

## The 1<sup>st</sup> Asia-Oceania Ceramic Federation (AOCF) Conference

Convened in Conjunction with The 18th Fall Meeting of The Ceramic Society of Japan

September 27-29, 2005

Osaka Prefecture University, Osaka, Japan

**Organized by**

*The Ceramic Society of Japan under the auspices of The Asia-Oceania Ceramic Federation*

**Endorsed by**

*The Australasian Ceramic Society,  
The Chinese Ceramic Society, The Korean Ceramic Society*

### Background

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The Asia-Oceania Ceramic Federation (AOCF) was established in September 2003 at a kickoff meeting held at PacRim 5 in Nagoya, Japan. Prof. Shin-ichi Hirano, the former president of the Ceramic Society of Japan, was elected the first AOCF president. The aim of the AOCF is to bring together scientists, engineers and students, to contribute to the development of ceramic science and technology in Asian and Oceanian countries. According to the AOCF Statutes, the AOCF Conference shall be held once every two years. The conference may be held by incorporation with a ceramic meeting in host member society. The 1st AOCF conference will be held in conjunction with the Fall Meeting in the Ceramic Society of Japan in Osaka from September 27-29, as a special session entitled "Chemical Design for Functional Innovation."

#### ***"Chemical Design for Functional Innovation"***

The methods employed in the development of ceramics include the discovery of new compounds and structural design aimed at development of highly functional materials. Since the materials are composed of atoms and molecules, the process of building them up from the nanometer level is the key technology. From this perspective, chemical processes can play an important role based on elemental reactions and colloidal processes. There are now various chemical processes available including sol-gel, polymer precursor, molecule and nanoparticle assembly. These fine techniques have created various unique structures such as hybrid, nanocomposite, mesoporous materials and micropatterning. "Chemical Design" is a total concept for nanostructural control of ceramics supporting innovative development of new ceramic functions. We are holding this special session with the aim of presenting research activities and practical technologies in the chemical processing.

### Session Organizers

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## Language

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The working language for this session is **English**

## Schedule

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### Sep. 27 (Tuesday):

Registration  
Opening Ceremony  
Oral Session  
Poster Session

### Sep. 28 (Wednesday):

Registration  
Oral Session  
Poster Session  
Welcome Party

### Sep. 29(Thursday):

Registration  
Oral Session

## Topics

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- (1) Novel processes for nanostructural design: vapor/liquid phase, sol-gel and precursor processes, etc., for nanoparticles, fibers, films and others.
- (2) Assembly system for dimensional control: one-, two- or three-dimensional ordered structures achieved through assembly of molecules or nanoparticles.
- (3) Network structures controlled on a nanoscale: polymer precursors, colloidal processes, etc., for hybrids, nanocomposites and others.
- (4) Pore control for well-organized space structures: nano/meso porous materials, intercalation compounds, etc., for functional nanospace application.

## Invited Speakers (tentative)

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John Bartlett (Australian Nuclear Science and Technology Organization, Australia)

Yi-Bing Cheng (Monash University, Australia)

Lian Gao (Shanghai Institute of Ceramics, China)

Chang-Chun Ge (University of Science and Technology Beijing, China)

Shingo Katayama (Fine Ceramics Research Association, Japan)

Kunihito Koumoto (Nagoya University, Japan)

Kazuyuki Kuroda (Waseda University, Japan)

Hong Lin (Tsinghua University, China)

Max Lu (The University of Queensland, Australia)

Mikio Miyake (Japan Advanced Institute of Science and Technology)

Kwang Bo Shim (Hanyang University, Korea)

John Wang (National University of Singapore, Singapore)

## Call for Papers

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Oral and poster presenters are invited to apply. Poster presentations will be evaluated, and excellent presentations will be honored. Details will be disclosed later.

### Deadlines

- Submission of title, authors, section codes, and an abstract : May 10 - May. 25, 2005
- Submission of manuscript for extended abstract
  - Electronic submission of a pdf file via web-site : July 12 - August 3, 2005
  - Camera-ready printed manuscript (duplicate) via postal mail : July 28, 2005

For further information, please see

**<http://www.ceramic.or.jp/csj/AOCF/index.html>**