# 1st Fraunhofer IZM & NIMS Workshop on "Nano-technology and Environmental Engineering "

November 25th, Friday – November 29<sup>th</sup> Tuesday Tsukuba, Japan



## 1st Fraunhofer IZM & NIMS Workshop on "Nano-technology and Environmental Engineering"

#### Program

#### November 25th, Friday:

9:45 - 16:35 Workshop

1st Floor, Seminar room1, Main Bldg., Sengen Site, NIMS <a href="http://www.nims.go.jp/eng/nims/office/tsukuba\_sengen.html">http://www.nims.go.jp/eng/nims/office/tsukuba\_sengen.html</a>

17:00 - 19:00 Fellowship banquet : Welfare Blidg at NIMS

#### November 26th, Saturday

10:00 - 15:30 Meeting and visiting Kiuchi Brewery <a href="http://www.kodawari.cc/">http://www.kodawari.cc/</a>

November 28<sup>th</sup>, Monday 10:00 - 16:00 Laboratory Tour





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Date: November 25th, Friday Time: 9:45 - 16:35 Workshop

17:00 - 19:00 Fellowship banquet

Venue: Workshop: 1st Floor, Seminar room1, Main Bldg., Sengen Site, NIMS

: Fellowship banquet : Welfare Blidg

#### Program

9:45-10:00 Greeting

Dr. Sukekatsu Ushioda, President of NIMS

10:00-10:30 Introduction of International Center for Materials Nanoarchitectonics
Dr. Yoshio Bandou, Chief Operating Officer ,MANA

10:30-11:00 Overview of Fraunhofer IZM and Environmental & Reliability Engineering
Dr.-Ing. Nils F. Nissen, Director, Head of Environmental and Reliability Engineering

11:00-11:30 Introduction of Hybrid Unit: Multiscale Hybrid Effects and Some Recent Topics
Prof. Yutaka Kagawa, Managing Director, Hybrid Materials Unit

11:30-13:00 Lunch

13:00-14:00 Nanotechnology Examples in IZM Technology Developments

Dr.-Ing. Nils F. Nissen, Director, Head of Environmental and Reliability Engineering

14:00-14:30 Introduction of Nano-Electronics Materials Unit

Dr. Toyohiro Chikyow, Managing Director , Nano-Electronic Materials Unit

14:30-14:50 Coffee break

14:50-15:10 Couple-resonator optical waveguide using self-assembly behavior of micro luminescent balls

Dr. Tadashi Mitsui, Surface Physics and Structure Unit

15:10-15:30 Low temperatures hybrid bonding in ambient air for homo/heterogeneous 3D integration

Dr. Akitsu Shigetou, Hybrid Materials Unit

15:30-15:50 Environmental Aspects and Resource Risks of Nanotechnologies Dipl.-Ing. Jana Rückschloss , Researcher

15:50-16:10 Study of interactions between cells and nanomaterials using sensor cells Dr. Akiyoshi Taniguchi ,Biomaterials Unit

16:10-16:30 Introduction of Learning from Nature Cluster

Dr. Naoe Hosoda, Hybrid Materials Unit

16:30-16:35 Closing

Dipl.-Ing. Hansjörg Griese, Senior Advisor

17:00- Banguet

## NIMS Laboratory Tour

Date/time November 28, 2011 (mon) 10:00~16:10

Place National Institute for Materials Science (Namiki and Sengen sites)

Guests Fraunhofer IZM (6 people)

Schedule

9:35~9:40 Move to the Daiwa Hotel in Tsukuba < Minibus >

9:45~9:55 Move to the Namiki Site < Minibus>

10:00~12:00 < MANA Building 4F Seminar Room>

Introduction of NIMS MANA, Doenni Andreas Team Leader (2857)

12:05~13:55 Lunch

14:00~14:30 < MANA Room 205/206>

Combinatorial materials screening for future electronics

Nano-Electronic Materials Unit Toyohiro Chikyo Unit Director (4725)

14:35~15:05 < MANA Room 311,302>

Development of sensor cells for Nanomaterials

MANA Biomaterials Unit Akiyoshi Taniguchi Group Leader (4505)

15:10~15:30 < Clean laboratory Room 101>

Biomimetics, Hybrid Materials Unit Naoe Hosoda Group Leader (4529)

15:35~15:40 Move to Sengen Area (Minibus)

15:45~16:00 < Sengen Labo. Room 434>

Facilities for cutting - edge organic synthesis

Polymer Materials Unit Yuka Kobayashi Principal Researcher (2154)

16:05~16:10 Move to the Daiwa Hotel in Tsukuba < Minibus>

(PR Office Seiichi Muneki (2163)

### Access from Narita airport to Tsukuba

#### By Highway Bus

The easiest way to get to Tsukuba is to take the Airport Liner NATT'S, a shuttle bus service. It departs from bus stop #8 at terminal 1 and bus stop #10 at terminal 2. Tickets are available at Keisei counter, which is located on the 1st floor of each terminal. It takes approximately 100 minutes to Tsukuba center (depends on traffic).

### Access Map from Tsukuba center to Hotel

Daiwa Roynet Hotel TSUKUBA

**BUS Stop** 

