

NIMS

EPOCHAL TSUKUBA, JULY 14-18, 2008

WEEK

Materials Science for Highly Efficient Use
of Energy and Resources

NIMS AWARD 2008

Prof. A. G. Evans, D. R. Clarke and C. G. Levi (UC Santa Barbara)

NIMS Conference 2008

July 14, Monday 10:00 - 18:00

NIMS Award Lecture	Prof. Anthony G. Evans
Keynote Lecture	Dr. Osamu Mishima
Prospective Review Lectures	Prof. Dr. Teruo Kishi Dr. Hiroshi Harada Dr. Hiroaki Kumakura Dr. Jinhua Ye Dr. Toshiji Mukai

July 15, Tuesday - July 16, Wednesday
Organized Symposia

Materials for Extreme Environment	
Challenges of Structural Materials against Aggressive Environments	July 15
New Stage of Hydrogen Embrittlement Research	July 16
Electrical Energy Materials	
Next Stage for Creating Thermoelectric Function	July 15
Power Switching Devices from Diamond	July 16
Contribution of the Superconducting Materials to Global Issues on Environment/Energy	July 16
Solar Energy Materials	
Nano Carbon Materials for Solar Power	July 15
Materials Research for Photovoltaic Power Generation	July 16
Light Weight Structural Materials	
Future Research Direction of High Performance Ti Alloys	July 15
Novel High-Strength Magnesium Alloys and Deformation Mechanism	July 16

Satellite Symposia

NIMS Sengen Site*

July 7-9 International Workshop on Superconductivity in
Diamond and Related Materials

EPOCHAL TSUKUBA

July 17 The 2nd External Contamination Management
Technology Workshop

July 17 The 1st International Symposium for Nondestructive
Reliability Evaluation

July 17-18 Workshop on Superconducting Materials for Energy
Conservation

July 17-18 MITS 2008 International Symposium on Materials
Database

July 18 Fuel Cell Materials Meet Hydrogen

July 18 North Carolina State University - NIMS Joint Workshop

Exhibition

July 14, Monday - July 16, Wednesday

State of the Art and its Prospect of the Department of Materials
Infrastructure of NIMS and Cooperative Companies

Important Deadline: Online Registration Deadline: June 30th
Registration Fee: Free
Conference Site: Tsukuba International Congress Center
(EPOCHAL TSUKUBA)
National Institute for Materials Science, Sengen Site*



National Institute for Materials Science (NIMS)

E-mail: nims_conference@nims.go.jp <http://www.nims.go.jp/nimsconf08/>

Venue

Tsukuba International Congress Center (EPOCHAL TSUKUBA), Tsukuba, Japan

The satellite symposium on July 7-9th will be held at the NIMS Sengen site.

Aim and Scope

In global scale, environmental and energy issue is the most critical to establish sustainable society. In the G8 Hokkaido Toyako Summit in Japan (July 7-9th, 2008), "environment and climate change" is one of the central topics. As the national institute of materials research, NIMS takes this opportunity to designate a week of July 14-18th to be the **NIMS Week 2008** under the main theme of **"Materials Science for Highly Efficient Use of Energy and Resources"**. NIMS has been strongly pursuing the research on advanced materials for the environment and energy. The main concern is to create materials with economic and social value responding to the social issues of constructing a safe and secure social infrastructure with reduced environmental and energy loads. In order to elucidate what materials science can do to solve environmental and energy issues, various activities are planned during the NIMS Week.

NIMS Award 2008

Since 2007, NIMS has been presenting the **NIMS Award** to a person or a group who has made a remarkable breakthrough in materials science and technology or related fields in recent years. **Professors Anthony G. Evans, David R. Clarke and Carlos G. Levi in University of California, Santa Barbara are the awardees of the NIMS Award 2008 for their outstanding achievement of "Enhancement of the Fuel Efficiency of Advanced Aero and Power Turbines through Material Innovation"**.

Outline of the NIMS Conference

Following the NIMS Award presentation, the keynote and prospective review lectures by distinguished researchers in NIMS will highlight the current state of materials researches related to the main theme.

Keynote Lecture

"Prospects of Research Relating to Polyamorphism"
Dr. O. Mishima
(NIMS Fellow, 2006 Nishina Award Recipient)

Prospective Review Lectures

"Energy Resource and NIMS"
Prof. T. Kishi (NIMS President)

"High Temperature Materials for Ultra-Efficient Power Plants and Advanced Aeroengines"
Dr. H. Harada

"Superconducting Materials for Efficient Use of Electrical Energy"
Dr. H. Kumakura

"Materials for Efficient Use of Solar Energy"
Dr. J. Ye

"Light Weight Structural Materials for Energy Conservation"
Dr. T. Mukai

Symposia

During July 15-16th, 9 topical symposia will be held under the subthemes of "Materials for Extreme Environment", "Electrical Energy Materials", "Solar

Energy Materials" and "Light Weight Structural Materials". All of the symposia are organized by young scholars in NIMS to have focused and intense discussion on relevant materials research with several invited speakers from all over the world. In addition, 7 satellite symposia will be held before and during the NIMS week. **See the web for the schedule and detailed program.**

Exhibition

Exhibition will be also held during July 14-16th to show the state of the art and its prospect of the Department of Materials Infrastructure supporting advance materials research in NIMS and cooperative companies.

Registration

The registration fee for the NIMS WEEK is free. For general participants and students, the online registration (<http://www.nims.go.jp/nimsconf08/>) by **June 30th, 2008** is highly recommended. The registered participants can receive admission to all scientific sessions, a conference program, an abstract book and a ticket for the conference banquet (July 14th).

Language

Official language of NIMS WEEK 2008 is English.

Organization

Organizing Committee Chair : Prof. T. Kishi (NIMS)
Programming Committee Chair : Dr. K. Nagai (NIMS)
NIMS Award Committee Chair : Dr. T. Doi (RIKEN)

Correspondence

Secretariat of NIMS Conference
Ms. Hiroko Inoue, International Affairs Office, NIMS
Sengen 1-2-1, Tsukuba, Ibaraki 305-0047, Japan
Tel: +81-29-859-2032 Fax: +81-29-859-2049
E-mail:nims_conference@nims.go.jp

