### Laboratory / Center profile

# **Business Engineering Research Laboratory**

#### http://lab.sdm.keio.ac.jp/nakanolab/en/index.html

### Figure 1: Main Research Areas

Representative: Professor Masaru Nakano

#### **Research Area**

W ith a view to realizing a sustainable society, the laboratory deals with system issues concerning society, economy and environment (see Figure 1). We design systems by comprehensively considering policies, businesses and technological advancement. We are also developing a socio-technical-economical methodology that runs quantitative analysis using simulations. Many of the laboratory members also take part in the Global Product Value Creation Research Laboratory and the Advanced City Design Laboratory.

#### **Automobile Research**

As shown in Figure 2, we factorize issues concerning an automobile society and study each factor, such as urban structures, environment, energies, resources and supply chains. Our focus is more on medium-to-long-term policies and corporate strategies for technological development rather than on short-term business. For our research on environment and energies/resources, we have been targeting various countries such as China, European countries, Latin American countries, Singapore, Indonesia, Malaysia and South Africa, in addition to Japan.

#### Internationalism

The laboratory has student members with diverse backgrounds: there are about 25 student members and roughly half of them have corporate experience; half of them have a science background and half of them are foreign students from various countries. As of October 2013, we have foreign students from the US, France, Denmark, Poland, Saudi Arabia, Indonesia, Taiwan, China and Mexico. Through the exchange partnership programs, 8 students and researchers have come from MIT and Purdue University in the US, the University of Cambridge in the U.K., ETH Zurich in Switzerland and Delft University of Technology in the Netherlands. We have all been benefiting from high-level discussions during the past year (see photo).

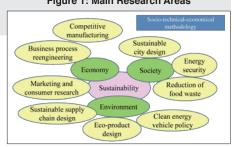
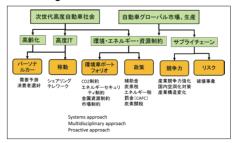


Figure 2: Automobile Research





Seminar

## **Innovative Design Center**

Members: Professor Takashi Maeno, Associate Professor Seiko Shirasaka, Guest Professor Toshiyuki Yasui, Associate Professor Naohiko Kohtake, Project Assistant Professor Kanenori Ishibashi and others

#### **Research Area**

The Innovative Design Center studies research and education on "Creating Innovation Based on the Collaboration of Multiple Stakeholders." In other words, we plan and manage the international group-project education aspect of the "Design Project", which is one of Keio SDM's required subjects. We also plan and manage group projects for external clients, while verifying their effectiveness

and improving practicality. In total, more than 6,000 individuals have participated in our workshops, which we began organizing during the 2012 academic year for external participants. This academic year, we are engaged in the "Innovation Dialogue Tool Development" project, sponsored by the Ministry of Education, Culture, Sports, Science and Technology, for which we have visited more than 20 universities

across Japan to promote dialogue among researchers, the business community and citizens. The laboratory is also actively collaborating with other initiatives, such as the "Innovation Hub (iHub)" of the Development Bank of Japan and Keio Marunouchi City Campus. We would like to continue playing an important role in promoting innovations in societies and entities.



A group photo after an open workshop of the Keio Innovative Design School (KiDS)



Workshop on "System x Design Thinking" during the fall camp



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