## System of Smooth Education and Research World's Leading Environment, Organization and Operation

### Sessions among Different Fields

A new course, opened in academic year 2009 for postgraduate students, takes advantage of the effectiveness of sessions among different fields based on previous Interdisciplinary Research Joint Lecture. In this course, students can share expertise and researchers in various fields that students do not study as their majors. The purpose of the cross-departmental lectures is to develop cross-sectional and interdisciplinary perspectives in students. They are expected to be committed to each class while studying their majoring fields. The new course draws attention for presenting a new curriculum as a part of graduate school reform.

Examples		
Lecturer	Title (including provisional one)	Outline
Graduate School of Science Professor Motoko Kotani	Introduction of Discrete Geometric Analysis	A macroscopic phenomenon that we observe is determined by a microscopic structure. This lecture will explain how symmetry and periodicity of a microscopic geometric structure controls a phenomenon at the macroscopic level from a standpoint of discrete geometric analysis.
Graduate School of Education Professor Katsutoshi Mizuhara	Structures and Characteristics of Curricula in Modern Japan	There are harsh arguments about the relationship between yutori education (relaxed education) and declines in the students' scholastic performance. This lecture is to elucidate principles of school curricula including its structure and characteristics.
Institute of Development, Aging and Cancer Professor Ryuta Kawashima	Most Advanced Brain Sciences and Creation of New Industries	This lecture will present industry-academia joint research projects to return technologies and research results on the brain science to society. We discuss the involvement of the university's science and technology in society, and various problems accompanied including its social and ethical aspects.

### The completion of Tohoku University Integration Laboratory

Tohoku University Integration Laboratory was completed in March 2009 for joint research by Institute for Materials Research and WPI Advanced Institute for Materials Research (WPI-AIMR.) The new laboratory aims to contribute to the significant development of interdisciplinary researches mainly on material sciences. In commemoration of the completion of the new building, an opening ceremony was held with the attendance of many guests from the Ministry of Education, Culture, Sports, Science and Technology, Japan Society for the Promotion of Science (JSPS,) and domestic and overseas WPI-related organizations on May 22, 2009. Following the unveiling ceremony



Appearance of the building

by President Inoue, guests participated in the laboratory tour to understand the

outline of research in WPI-AIMR.

particular academic fields.



The Global COE Program aims to support establishment of the world's highest education and research center to develop creative human resources with global leadership. The program is supported by the Ministry of Education, Culture, Sports, Science and Technology. For the designation of Global

http://www.tohoku.ac.jp/japanese/researcher/coe/

COE Programs, candidates are evaluated for their possibilities to be the above center on the condition that they have the world's highest research base for

In Tohoku University, 12 programs in eight fields have been designated in academic year 2007 and 2008.

Kyushu

The laboratory tour

## The Fourth-Generation Campus Network

StarTAINS, the fourth-generation Tohoku University Academic/All-round/Advanc ed Information Network System (TAINS,) has started. The new star shaped network including a core router has been installed at the Cyberscience Center on Aobayama Kita Campus. StarTAINS is expected to play a role as a "star" of the next-generation powerful information platform that Inoue Plan aims for.



# The Cyberscience Center has been Designated as a Joint Research Center for shared use.

The Cyberscience Center of Tohoku University has been designated as a joint research center to share the large-scale interdisciplinary information platform by the Ministry of Education, Culture, Sports, Science and Technology. Members to use the new center consist of the Hokkaido University Information Initiative Center, the Information Technology Center of the University of Tokyo (as a core organization), the Global Scientific Information and Computing Center of Tokyo Institute of Technology, the Information Technology Center of Nagoya University, Academic Center for Computing and Media Services of Kyoto University, the Cybermedia Center of Osaka University, the Research Institute for Information Technology of Kyushu University, and the Cyberscience Center of Tohoku University. The period of designation is for six years from April 1, 2010 through March 31, 2016. The networked research center aims to contribute to the further development of academic and research bases in Japan by using information platforms including ultralarge scale computers, large-capacity memory, and a network. The research center will conduct joint researches in interdisciplinary fields that have been difficult to explain such as global environment, energy, materials, genome, academic information, program analysis, and information processing. The achievements produced at the above center are important for challenging researches, and are expected to draw international attention.

## Department of Technical Support

As of April 1, 2009, the technical staff consists of 427 members, and engages in supporting education and research in various fields. Many technical staff members work at Graduate school of Science and laboratories, and continue to keep advanced techniques for the development of our researches.

The Department of Technical Support was established in April 2009 in order to contribute to the

development of the support system. Since then, the technical staff members have belonged to the new department, which allows us to study and carry out cross-departmental measures. The university has tried to further improve skills of the technical staff, to ensure talented human resources, and to appropriately arrange personnel.

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