

January 31, 2006

1st Asia-Pacific Symposium on Nanoscience and Frontier Materials

We are pleased to announce the 1st Asia-Pacific Symposium on Nanoscience and Frontier Materials, sponsored by the RIKEN Frontier Research System, for the promotion of a new system of international research collaboration between Japan and other Asian nations.

The RIKEN Frontier Research System (FRS) celebrates its 20th anniversary this year. FRS' aim has been, since its inception, the encouragement of internationalization in scientific and technological research in Japan, though this has traditionally been accomplished with an eye to European and American practices. This establishment of a new system of internationalization recognizes the importance of Asia creating its own stance for continued international development.

The purpose of this symposium is not merely to discuss the current state of science in Asia, but to address other issues such as declining birthrates, decreasing numbers of students entering scientific fields, falling labor populations, and the flow of the cream of Asian student talent and post doctoral researchers to institutions in the United States and Europe. In order to examine how to better exploit the scientific potential not only of Japan but of Asia in general, we will discuss the creation of a new Asian research network that will implement an FRS-style system for promoting the future of science in Asia and the establishment of a new model for Asian internationalization of science that does not depend on imported practices.

Lectures are scheduled from scholars from Japan and South Korea as well as China, Taiwan, Singapore, Indonesia and Australia, and there will be at least 20 attendees from South Korea. Feb. 3 will be an open session at Tokyo's Hotel Metropolitan in Ikebukuro from 9:00 am to 5:00 pm; we hope to receive participation from as many interested scientists as possible.

Outline:

The fusion of differing fields through research linkage between Japan and South Korea, China and the other countries of Asia to create new fields of investigation is extremely important in any consideration of the future development of nanotechnology and nanobiotechnology. In order to accomplish this there is a plan afoot to create a joint program based at the RIKEN Frontier Research System and Hanyang University that will link both domestic and overseas nanoscience-related programs, and much attention is being paid to this cooperative effort. Seoul National University, Pohang University of Science and Technology, KRICT, ETRI and Institute of Pasteur Korea at KIST will be participating in this plan and have signed letters of intent with the RIKEN Wako Institute and a feasibility study is now underway to examine how this cooperative project might best be developed. As a part of this effort, RIKEN and Hanyang University are jointly sponsoring a symposium that represents the initiation of student and researcher exchange.

This symposium, however, will involve not just South Korea and Japan, but other countries of Asia including China, Taiwan, Singapore, Indonesia and Australia. By involving key scientists from the various countries of Asia in this cooperative research effort with RIKEN, it is hoped to create a meaningful exchange of ideas with regard to the future of nanotechnology, the feasibility of joint research efforts and the cultivation of new research talent.

Time:Friday, Feb. 3, 2006 9:00-17:00

Location:

3F, Hikari Room, Crown Plaza Hotel METROPOLITAN, Tokyo
6-1, Nishi-Ikebukuro 1-Chome, Toshima-ku, Tokyo 171 Japan
<http://www.ichotelsgroup.com/h/d/cp/1/en/hd/tyomp>

Language:

English

Admission fee:

None

Applications for attendance:

Applications may be forwarded in advance to the contact address given below, but also will be accepted at the reception desk on the day of the symposium. Seating in the conference hall is limited to 100, so entrance may be refused at that point, depending on circumstances.

Lecturers:

- Masahiko Hara (RIKEN, Japan)
- Haiwon Lee (HYU, Korea)
- Maki Kawai (RIKEN, Japan)
- Jianguo Hou (USTC, China)
- Young Kuk (SNU, Korea)
- Masakazu Aono (NIMS, Japan)
- Roger Horn (University of South Australia, Australia)
- Young Jun Park (SNU, Korea)
- Ing-Shouh Hwang (Academia Sinica, Taiwan)
- Natarajan Chandrasekhar (National University of Singapore, Singapore)
- May On Tjia (Institut Teknologi Bandung, Indonesia)

Sponsor:

The RIKEN Frontier Research System

Organizers:

- Masahiko Hara, Local Spatio-Temporal Functions Lab.
- Maki Kawai, Surface Chemistry Lab.
- Frontier Research Promotion Section, DRI/FRS Promotion Division, RIKEN
(www.riken.jp)

For more information, contact:

Masahiko HARA, RIKEN Frontier Research System

Tel: 048-467-9600; Fax: 048-462-4630

**1st Asia-Pacific Symposium on
Nanoscience and Frontier Materials**

Friday, Feb 3, 2006 (3F, Hikari Room)

9:00 Opening Remarks by Prof. Kaya (Director, Wako Institute, RIKEN, Japan)

Nanoscience and Frontier Materials

9:15 Masahiko Hara (RIKEN, Japan)

"Nanomaterials Research in Frontier Research System and Feasibility Study of

Asia-Pacific Research Network"

9:45 Haiwon Lee (HYU, Korea)

"Research Activities of Nanoscience and Nanotechnology at Participating Korean Institutes"

10:15 Coffee Break

Nanoscience and Surface-Interface Science

10:30 Maki Kawai (RIKEN, Japan)

"Single Molecule Chemistry"

11:00 Jianguo Hou (USTC, China)

"Electronic Structures and Transport Properties of Single Molecules and Nanoparticles"

11:30 Young Kuk (SNU, Korea)

"What Could Be the Ultimate Functionality of Scanning Tunneling Microscopy ?"

12:00 Masakazu Aono (NIMS, Japan)

"Ballistic, Diffusive, and Polaronic Electrical Conduction in Nanowires - Observation by Multiprobe Scanning Tunneling Microscopy -"

12:30 Lunch

Nanoscience and Project Activities

14:00 Roger Horn (University of South Australia, Australia)

"Interactions at the Nanometer Scale - and Across Oceans"

14:30 Young June Park (SNU, Korea)

"CNTs-Oxide-Silicon System for Biochemical Sensor/Actuator SoC"

15:00 Coffee Break

15:15 Ing-Shouh Hwang (Academia Sinica, Taiwan)

"Effects of Size, Shape, and Point Defects on Stability of Nanostructures"

15:45 Natarajan Chandrasekhar (National University of Singapore, Singapore)

"BEEM and Nanoscience Programs in Singapore"

16:15 May On Tjia (Institut Teknologi Bandung, Indonesia)

"Researches in Magnetic Oxides and Photonic Science in ITB and Their Prospective Extension to Nanoscience Researches"

16:45 Closing Remarks by Prof. Doi (Executive Director, RIKEN, Japan)

For more information, please contact:

RIKEN Public Relations Office

Email: koho@riken.jp