

ACADEMIES MEET

12 OCTOBER 2007, 10:00 A.M. – 6:00 P.M

Max-Planck-Institut für Kolloid- und Grenzflächenforschung
(Max Planck Institute of Colloids and Interfaces) Wissenschaftspark Golm
Am Mühlenberg 1, Main Building (Great Lecture Hall), D – 14476 Golm

SCIENTIFIC ORGANISERS:

Professor Frieder W. Scheller, University of Potsdam
(Institute for Biochemistry and Biology)
Professor Hermann E. Gaub, Ludwig-Maximilians-Universität
(LMU) Munich (Department of Physics)
Professor Reinhard Lipowsky, Max Planck Institute
of Colloids and Interfaces, Golm
(all Members of the Berlin-Brandenburg Academy of Sciences
and Humanities)
Professor Itamar Willner, The Hebrew University of Jerusalem
(Member of the Israel Academy of Sciences and Humanities)

CONTACT AND INFORMATION:

Professor F. W. Scheller
Phone: 0331/ 977-5121
E-mail: fschell@rz.uni-potsdam.de

ADMISSION IS FREE.

**A GERMAN-ISRAELI SYMPOSIUM
ON NANOMEDICINE**





A German-Israeli Symposium on Nanomedicine

Internationally recognized experts will present recent achievements in molecular diagnostics based on nanotechnological tools. These principles will open the door to personal diagnosis and therapy but also to bio-electronic circuitry.

A transdisciplinary audience is invited to discuss the perspectives of this fascinating field.

Programme

10:15 a.m. **OPENING**

10:30 a.m. **NANOBIOTECHNOLOGY FOR SENSING AND ELECTRONIC CIRCUITRY**

Itamar Willner, The Hebrew University of Jerusalem /
Member of the Israel Academy of Sciences and Humanities

11:10 a.m. **TRANSCRIPTION AND TRANSLATION ON THE CHIP**

Frank F. Bier, Fraunhofer-Institut für Biomedizinische Technik
– Fraunhofer Institute for Biomedical Engineering
(IBMT) Potsdam-Golm

11:40 a.m. **CHEMICAL AND BIOLOGICAL SENSING USING TRANSMISSION LOCALIZED SURFACE PLASMON RESONANCE (T-LSPR) SPECTROSCOPY**

Israel Rubinstein, Weizmann Institute of Science, Rehovot

12:20 p.m. **LUNCH**

1:00 p.m. **DIELECTRIC-BASED SENSING, MANIPULATION AND TOMOGRAPHY**

Ziv Reich, Weizmann Institute of Science, Rehovot

1:40 p.m. **NANOBIOTECHNOLOGICAL DRUG SCREENING: IMAGING, SENSING AND LOCATING MOLECULAR COMPOUNDS THAT DRIVE CELLULAR MACHINES**

Daniel Müller, Technische Universität Dresden

2:20 p.m. **SELF-ASSEMBLY OF PEPTIDES AND PROTEINS: FROM AMYLOID FIBRILS TO NANOTECHNOLOGY**

Ehud Gazit, Tel Aviv University

3:00 p.m. **COFFEE BREAK**

3:20 p.m. **MULTIFUNCTIONAL MATERIALS WITH COLLOIDAL NANOPARTICLES AND THEIR APPLICATION IN LIFE SCIENCES**

Wolfgang Parak, Philipps-Universität Marburg

4:00 p.m. **MULTIFUNCTIONAL HETEROGENEOUS POLYMER SYSTEMS**

Andreas Lendlein, Institute of Polymer Research,
GKSS Forschungszentrum Teltow-Seehof

4:40 p.m. **BIOLOGICAL PROPERTIES OF NUCLEIC ACID-BASED NANOPARTICLES**

Gunther Hartmann, University of Bonn

5:20 p.m. **EXPLOITING CARBOHYDRATE-PROTEIN INTERACTIONS FOR DRUG DISCOVERY: FROM MICROARRAYS TO VACCINES**

Peter Seeberger, ETH Zurich

6:00 p.m. **CLOSURE**