



**Second NIMS-WUT-EMPA Workshop
Materials for Sustainable Development
November 12th – 13th, 2009**

Venue:

**National Institute for Materials Science, Namiki-site
(Collaborative Research Building, Large Meeting Room 403)**

PROGRAM

NIMS National Institute for Materials Science, Tsukuba, Japan

WUT Warsaw University of Technology, Poland

EMPA Swiss Federal Laboratories for Materials Testing and Research,
Switzerland

November 11th (Wednesday):

18:30

Welcome Reception at French Restaurant Angebrisa

November 12th (Thursday):

Opening

(Chair: Prof. Enrico TRAVERSA)

09:00 – 09:05

Welcome Address

Prof. Sukekatsu USHIODA

(NIMS President)

09:05 – 09:10

Welcome Address

Prof. Krzysztof J. KURZYDLOWSKI

(Head of Materials Design Division, WUT)

09:10 – 09:15

Welcome Address

Prof. Andreas ZÜTTEL

(Head of Hydrogen & Energy Section,
Department of Energy, Environment and Mobility, EMPA)

09:15 – 09:35

Introduction to NIMS and MANA

Prof. Masakazu AONO

(MANA Director General, NIMS)

09:35 – 09:45

EMRS Activities

Mr. John BLIZZARD

(Warsaw University of Technology)

09:45 – 10:20

Coffee Break

10:20

Group Photo

Session 2: Bio-Materials 1

(Chair: Andreas ZÜTTEL)

- 14:00 – 14:25 *Detection of biomolecular recognition using bio-transistors*
Prof. Yuji MIYAHARA
(Managing Director Biomaterials Center,
MANA Principal Investigator, Nano-Bio Field, NIMS)
- 14:25 – 14:40 *Boron nitride nanotubes as innovative biomaterials*
Mr. Gianni CIOFANI
(Ph. D. student, CRIM Lab, Pontedera, Pisa, Italy)
- 14:40 – 14:55 *Highly perfusive 3D scaffolds for thick tissue engineering*
Dr. Corrado MANDOLI
(MANA Research Associate, Nano-Green Field, NIMS)
- 14:55 – 15:20 *Nanojoining techniques and interface engineering*
Prof. Jolanta JANCZAK-RUSCH
(Laboratory for Joining and Interface Technology, EMPA)
- 15:20 – 15:50 Coffe Break

Session 3: Nano-Materials 2

(Chair: Krzysztof J. KURZYDLOWSKI)

- 15:50 – 16:15 *Microstructural non-homogeneity of fine grained metals
and its importance to their mechanical properties*
Dr. Malgorzata LEWANDOWSKA
(Faculty of Materials Science and Engineering, WUT)
- 16:15 – 16:30 Development of ordered nanoporous materials
for electrochemical applications
Dr. Pavuluri SRINIVASU
(ICYS-MANA Researcher, NIMS)
- 16:30 – 16:45 *Theoretical investigation of Au(111) stepped surfaces:
from structure to function*
Mr. Roberto GASPARI
(Ph. D. Student, Nanotech@surfaces Laboratory, EMPA)
- 16:45 – 17:10 *Supramolecular magic: hand-operating nanotechnology*
Prof. Katsuhiko ARIGA
(MANA Principal Investigator, Nano-Materials Field, NIMS)
- 17:10 – 17:35 *Surface and interface magnetism*
Dr. Miguel A. MARIONI
(Laboratory for Nanoscale Materials Science, EMPA)
- 18:30 **Banquet at Japanese Restaurant**

