



Mitsui Chemicals, Kyoto University to Establish Joint Laboratory for Digital Chemistry

Kyoto University (Kyoto; President: MINATO Nagahiro) and Mitsui Chemicals, Inc. (Tokyo: 4183; President & CEO: HASHIMOTO Osamu) have agreed to build an autonomous testing system for automated synthesis. The new system will bring together the pair's technologies for data science, flow synthesis and more, and will be used to help establish a joint industry-academia research program aimed at developing high-performance materials.

Based on this agreement, both parties intend to begin activities at the Mitsui Chemicals & Kyoto University Digital Chemistry Lab as part of Kyoto University's Graduate School of Engineering in April 2023. The agreement represents the latest step in both Kyoto University and Mitsui Chemicals' plans to pursue the creation of cutting-edge, practically viable technology as a means of helping solve social issues.

Overview of the Mitsui Chemicals & Kyoto University Digital Chemistry Lab

Official name	Mitsui Chemicals & Kyoto University Digital Chemistry Lab
Focus of the collaboration	Establishing and jointly operating the Mitsui Chemicals & Kyoto University Digital Chemistry Lab
Objective	Building an autonomous testing system for automated synthesis, and using this system to develop high-performance materials
Period	April 1, 2023 – March 31, 2028
Location	Graduate School of Engineering, Kyoto University
Joint laboratory heads	SOTOWA Ken-Ichiro, Professor, Graduate School of Engineering, Kyoto University NAITOU Kiyoshi, Director, Process Technology Laboratory, R&D Center, Mitsui Chemicals

◆ Strengths of the Mitsui Chemicals & Kyoto University Digital Chemistry Lab

1. The various technologies built up by Kyoto University's Graduate School of Engineering, Graduate School of Pharmaceutical Sciences and Graduate School of Medicine, including those for autonomous testing, organic reaction chemistry, flow synthesis and data science
2. Mitsui Chemicals' technologies for organic synthesis and the commercialization of high-performance chemicals, as well as the testing facilities, computing systems and other such resources that contribute to these technologies
3. The synergies to be created by combining the technological, human and material resources of both parties

◆ About Kyoto University

Since its establishment in 1897, Kyoto University has worked to sustain and develop its historical commitment to academic freedom, and has endeavored to solve a wide range of social issues. These efforts have in turn allowed the university to help facilitate a harmonious coexistence within global society. Now, in addition to proactively pursuing both innovation and contributions to society, Kyoto University is working to strengthen its alliances with overseas research universities, as well as its co-creation efforts with Japanese and overseas companies alike.

◆ About Mitsui Chemicals

In formulating its VISION 2030 Long-Term Business Plan in 2021, Mitsui Chemicals made digital transformation a key business priority and set out on company-wide efforts toward this end. The company believes that by leveraging digital transformation to strengthen its development capabilities for products and businesses, it will be able to achieve a corporate transformation, and in turn contribute to the solution of various social issues. Mitsui Chemicals is also pursuing initiatives that focus on using the company's supply of products to help bring about a circular society in harmony with the environment.