

**The 2<sup>nd</sup> GCOE International Symposium**  
**Hokkaido University Global COE Program**  
**“Catalysis as the Basis for the Innovation in Materials Science”**

**Conference Hall (N8W5, Sapporo, Japan) [Lectures]**  
**Centennial Hall (N9W6, Sapporo, Japan) [Poster presentations]**  
**Hokkaido University**

**December 18<sup>th</sup> (Thu) 9:00-20:00, 2008**  
**19<sup>th</sup> (Fri) 9:00-12:00**

[SCOPE]

The transformation and syntheses of materials using catalysts are key technologies that encompass the main fields in innovations of materials science. Continual research on catalysis has been vigorously conducted at eight schools and institutes in Hokkaido University, including the graduate school of engineering and the graduate school of science. These activities have achieved many pioneering results in the field of fundamental theory, surface analysis and design, and the development of practical catalysts and catalytic reactions. These successful achievements led to the selection in the “Global COE (Center of Excellence) program” of the Ministry of Education, Culture, Sports, Science and Technology, Japan in 2007, which continues till 2011. The title of the selected program is “Catalysis as the Basis for the Innovation in Materials Science”.

In this program, twenty-two staff members in five schools are organized into the following four fields, aiming for effective advancement of fundamental research.

- a) Catalysis Theory and Analysis
- b) Catalyst Design
- c) Material Transformation
- d) Syntheses of Materials

*The 2<sup>nd</sup> GCOE International Symposium: Catalyst Development Based on Structured Reaction Field*

As one of the activities of this program, an international symposium is held annually for establishing new concepts in catalyst design. This year’s symposium will take place in Hokkaido University on December 18 and 19. The main topic of this year’s symposium is “Catalyst Development Based on Structured Reaction Field”, an indispensable concept for the designing of molecular catalysts, surface of solid catalysts, pore structure of solid catalysts, mass and heat transfer in and out of catalysts, and catalytic reaction system.

This symposium is constituted by two types of presentations; one is lectures by celebrated pioneers in the field of catalysis and the other is poster presentations by post doctoral fellows and doctor course students. We hope that, and are quite confident that active discussions among the attendants in this symposium are sure to lead to the establishment of new concepts in catalyst science.