

Hokkaido Summer Institute

# Catalysis Principle and Catalyst Design



Date : 17 – 30 Jul, 2020

\*The course will be offered online.

Today, approximately 200 million tonnes of fossil fuel resources are converted annually into 40000 ~ 100000 useful chemicals and materials to meet the daily needs of people around the world. The declining dependence on petroleum resources, in terms of a resource and environmental perspective, has created a strong demand for the development of new technologies that enable the production of sustainable, environmentally friendly fuels and industrially important chemicals from renewable sources. One way to solve this problem is to use a catalyst. This class will outline the basic principles of catalysis, basic theories, important factors affecting catalytic activity, and recent advances in heterogeneous catalysts.

## Lectures



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