

## Lab profile

Communication Design Laboratory

Associate Professor Tetsuya Toma

The specialty of Associate Professor Tetsuya Toma, former advanced product development specialist at 3M in the US, is advanced system development and global marketing for the broadband society. He is known for his wide experience in project management at 3M, a global company. For his work in developing numerous new products and successfully introducing them to the market, he has won many company awards.



Toma Lab members of the inaugural class at master's thesis presentation in March

### Communication Design Laboratory

Communication design as a keyword, and various research relating to communication is underway in the laboratory. The categories are wide; from education, medical care, IT system development, and marketing to printed media.

The laboratory's core activity this fiscal year will be "Cabinet Offices' leading-edge R&D support program - creating the face-to-face communication industry with the world's fastest plastic optical fiber and photonics polymer for high-definition big-screen display," led by Professor Hiroyasu Koike in Faculty of Science and Technology, Keio University. Associate Professor Toma has been appointed as the leader of one of three sub-themes of the project, "Development of a Face-to-Face Communication System."

#### Associate Professor Toma leads a leading edge R&D program

The project was featured in an article titled "Japanese optical technology put into practical use" on the first page of Nikkei newspaper on March 19, 2010. Keio University established Keio Photonics Research Institute (KPRI) for the grand scheme of developing plastic optical fiber

for building optical networks at home and home electronics to connect to the network, and of the creation of products and services associated with the network. Professor Koike was appointed president of the institute, and Mr. Yokomizo, former CIO of Lawson, was named vice-president. Associate Professor Toma's role is the creation of new business from the industry - university collaboration. Major companies, including Sony and Sekisui Chemical, have already announced their participation.

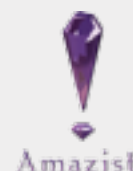
"The project includes not only the development of technology but also that of applications and business models, which really requires system design and management to handle large scale and complex systems," said Associate Professor Toma. "To create an exciting future for the whole nation, the project will involve associated cutting-edge technologies that SDM Professors are working on, such as haptic communication by Professor Maeno, super-high definition and high-realistic display by Professor Ogi, and visible light communication by Professor Haruyama. The participating companies are excited about the project, and the environment for producing substantial result is nearly ready. We are confident we will meet their high expectations."

#### Mr. Tateishi, a member of Toma Lab who is in the second year of the Master's program, starts a business



Mr. Mikito Tateishi has been working on information literacy for wireless network visualization since his time as an undergraduate in Professor Jun Murai's Lab in the Faculty of Environment and Information Studies, Keio

University. Since his enrollment at SDM, he has been working in Toma Lab on a rear project screen that applies zero-birefringence polymer. He has founded Amazist, a company that will produce a product based on his research.



#### Message from Mr. Tateishi

Recently the global market, especially China, is dramatically expanding. Each country must appeal its strengths to the world market. Japan has advanced and innovative technology to offer. However, we don't readily see the target markets and don't find ways to promote our

technology. In Amazist, I would like to support technology branding by using system thinking to create the concepts, plan the events, and make the visuals at every step, from website creation to media art production.

- ▶ <http://www.amazist.co.jp>
- ▶ <http://www.sdm.keio.ac.jp/en/voices/tateishi.html>



SDM Research Institute, Graduate School of System Design and Management at Keio University  
Collaboration Complex, Keio University, 4-1-1 Hiyoshi, Kohoku-Ku, Yokohama, Kanagawa 223-8526  
Tel : 045-564-2518 Fax : 045-562-3502 E-mail : [sdm@info.keio.ac.jp](mailto:sdm@info.keio.ac.jp)

\* Please put "SDM Research Institute" in the subject when communicating by fax or e-mail.

**SDM**  
System Design and Management