

## Invitation

The Sixteenth International Symposium on Relations between Homogeneous and Heterogeneous Catalysis (ISHHC-16) will be held in Conference Hall, Hokkaido University, Sapporo, Japan from August 4 (Sun) to 9 (Fri), 2013, according to the decision at ISHHC XV in Berlin. The ISHHC has been held in Brussels, Belgium (1974), Lyon, France (1977), Gröningen, The Netherlands (1981), Asilomar, USA (1983), Novosibirsk, Russia (1986), Pisa, Italy (1989), Tokyo, Japan (1992), Balatonfüred, Hungary (1995), Southampton, UK (1999), Lyon, France (2001), Evanston, USA (2003), Florence, Italy (2005), Berkeley, USA (2007), Stockholm, Sweden (2009), and Berlin, Germany (2011) every two or three years.

Aims of ISHHC are to link three fields of catalysis: heterogeneous, homogeneous and enzyme, and to understand the catalysis on the molecular level. Recent advances in instrumentation, synthesis and reaction studies will permit the molecular–nanoscopic scale characterization of the catalyst systems for similar reactions and the development of molecular-level integration and correlations of these three different fields of catalysis. To further this goal we aim to uncover new aspects and common concepts that emerge from the molecular–nanoscopic scale studies of active structures and dynamics of the three types of catalysts, achieving catalyst design and synthesis and addressing key issues of catalytic activity and selectivity.

We heartily invite all of you who are interested in the link of the three fields in catalysis and who intend to understand the catalysis on the molecular level, to the ISHHC-16 in 2013, Japan.

Yasuhiro Iwasawa (Honorary Chair)  
Director of Innovation Research Center for Fuel Cell  
The University of Electro-Communications

Atsushi Fukuoka (Conference Chair)  
Director of Catalysis Research Center  
Hokkaido University



## Key Dates

- |   |                |
|---|----------------|
| Registration and call for papers (on the web) | Oct. 1, 2012   |
| Deadline of submission of abstract            | Jan. 15, 2013  |
| Notice of acceptance (oral or poster)         | March 15, 2013 |
| Third Circular (program & events)             | Apr. 30, 2013  |
| Deadline of online early registration         | May 31, 2013   |
| Conference                                    | Aug. 4-9, 2013 |

## Location & Access



## Correspondence

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# The Sixteenth International Symposium on Relations between Homogeneous and Heterogeneous Catalysis (ISHHC-16)



## Second Circular / Call for Papers

Aug. 4 (Sun) - 9 (Fri), 2013

Hokkaido University, Sapporo, Japan



Organized by ISHHC-16 Organizing Committee  
Cooperated with Catalysis Research Center, Hokkaido University  
Sponsored by Science Council of Japan, Japan Society for the Promotion of Science, Hokkaido, Sapporo city,  
Catalysis Society of Japan

URL: <http://shokubai.org/ishhc16/>

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## Scope of the Conference

This conference follows the concept of the past ISHHC to link three fields of catalysis and to understand the catalysis on the molecular level. Papers on the three catalysis fields especially following topics are welcome.

### The Topics

1. New Concept and Mechanism
2. New Methods and Characterization
3. Advanced Materials for Catalysis
4. Catalysis for Green and Sustainable Chemistry
5. Catalysis for Fine Chemicals
6. Bio-inspired Catalysts
7. Energy and Environmental Catalysts
8. New Industrial Catalysts and Processes

## Extended Abstracts

Those who wish to present paper in the sessions are requested to submit an extended abstract of 2 pages (1.5 line spacing on A4 or 8"×11" size paper) including references, figures and tables. Title, author(s) and affiliation(s) with the contact persons' email address or fax number should be placed at the head, followed by a short summary, keywords and main text. The short summary should include the short introduction and conclusion. The extended abstract should be prepared by Microsoft Word (.doc) or Adobe PDF format. The author should submit the files through the web site following the instructions which require all paper information including desired mode of presentation (oral or poster) and desired session and keywords.

## Scientific Program

The scientific program will consist of plenary talks (single session), keynote lectures and oral presentations (two parallel sessions) with poster presentations. The keynote lecturers will soon be announced on the website. Special sessions for the discussion about the future alliance of these three fields and about "molecular activation" are also planned.

### Plenary lectures

- Gabor A. Somorjai (UC Berkeley)  
"Bridging heterogeneous and homogeneous catalysis using supported 10-50 atom size metal nanoparticles"
- Hans-J. Freund (FHI)  
"Model studies on heterogeneous catalysis at the atomic scale."
- Christophe Coperet (ETH)  
"Controlled functionalization of surfaces to access to well defined supported nanoparticles and single-site catalysts."
- Keiji Morokuma (Kyoto Univ.)  
"Theory can provide insights unavailable from experiments in catalysis."
- Krzysztof Matyjaszewski (Carnegie Mellon Univ.)  
"Catalysis in Radical Polymerization."
- Pierre Dixneuf (Univ. of Rennes)  
"Ruthenium catalysts: the unique promoters of C-H bond transformations even in water."
- David Milstein (Weizmann Institute of Science)  
"Discovery of Sustainable Catalytic Reactions Based on Pincer Complexes"

## Publication

The special issue will be published from Topics in Catalysis (Springer Verlag). We are going to include plenary talks, keynote lectures and other excellent papers. The publishing committee will select the papers.

## Registration

Registration, accommodation, and paper submission page will be open on the 1st October 2012 on the web site,

<http://shokubai.org/ishhc16/>

