

# Third International NanoBio Conference 2010

– Third Announcement –

**Deadline for Abstract Submission: 1<sup>st</sup> May 2010**

August 24<sup>th</sup> – 27<sup>th</sup>, 2010

ETH Zurich, Switzerland

NanoBio-Tokyo 2006 (chaired by Prof. Kazunori Kataoka) und Nanobio-Seoul 2008 (chaired by Prof. Kyung-Hwa Yoo) were outstanding conferences with 500 – 1000 participants and an excellent scientific program. The **Third International NanoBio Conference** will take place at **ETH Zurich, August 24-27, 2010**. For this 4-day conference, we will have **41 invited, internationally renowned speakers for plenary and two parallel sessions**, as well as dedicated **poster sessions** and an **industrial exhibition**. We expect around 450 participants, 250 posters and 15 exhibitors. The conference will take place in the Main Building of the Swiss Federal Institute of Technology Zurich (ETH Zurich) providing ample space for sessions and exhibition, and located very close to Zurich City Center (in walking distance to conference hotels and center).

**Conference Location: ETH Zurich Main Building (HG)**

**Conference Duration: August 24<sup>th</sup> – 27<sup>th</sup>, 2010**

**Session Program on-line: <http://www.nanobio.ethz.ch/program>**

**Pre-Conference Welcome Aperitif: August 23<sup>rd</sup>, 2010, 6 – 9 pm**

On Monday 23<sup>rd</sup> August, starting at 6 pm, we invite you to a pre-conference Welcome Aperitif on the top-floor restaurant of the ETH Main Building, sponsored by the **Zurich City Council**. The welcome address will be given by the **Mayor of Zurich, Mme Corine Mauch**.

## Sessions Topics

NanoBio Sensing  
NanoBio Materials  
NanoBio Interfaces  
NanoBio Devices  
Drug Delivery & Nanomedicine  
Nanomedical Imaging  
Nanotoxicology  
Biomimetic and Bioinspired Nano-Structured Materials and Interfaces  
Nano-scale Characterization Techniques and Single Molecule Analysis



## Co-Chairs of the Conference:

Marcus Textor & Janos Vörös  
ETH Zurich

## Co-Chairs of the Local Organizing Committee:

Mirren Charnley & Lucio Isa  
ETH Zurich

<http://www.nanobio.ethz.ch/>

# Third International NanoBio Conference 2010

## Exhibitors

<http://www.nanobio.ethz.ch/>



PHYSICAL ELECTRONICS GMBH



Cytosurge GmbH



Anton Paar



Farfield

illuminating the molecular world...



JOSSI  
Orthopedics

[www.jossi-orthopedics.ch](http://www.jossi-orthopedics.ch)



**JPK**  
Instruments

Anton-Paar  
Bucher Biotec  
Cytosurge GmbH  
Jossi Orthopedics  
MicroVacuum Ltd  
Nikon  
PHYSICAL ELECTRONICS

Farfield Group  
JPK Instruments  
Nanosurf  
LOT-ORIEL  
Nanoworld  
Park Systems Corp.  
Q-Sense

# Third International NanoBio Conference 2010

## Sponsors

<http://www.nanobio.ethz.ch/>



BASF  
CCMX  
EMPA  
IBM  
JOSSI AG  
Park Systems Corp.  
PEPublishing

RSC Publishing  
RMS Foundation  
SSB  
Stadt Zürich  
Straumann AG  
Susos AG  
Carl Zeiss AG

# Third International NanoBio Conference 2010

## Sponsors

**Kontakt**Gruppe für **F**orschungsfragen  
*Contact Group for Research Matters*



Ciba/BASF  
Merck Serono  
Novartis  
Roche  
Syngenta

<http://www.nanobio.ethz.ch/>



# Third International NanoBio Conference 2010

## Invited Speakers

### **Christine Allen**

University of Toronto, Canada

*Tracking the In Vivo Pathway and Fate of Nanoparticles*

### **Marc Bohner**

RMS Foundation, Bettlach, Switzerland

*Nanodefects to Tune the Chemical and Biological Properties of Calcium Phosphate Biomaterials*

### **Frank Caruso**

University of Melbourne, Australia

*Engineered, Responsive Polymer Carriers for Biomedical Applications*

### **Jennifer Cha**

University of California, San Diego, USA

*Biomolecular Architectures and Systems for Nanoscience Engineering*

### **Patrick Couvreur**

Université de Paris-Sud, France

*Nanomedicines: a New Approach for the Treatment of Severe Diseases*

### **Harold Craighead**

Cornell University, New York, USA

*Nanostructures for Biological Investigations*

### **Cees Dekker**

Delft University of Technology, The Netherlands

*TBA*

### **Emmanuel Delamarche**

IBM Rüschlikon, Switzerland

*Patterning Proteins on Surfaces: at What Scales and What for?*

### **Ruth Duncan**

Cardiff University, Great Britain

*Polymer Therapeutics: Treatments of Cancer and for Tissue Repair*

### **Bengt Fadeel**

Karolinska Institute, Stockholm, Sweden

*Interactions of Engineered Nanomaterials with the Immune System*

### **Christof Fattinger**

F. Hoffmann-La Roche, Basel, Switzerland

*TBA*

### **María García-Parajo**

Institut de Bioenginyeria de Catalunya, Barcelona, Spain

*Single Molecule Nanotools in Immunology*

<http://www.nanobio.ethz.ch/>

# Third International NanoBio Conference 2010

## Invited Speakers

### **Hermann E. Gaub**

Ludwig-Maximilians-Universität, Munich, Germany

*Force and function: Probing Proteins with Single Molecule Force Spectroscopy*

### **Stefan W. Hell**

Max Planck Institute for Biophysical Chemistry, Göttingen, Germany

*Nanoscopy with Focussed Light*

### **Fredrik Höök**

Chalmers University of Technology, Göteborg, Sweden

*Integrating Microfluidics with Nanoplasmonic Sensing of Cell-Membrane Mimics*

### **David Kaplan**

Tufts University, Medford, USA

*Dynamic Biomaterial Systems Based on Silk Proteins*

### **Nobuo Kimizuka**

Kyushu University, Fukuoka, Japan

*Adaptive Self-Assembly in Coordination Nanoparticles*

### **David Klenerman**

University of Cambridge, Great Britain

*Single Molecules on Living Cells*

### **Harald F. Krug**

EMPA, St. Gallen, Switzerland

*3R of Nanotoxicology: Reactions, Regulation and Restriction?*

### **Ick-Chan Kwon**

Korea Institute of Science and Technology, Seoul, Korea

*Polymer Nanotechnology for Molecular Imaging*

### **Luke P. Lee**

University of California, Berkeley, USA

*Bionanoscience via Satellite Nanoscopes*

### **Hongbin Li**

University of British Columbia, Vancouver, Canada

*Protein Mechanics of Artificial Elastomeric proteins: From Single Molecule to Biomaterials*

### **Luis M. Liz-Marzan**

Universidade de Vigo, Spain

*SERS-Based Diagnosis and Biodetection*

### **Cait MacPhee**

University of Edinburgh, Great Britain

*Hybrid Nanomaterials: Exploiting Biological Self-Assembly for Novel Functions*

<http://www.nanobio.ethz.ch/>

# Third International NanoBio Conference 2010

## Invited Speakers

### **Sebastian Maerkl**

EPFL, Lausanne, Switzerland

*Software Programmable Microfluidic Devices: Bringing High-End Microfluidics to the Masses*

### **Yasuhiro Matsumura**

National Cancer Center Hospital, Tokyo, Japan

*A New Aspect of Drug Delivery System in Cancer Therapy*

### **Sally L. McArthur**

Swinburne University of Technology, Melbourne, Australia

*Plasma, Particles and PDMS*

### **Rachel McKendry**

University College London, Great Britain

*Nanomechanical Sensors for Superbugs and Superdrugs*

### **Phillip B. Messersmith**

Northwestern University, Evanston, USA

*Mussel Adhesive Proteins and their Biologically Inspired Analogs for Nanobiotechnology*

### **Andre Nel**

University of California, Los Angeles, USA

*Nanotoxicology as a Predictive Science: From Cells to Animals*

### **Buckhard Raguse**

CSIRO, Lindfield, Australia

*Gold Nanoparticle Chemiresistors - Towards a Universal (Bio)Chemical Sensor System?*

### **Simon Scheuring**

Institut Curie, Paris, France

*Membrane Proteins in Native Membranes Studied by Atomic Force Microscopy: Watching Biological Nano-Machines at Work*

### **Eva M. Sevick-Muraca**

The University of Texas Health Science Center, Houston, USA

*NIR Fluorescence Molecular Imaging: Towards "First-in-Humans"*

### **Bettina Sobotka**

BASF, Ludwigshafen, Germany

*Biofilms in Industry and Medicine - An Overview*

<http://www.nanobio.ethz.ch/>

# Third International NanoBio Conference 2010

## Invited Speakers

### **Patrick S. Stayton**

University of Washington, Seattle, USA

*Opening the Intracellular Universe of Disease Targets to Biologic Drugs*

### **Molly Stevens**

Imperial College, London, Great Britain

*Engineering the Cell-Material Interface*

### **Samuel I. Stupp**

Northwestern University, Evanston, USA

*Cell Signaling with Nanostructures for Regeneration*

### **Itamar Willner**

The Hebrew University of Jerusalem, Israel

*Functional Biomolecule Nanostructures for Sensing, Catalysis and Circuitry*

### **Karen L. Wooley**

Texas A&M University, USA

*Well-Defined, Biologically-Inspired Nanoscopic Objects Derived from Synthetic Polymer Building Blocks*

### **Yi Yan Yang**

A\*Star Singapore, Singapore

*Nanostructures Self-Assembled from Polymers with Well-Defined Molecular Structure for Targeted Delivery of Therapeutics*

### **Xi Zhang**

Tsinghua University, Beijing, China

*Supramolecular Amphiphiles for Controlled Assembly and Disassembly*

### **Renato Zenobi**

ETH, Zurich, Switzerland

*Label-Free Chemical Nanoanalysis of Biological Samples using Tip-Enhanced Raman Spectroscopy (TERS)*

<http://www.nanobio.ethz.ch/>



# Third International NanoBio Conference 2010

<http://www.nanobio.ethz.ch/>

## Scientific Committee

- Mitsuru Akashi**, akashi@chem.eng.osaka-u.ac.jp (Osaka University, Japan)
- Fu-Hsiung Chang**, fhchang@ha.mc.ntu.edu.tw (National Taiwan University, Taiwan)
- Ashutosh Chilkoti**, chilkoti@duke.edu (Duke University, USA)
- Krunal Chopra**, nanobiotek@yahoo.com (LSFI, Morigeri, IN)
- Emmanuel Delamarche**, emd@zurich.ibm.com (IBM Rueschlikon, CH)
- Mauro Ferrari**, mauro.ferrari@uth.tmc.edu (University of Texas, USA)
- Christoph Gerber**, christoph.gerber@unibas.ch (University of Basel, CH)
- David Grainger**, david.grainger@utah.edu (University of Utah, USA)
- Hans Griesser**, hans.griesser@unisa.edu.au (IWRI, University of South Australia, Australia)
- Jeffrey Hubbell**, jeffrey.hubbell@epfl.ch (EPF Lausanne, CH)
- Jijian Jijan**, Jijian@zju.edu.cn (Zhejiang University, China)
- Kazunori Kataoka**, kataoka@bmw.t.u-tokyo.ac.jp (University of Tokyo, Japan)
- Jae-Ho Kim**, jhkim@ajou.ac.kr (Ajou University, Korea)
- Sung Wan Kim**, rburns@pharm.utah.edu (University of Utah, USA)
- Harald Krug**, harald.krug@empa.ch (Empa St. Gallen, CH)
- Wen-Tso Liu**, eseliuwt@nus.edu.sg (National University Singapore, Singapore)
- Jacques Livage**, livage@ccr.jussieu.fr (Université Pierre et Marie Curie, France)
- Katharina Maniura**, katharina.maniura@empa.ch (Empa St. Gallen, CH)
- Keith McLean**, keith.mclean@csiro.au (CSIRO Molecular and Health Technologies, Clayton, Australia)
- Jun Miyake**, jmiyake@appchem.t.u-tokyo.ac.jp (University of Tokyo, Japan)
- Erik Reimhult**, erik.reimhult@mat.ethz.ch (ETH Zurich, CH)
- Leonard H. Rome**, lrome@mednet.ucla.edu (UCLA, USA)
- Michael Smith**, msmith@buedu (Boston University, USA)
- Sirirung Songsivilai**, sirirung@nstda.or.th (National Nanotechnology Center, Thailand)
- Nicholas Spencer**, spencer@mat.ethz.ch (ETH Zurich, CH)
- Marcus Textor**, marcus.textor@mat.ethz.ch (ETH Zurich, CH)
- Julius Vancso**, g.j.vancso@tnw.utwente.nl (University of Twente, the Netherlands)
- Viola Vogel**, viola.vogel@mat.ethz.ch (ETH Zurich, CH)
- Janos Vörös**, janos.voros@biomed.ee.ethz.ch (ETH Zurich, CH)
- Kyung-Hwa Yoo**, khyoo@yonsei.ac.kr (Yonsei University, Korea)
- Chiming Wei**, chimingwei@gmail.com (John Hopkins University, USA)

# Third International NanoBio Conference 2010

<http://www.nanobio.ethz.ch/>

## Local Conference Office

ETH Zürich, Institut für  
Biomedizinische Technik  
Mrs. Esther Singer  
Gloriastrasse 35  
CH-8092 Zurich  
Switzerland  
Tel.: +41 (0)44 632 45 85  
Fax: +41 (0)44 632 11 93

ETH Zürich, Oberflächentechnik  
Mrs. Esther Stähli  
Wolfgang-Pauli-Strasse 10  
8093 Zurich  
Switzerland  
Tel.: +41 (0)44 633 63 61  
Fax: +41 (0)44 633 10 76

## Local Organizing Committee

**Mirren Charnley** (ETH Zurich, CH, Co-chair), [mirren.charnley@mat.ethz.ch](mailto:mirren.charnley@mat.ethz.ch)

**Lucio Isa** (ETH Zurich, CH, Co-chair), [lucio.isa@mat.ethz.ch](mailto:lucio.isa@mat.ethz.ch)

**Team of ETH students** (ETH Zurich, CH)

## E-mail contact: [nanobio@ethz.ch](mailto:nanobio@ethz.ch)

You may wish to write an email to this address to make sure you receive further information, particularly if you have received this announcement through a colleague. In that case, please send an email with your affiliation and we will include you in all further communications.

## Online Registration is open

Please use the form provided on the web to register for the conference.

## How to pay / Bank details

After having registered you will first **receive a bill** from us to pay the registration fee.

# Third International NanoBio Conference 2010

<http://www.nanobio.ethz.ch/>

## Conference Fees

**Conference fees** include conference and poster session participation, booklet with full abstracts of talks and posters, four lunches, coffees at breaks, poster session drinks and free internet access.

**Dinner** at the Restaurant "Die Waid" on August 26th will be charged separately (see registration form).

**Registration on site:** cash only, normal fee + CHF 60.–

**Reductions on registration fees** (conference dinner excluded): Groups: Companies and individual academic groups (one professor) with five or more participants get 20% reduction of total group registration fees.

**Cancellation** before August 1st: fee will be refunded minus CHF 50.– administrative charge. Cancellation after August 1st: no refund possible.

All payments must be received in full in order to qualify for early booking discounts.

Registration is not confirmed unless payment has been received in advance. The registration will be confirmed by e-mail.

Payment for normal registration fees must be received before August 1st.

## Conference Fees at a glance in CHF

Participants	Early Registration (before June 1 <sup>st</sup> )	Normal Registration (until August 1 <sup>st</sup> )	On-site Registration (after August 2 <sup>nd</sup> )
Industry and Academia (4 days)	580.-	690.-	750.-
Industry and Academia (1-2 days)	400.-	480.-	540.-
PhD Students (4 days only)	250.-	320.-	380.-
PhD Students with first author posters (4 days only)	220.-	320.-	380.-
Undergraduate Students**	Free	Free	Free
Conference Dinner (Aug 26th)	100.-	100.-	100.-

\*\* Copy of student card required (see "conference office" for fax number or address) or has to be presented at the information desk. Lunch coupons have to be purchased separately at CHF 15.- at the registration desk.

# Third International NanoBio Conference 2010

<http://www.nanobio.ethz.ch/>

**Call for Abstracts is open: Deadline for submission: 1<sup>st</sup> May 2010**

**Online submission** and further information on abstract submission:

[http://www.nanobio.ethz.ch/call\\_for\\_abstracts](http://www.nanobio.ethz.ch/call_for_abstracts)

**Please register before sending the abstract.**

## Proceedings

An extended 4-day poster session will be an important conference component. A booklet with full abstracts of talks and posters will be compiled and electronically typeset, for publication as a supplement in the European Cells & Materials journal. Hence, abstracts must adhere to the abstract guidelines.

## Dates and Deadlines

See: [http://www.nanobio.ethz.ch/dates\\_deadlines](http://www.nanobio.ethz.ch/dates_deadlines)

## Poster Prizes

There will be three sponsored prizes for best posters, and two for best oral presentations by PhD students/postdocs. Details will be given well before the abstract submission deadline.

## Poster Formatting

Posters should be no larger than DIN A0 (84 cm wide by 119 cm long) in portrait form and not landscape.

## Abstract Submission for Contributed Talks and Posters

**The deadline for submitting abstracts for oral presentations or posters is 1st May 2010.** There are 38 open slots for contributed talks (15+5 min) in the different sessions. Applications for contributed talks will be selected by the International Scientific Committee based on the submitted abstracts.

## Financial Support for Students and Early-stage Researchers

Thanks to our Sponsors (<http://www.nanobio.ethz.ch/sponsors>), we can provide **financial support for a limited number of students and early-stage researchers** (for details please see: [http://www.nanobio.ethz.ch/conference\\_fees](http://www.nanobio.ethz.ch/conference_fees)).

**Deadline for application: 24th April 2010.**

## Conference Language

The official conference language is English.

# Third International NanoBio Conference 2010

<http://www.nanobio.ethz.ch/>

## Exhibition

Exhibition booths will be available to companies and institutes.

We will have space for ca. 15-20 Exhibitors (assigned on a first come/first serve basis). The exhibition area will be in the main hall of ETH Main Building, very close to where lunches and coffee/tea breaks are served, and adjacent (to the left and right) of the poster session areas.

The **standard exhibition booth** includes from our side: (a) A table of 180 x 90 cm with company name; (b) Poster walls (if required); (c) Power outlet; (d) Any further infrastructure on request.

**Price for one standard booth: CHF 2,500** (Swiss Francs)

### *This exhibition fee includes:*

- **Standard booth** as specified above.
- **Waived registration fee for one person** (access to conference and poster sessions, free coffees, lunches and aperitifs on all four conference days, conference booklet with program and abstracts of all talks and posters; value: 580 CHF)
- **Logo and exhibitor's affiliation on website and in conference booklet.**

If you are interested in exhibiting at this conference **please contact us at:**  
[nanobio@ethz.ch](mailto:nanobio@ethz.ch)