Feb. 16, 2007	Robotics for Space Exploration — "Hayabusa" Asteroid Probe, Lunar Exploration Rovers, and Field Robots for Terrestrial Applications
Mar. 15, 2007	Science of Sleeping Plants and Carnivorous Plants — Chemistry of Mysterious Biological Phenomenon



Science Café

### Innovation Fair

Date	Contents	Venue
Oct. 5, 2007	Introduction and presentations were made of innovative and extraordinary research by the young researchers in the fields of nanotechnology/ materials, electrical communication, biomedical cooperation/ life science, robotics, environment/ energy, etc.	Sendai International Center

### Extension Courses

Tohoku University is constantly making efforts to play the leading roles in educational and academic activities in the Tohoku District. Meeting the community's needs, it provides extension courses and public lectures for lifelong learning of citizens. In FY 2007, the University organized 59 extension courses including on-demand high school classes and 2 public lectures which gained a high reputation from various academic fields. Tohoku University has continued these educational activities made understandable for the public to strengthen cooperation with community and for the purpose of disseminating information. As a result of these highly motivated activities, Tohoku University secures its position as a highly appraised university in society.

## Citations

Tohoku University ranks amongst the highest in quality of universities in the world. According to the ISI Thomson Corporation Database, Essential Science Indicators (ESI), investigates citations in scientific papers of the past 10 years and then ranks their data by fields, countries and institutions. The Database serves as an indicator of evaluation in research of each institution as well as listing the latest information on scientific research. The research findings of Tohoku University were highly evaluated in the international academic community and found to contribute to the global society in the various fields of science.

### Field Rankings for Tohoku University Sorted by Citations

(as of May 1, 2008)

National Ranking	International Ranking	Field	Papers	Citations	Citations Per Paper
1	3	Materials Science	5,346	32,172	6.02
2	9	Physics	10,391	109,999	10.59
4	15	Chemistry	6,038	65,749	10.89
2	40	Engineering	3,280	12,031	3.67
4	64	All Fields	39,739	372,175	9.37

Source: ISI Essential Science Indicators<sup>SM</sup>, January 1, 1998-February 29, 2008