

Establishment of Joint Research, “ENEOS Lab”, with Research Center for Advanced Science and Technology, the University of Tokyo

– Working towards the creation of a low-carbon society –

Nippon Oil Corporation (NOC) (President: Shinji Nishio) is pleased to announce that we have reinforced comprehensive Academia-Industry collaboration with Research Center for Advanced Science and Technology, the University of Tokyo (hereinafter called, “RCAST”), and have commenced joint research on new energy technologies for ultrahigh efficiency solar cells and rechargeable batteries.

Since October 2005, NOC has engaged in comprehensive Academia-Industry collaboration with RCAST based on the theme, “realization of a society in which energy and the environment are harmonized.” Such collaboration resulted in the implementation of joint researches in fields such as next-generation organic solar cells, materials for high output rechargeable batteries, and functional polymer solubilizing biomass, and Nippon Oil Corporation engaged in personnel resource exchange including the dispatch of NOC researcher as an associate professor to RCAST.

Meanwhile, solar power generation system plays a significant role amidst heightening expectations in the shift to the low-carbon society with the aim of halving greenhouse gas by the year 2050 to attain the goal of “Cool Earth 50” proposed by the Japanese government, and we sought the technological innovation of ultrahigh efficiency solar cells which aim to attain generation efficiency of 40% at cost comparable to that of thermal power generation.

We have long been conducting solar power generation system research as well as storage material necessary for such as system, and in April 2008 we started preparing to sell silicon-based solar system.

It is recently decided that we will further strengthen the collaboration with RCAST with the aim of creating a low-carbon society and study innovative energy technology focusing on ultrahigh efficiency solar cells. We established “ENEOS Lab” within RCAST to which we dispatched a number of our researchers to engage in joint research and we accelerated the study through the exchange of knowledge between “academia” and “industry” and planned the development and sustainable development of new energy business.

Nippon Oil Corporation, as a general energy corporation which contributes to the realization of a society in which energy and the environment are harmonized, intends to engage in the technical innovation of energy.

Details

1. Outline of Joint Research

- (1) Content: Ultrahigh efficiency solar cells, storage technology, etc.
- (2) Starting date: April 2008
- (3) Structure: Establishment of “ENEOS Lab” at RCAST for joint research and the dispatch of Nippon Oil Corporation researchers to the site.

2. Outline of RCAST

- (1) Location: 4-6-1 Komaba, Meguro-ku, Tokyo
- (2) Establishment: May 1987
- (3) Institute head: Professor Kenjiro Miyano (research area: photonics materials)
- (4) Research structure: 25 professors, 13 associate professors, 5 lecturers and 17 assistant professors.

(5) Establishment objective: RCAST will actively challenge new issues which arise from academic development and social changes, and contribute to the development of science and technology by developing new areas of science and technology aimed at people and society.

Appendix:  [Future Themes for Joint Study with RCAST and Past Study Results](#)