Divisional Major Achievements (Academic Year 2007)

Graduate School / Faculty of Arts and Letters
The Asia Int’l Memorial Prize for Essays by a Young People was inaugurated for the Centenary Anniversary of Tokushima University. Associate Professor Kyoko Haga was awarded the Henred Prize 2007 by Collegium Mediterraneanum.
Four International COE Symposiums on “Social Stratification and Inequality” were held.

Graduate School / Faculty of Education
“Toward Improving Academic Competencies in Asian High Schools: Japan, Korea, Taiwan, Singapore and Mongolia” in the International Symposium (organized by JSPS), “Graduate Program on Environmental Frontiers” (organized by JSPS), started cooperating with Graduate School of Environmental Studies.

Graduate School of Economics and Management / Faculty of Economics
Professor Ei. Oyama was awarded N. Black Award 2007, for his pioneering work on the physical and chemical properties of earth materials, under deep earth conditions.
Professor Kita was awarded the Purple Ribbon Medal for his research in organization chemistry.
Professor Nakahara was also awarded the Miyake Award and the Shimada Award, for his excellent achievement in geophysical ocean research.
Associate Professor Toshihiro Nakaoka was awarded the Hitotsubashi-Kajino-Takeni Memorial Award, for his research on the effects of gravity on the evolution of the universe.
Assistant Professor Yoshihiko Kita was awarded the Inoue Research Award for Young Scientists for his study of the mapping class group from the viewpoint of measure equivalence.

Graduate School / Faculty of Science
Identification of Translational suppressor 4E-BP1 as a factor promoting pancreatic islet cell autophagy.
Symposium on Local Medical System 44: Building up the doctors’ career design, from the doctors in community.
Tohoku Flier Plan for Cancer Specialists was established.
Professor Yamasato received the 18th Tokushima Prize.

Graduate School / School of Dentistry
MEeX Research and Education Funding “Highly functional Interface Science: Innovation of Biomaterials”.
Professor Fujimoto received Minister of MEeX 2007 (Science and Technology: Young Scientist).
Development of the Regional Oral Health Promotion Office with Miyagi Pref. and Sendai City.
Publication of “Inferior Oral Health Science”.

Graduate School of Pharmaceutical Sciences / Faculty of Pharmacy and Pharmaceutical Sciences
Professor Tetsuya Taniaki received “The Academy of Pharmaceutical Sciences and Technology, Japan Award” and “The Japanese Society for the Study of Schistosomiasis Award”.
Professor Hidetsugu Yukamaki received “The Commendation for Science and Technology by MEeX (Young Scientists’ Prize).”
Professor Soma Shizuo received “The Gold Medal Award” from Tokyo Techico Forum 21.

Graduate School / School of Engineering
Professor Kazuhisa Hishigawa was awarded the prize of Minister of science and technology policy: Analysis of tracheal mechanics and development of a silicon compensation control for larynx paralysis robots (Professor Ken'ichi Yashita) Subsidy.”
Realization of Stable Quadruped Galil Transition By Changing Body Stiffness (Professor Aki Higuchi).
Towards establishing a venture company with non-destructive analyzing systems (Professor Koshiro Kitani).
At Allors for Hydrogen Generation Successfully Developed (Professor Kyohito Ichida).
Cu-Mg alloys can drastically improve the performance and reliability of LCD panels (Professor Junshi Kobayashi).
Application of earthquake early warning system in schools (Professor Masahiko Morikawa).

Graduate School of Agricultural Science / Faculty of Agriculture
Professor Kenichi Hida was awarded the Japanese Society of Nutrition and Food Science Prize 2006 for “Physiological functions of food components preventing atherosclerosis.”
Associate Professor Makiko Tachikawa was awarded the JPS Prize 2008 for “Study in the molecular interaction between CNV and host plants”.
Involvement of the ApoHDL complex in DHA replication and genome stability (Asako, Professor Hanada).

Graduate School of International Cultural Studies
The 2nd Workshop of Japanese Culture by Graduate Students of Chong-Ang University (Korea) and Tokushima University (GSCS).
Lecture Forum of the European Union by Christophe PENOT, Minister-Counsellor, French Embassy.

Graduate School of Information Sciences
Cooperative Support for Asian IT Student Career Route by MEeX-MEXT ASIST program.
Symposium on “Research Activity and Mobility” was held for all faculty members.
OB and incumbent faculty cooperative seminar on “Science Integration” was held.

Graduate School of Life Sciences
Established the “Basic & Translational Research Center for Global Brain Science” as a global center of excellence (GCoE) for life science fields. (Cooperated with the Graduate School of Medicine).
Shining blue light on algae gene expression: -AUREOSOME, the new blue light receptor of Stenocypris-

Graduate School of Environmental Studies
Environmental Forum (13’- 15’): Global warming and sustainable manufacturing” etc.
5th Environmental Technology Symposium “Global warming――Life Style and Industry.”

Institute for Materials Research
Grand spin Hall effect in perpendicularly-orientated FePt/Al devices. Li superionic conductivity in hydrides.
Different drive mechanisms of domain wall motion - Step driven domain wall motion, formation mechanism of dendrite crystals with parallel twins and its implementation to the crystal growth method to realize high-quality Si multilayers for solar cell applications.

Institute of Development, Aging and Cancer
Identification of a novel cell-surface receptor regulating anti-angiogenic responses. We found a TGF-β gene transfer reduces acute abdominal infection in a rat lung transplant model.

Institute of Fluid Science
Emeritus Professor Yuji Masuoka was awarded the Purple Ribbon Medal in spring 2007.
Professor Katsushiro Shibata received the “Minister of Education, Culture, Sports, Science and Technology Award” in the Award for Persons of Merit in Industry-Academia-Government Collaboration in FY2007.
Associate Professor Hiroshi Ohta received the “Makuhari Science Award” in FY2007 from the Makuhari Research Promotion Foundation.

Institute of Multidisciplinary Research for Advanced Materials
Post-Silicon Materials and Devices Research Alliance was established under 4 different institutes in different universities.
Center for Advanced Microscopy and Spectroscopy and Center for Advanced Nitride Technology were reorganized.
Res. Prof. T. Fukuda was awarded The Czochralski Gold Medal and The 5th Kobata Prize.
Big project. Development of Ultra-Hybrid Materials, was started, and also concentrated research laboratory was founded.

Center for Northeast Asian Studies
Deming senior AILS and its deployment in new fields in Croatia.

Center for the Advancement of Higher Education
CARE developed and held a laboratory subject entitled “Introduction Science Experiments for Humanities” for PhD-level students in humanities course (Faculty of Arts and Literature, Education, Law, and Economics).
CARE established “Advanced Mathematics Course” which stresses mathematics seminar in order to implement small and high-level extracurricular class.

The Center for Academic Resources and Archives
Interchange program on facilitating museum education runs with the Smithsonian National Museum.
A long term monitoring of Aobayama was started under a cooperation with Ministry of the Environment.

International Advanced Education and Education Organization
Start of nurturing for excellence young researchers in interdisciplinary areas by selection of “Master’s course students of the Institute”, employment of “Research Fellow” etc.

Cyclotron and Radiosotope Center
Successful development of a semi-conductor animal PET scanner of ultra-high resolution “Fine PET”.

New Industry Creation Hatchery Center (NIChE)
Prof. Michiaki Takahashi received prize from Minister of MEeX.
The Tohoku University Business Incubator (T-BIS) sponsored by Small & Medium Enterprises and Regional Innovation (JAPAN(SU)) was inaugurated.

Center for Interdisciplinary Research
Success in the fabrication of vertical blue-light-emitting diodes by chemical lift-off technique.

Cyberscience Center
Reference of sample policies for Information security measure for universities.

Tohoku University Library
Special exhibitions, “Tohoku University Treasure” and “A Great Novelist: Natsume Soseki” held to commemorate the Centenary Anniversary of the University.
TOBUR (Tohoku University Repositio) providing more than 200000 items.

Tohoku University Hospital
Building up a hotspot of translational research on cooperation with medical science and engineering-Tohoku University (Innovation of New Biomedical Engineering Center) has been established.
DMAT ( Disaster Medical Assistance Team) had been dispatched to the Nigata Chubu Offshore Earthquake.
Regional emergency medical treatment system promotion project had been reinforced by Emergency Center (Aoba Prefecture and Sendai City).
Opinion exchange meeting for the promotion of equality in cancer treatment was held.
Regional medical treatment cooperation conference was held.
Training To “Cancer Medicinal Treatment” cancer treatment pharmacist and nurses was held.

WPI Advanced Institute for Materials Research
Professor Ikawa was selected as a foreign member of National Academy of Engineering Professor Miyazaki was awarded the Ariake Prize.

Biomedical Engineering Research Organization (TUBERO)
Symposium commemorating completion of TUBERO project was held.
A venture company originating from TUBERO Clair was established.