

# NIMS Conference 2010

**“Challenges of Nanomaterials Science:  
towards the Solution of Environment and Energy Problems”**

**July 12-14, 2010**

**Tsukuba International Congress Center (Epochal Tsukuba)**

<http://www.nims.go.jp/nimsconf/2010>

## Aim and scope:

Today's environmental problems stem from a relatively new situation: human energy consumption, amounted to be 16 tera Watts, has reached a non-negligible level relative to the earth's total capacity. To maintain prosperity we need to develop technologies to provide various forms of energy (electrical, thermal, etc.) without degrading the natural environment. In 2009 NIMS established the “Innovative Center of Nanomaterials Science for Environment and Energy (ICNSEE)” to carry out a national project to develop environmental technologies utilizing nanotechnology, sponsored by MEXT. Here, we work on engineering problems to directly applicable to real-world problems. At the same time we explore theoretical and computational approaches to material sciences problems that are relevant in energy providing process starting from solar energy conversion.

NIMS will hold a series of symposia during July 12th-14th titled “NIMS Conference 2010”. The main topic is “Challenges of Nanomaterials Science: towards the solution of Environment and Energy Problems” and ICNSEE will serve as the host center. We expect a broad discussion on what material science and nanotechnology should be to solve the environment and energy problems.

During the NIMS Conference, various activities are planned such as the NIMS Award ceremony, lectures and prospective reviews by Japanese and international leading researchers with the viewpoint of materials science contributing to new environment and energy technologies. Eight organized sessions are also planned. We look forward to welcoming you in Tsukuba at a very fruitful and rewarding NIMS Conference 2010.

## NIMS Award 2010

NIMS will present the NIMS Awards to a person who has made a remarkable breakthrough in materials science and technology or related fields in recent years.

## Registration

The registration fee for the NIMS Conference is free. For general participants and students, the online registration (<http://www.nims.go.jp/nimsconf/2010>) is highly recommended. The registered participants can receive admission to all scientific sessions, an abstract book and a ticket for the conference banquet (July 12).

## Program at a glance

### [July 12, Monday]

#### NIMS Award Ceremony & Lecture

**Prof. Jean-Mary Tarascon**

(University of Picardie Jules Verne, France)

#### Keynote Lecture

**Prof. Akira Fujishima**

(President, Tokyo Univ. of Science, Japan)

#### Prospective Review Lecture

**Prof. Sukekatsu Ushioda** (President, NIMS)

**Prof. Prashant Kamat** (Univ. of Notre Dame, USA)

**Dr. Takahisa Ohno** (Managing Director, ICNSEE, NIMS)

**Dr. Hideki Iba** (Toyota Motor Corp., Japan)

**Dr. Sebastian Fiechter** (Helmholtz-Zentrum Berlin, Germany)

### [July 13, Tuesday – 14, Wednesday]

#### Organized Symposia

OS-1 Theoretical and Computational Studies for the Materials Development

OS-2 Rechargeable Batteries

OS-3 Photovoltaics

OS-4 Design of High Quality Fuel Cell Materials and Devices

OS-5 Nano Photocatalysis: Possibilities and Challenges:

OS-6 Nano Interface Characterization for E&E Materials

OS-7 Practical Social Needs for Thermoelectric Power Devices

OS-8 Environmental Catalysts and Materials

## Venue

**Tsukuba International Congress Center (EPOCHAL TSUKUBA)**

2-20-3 Takezono, Tsukuba, Ibaraki 305-0032, Japan

tel: +81-29-861-0001 fax: +81-29-861-1209

(<http://www.epochal.or.jp/eng/index.html>)

## Correspondence

**Secretariat of NIMS Conference**

**International Affairs Office, NIMS**

1-2-1 Sengen, Tsukuba, Ibaraki 305-0047, Japan

tel: +81-29-860-4334 fax: +81-29-859-2049

e-mail : [nims\\_conference@nims.go.jp](mailto:nims_conference@nims.go.jp)