

2013 NIMS CONFERENCE



Structure Control of Atomic / Molecule
Thin Film and Their Application

7/1_[Mon] - 3_[Wed], 2013

Tsukuba International Congress Center **EPOCHAL TSUKUBA**

Registration fee: **Free**

Online Registration Deadline: **June 23, 2013**

(<http://www.nims.go.jp/nimsconf/2013>)

July 1

NIMS Award Ceremony & Lecture

To be announced

Plenary Lectures

Prof. Roy Gordon (Harvard University, USA)

Dr. Kazuhito Tsukagoshi (NIMS, JAPAN)

Prof. Omar M. Yaghi (UC Berkeley, USA)

Prof. Tetsuo Tsutsui (CERBA, JAPAN)

Prof. Hans-Joachim Freund

(Fritz-Haber-Institut der Max-Planck-Gesellschaft, GERMANY)

July 2, 3

Organized Sessions

OS-1: Organic Layer Electronics

- Organic Material and Interface -

OS-2: Ultra-Thin Film Technology

OS-3: Nano-scale Characterization

OS-4: Atomic Layer Deposition Technology and Its Application

OS-5: Advanced Fusion Materials :

New Functionality by Cooperative Organic/Inorganic Compositions

Poster Session

Call for Papers for Poster Session
Submission Deadline: **May 17, 2013**

National Institute for Materials Science (NIMS)

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<http://www.nims.go.jp/nimsconf/2013>

2013 NIMS CONFERENCE

Structure Control of Atomic / Molecule Thin Film and Their Application

July 1-3, 2013

Tsukuba International Congress Center (Epochal Tsukuba)

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Aim and scope:

Electronics, including large scale integrated circuit (LSI) is the base for ubiquitous network society. Recently we recognized rapid development in cloud computing by smartphones and mobile gears. Here we receive a full benefit of the service provided by internet. As well recognized, our society is full of electronics devices and many modern cars are controlled by electronics system. Electronics, what we call, is the fundamentals for the industrial society.

The modern electronic device has been improved to show high speed operation and low power operation by fine patterning and high density packing on the " Moore's Law". However this trend is almost to be close to the limit. To overcome the limit, new materials and new device structure are required.

One of the candidate materials is organic molecules. Especially the organic molecular film shows two dimensional growth of layer by layer and is expected to be a candidate for 2D devices. Recently by fusion with inorganic materials, they are found to show new functionality. To realize such 2D structures, the atomic layer deposition and thin film growth from 2D nano sheet is proposed. Also nano scale characterization using X-ray or neutron scattering show significant development. These materials development, structure control and improvement of characterization tool are the critical factors in making innovation in nano electronics.

In order to discuss these three key issues, NIMS is going to organize the "NIMS Conference 2013" entitled, "Structure Control of Atomic / Molecular Thin Film and Their Application" from July 1st to 3rd in 2013 in Tsukuba Science City. In this conference, we will discuss new materials, new technology, related synthesis method and sophisticated characterization tools.

During the NIMS Conference 2013, we will celebrate the "NIMS Award 2013" to a researcher who contributed to these research field on nano electronics and an award-winning lecture will be given by the winner. We also invite plenary talks on these fields by researchers from domestic as well as overseas. 5 organized sessions are scheduled for two days. We believe this NIMS conference will provide you new insight and idea in researching. We welcome you and hope to enjoy this NIMS conference 2013.

Program at a glance

[July 1, Monday]

NIMS Award Ceremony & Lecture

To be announced

Plenary Lectures

Prof. Roy Gordon (Harvard University, USA)

Dr. Kazuhito Tsukagoshi (NIMS, JAPAN)

Prof. Omar M. Yaghi (UC Berkeley, USA)

Prof. Tetsuo Tsutsui (CEREB, JAPAN)

Prof. Hans-Joachim Freund

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[July 2, Tuesday - 3, Wednesday]

Organized Sessions

OS-1: Organic Layer Electronics - Organic Material and Interface -

OS-2: Ultra-Thin Film Technology

OS-3: Nano-scale Characterization

OS-4: Atomic Layer Deposition Technology and Its Application

OS-5: Advanced Fusion Materials :

New Functionality by Cooperative Organic/Inorganic Compositions

Poster Session (July 2)

NIMS Award 2013

NIMS will present the NIMS Award to a person who has made distinguished achievements in research and development in the field of electronics materials in recent years and as well as valuable contribution to NIMS previously or in the near future.

Registration (Deadline: June 23, 2013)

The registration fee for the NIMS Conference is free. For all participants, the online registration (<http://www.nims.go.jp/nimsconf/2013>) is highly recommended. The registered participants can receive admission to all scientific sessions, an abstract book and a ticket for the conference banquet (July 1).

Venue

Tsukuba International Congress Center (EPOCHAL TSUKUBA)

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

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

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