

These research trainees of different colleges are having opportunities to interact with each other in the course of researches, project meetings, the symposium held in September, the Young Researchers Forum to be held in February, which should definitely be helpful in education through cutting-edge research, the mission which a university is meant to serve.

Collaboration with Academic and Industrial Institutions

Part of this project is collaborative research with institutions both in academic and industrial, and both in Japan and overseas.

The studies on the light triggered magnetic reversal in the Information Technology Group is carried out in collaboration with Radboud University, The Netherlands and York University, UK, among others. The work on genetic network was conducted in Helen Diller Family Comprehensive Cancer Center among other institutions. The studies by the Medical Technology Group on DNA binding molecules for amplified oncogene detection and silencing are in collaboration with Kyowa Kirin Inc., the development of a novel radiation dynamic therapy against cancer cells in internal organs are in collaboration with Utsunomiya University and Roswell Park Cancer Institute. An international travel grant was obtained from the Royal Society on the research for DNA recognition. For magnetized coaxial plasma guns developed by the Nanomaterials and Nanodevices Group, discussion is ongoing toward commercialization with Plasmionique Inc., Canada.

Publications and Achievements in 2009

Papers	159
Patents	9
Invited Lectures	76
Presentation in scientific meetings	320
Other forms	57
Award	4

It is particularly noteworthy that work on genetic network was published in *Nature*. The fastest reading/writing in magnetic recording published in *Phys. Rev. Lett.* was highlighted in *Physics – spotlighting exceptional research* – published by the American Physical Society.

The project appeared in news media *Nikkan Kogyo Shinbun* (Daily Industry Newspaper) and *Toyo Keizai* (Eastern Economy). A work toward artificial photosynthesis was highlighted in science magazine *someone*.

Best poster/presentation awards were given to contributors from the project in MORIS (Magnetics and Optics Research International Symposium) 2009 and in three domestic scientific meetings.