

# NANOSENS 2010

29 - 30 April 2010

## INFORMATION AND REGISTRATION

I [www.nanosens.at](http://www.nanosens.at)  
E [office@nanosens.at](mailto:office@nanosens.at)  
P +43-(0)50550-4300  
F +43-(0)50550-4399

## VENUE

AIT Austrian Institute of Technology GmbH  
Tech Gate Tower  
Donau-City-Strasse 1  
1220 Vienna, Austria  
How to get there:  
[www.ait.ac.at/contact/contact\\_techgate\\_en.html](http://www.ait.ac.at/contact/contact_techgate_en.html)

## IMPORTANT DEADLINES

Submission of abstracts: **29 January 2010**  
Confirmation of authors: **15 March 2010**  
Early registration discount: **26 March 2010**  
Closing date for registration: **23 April 2010**

## LOCAL ORGANISATION

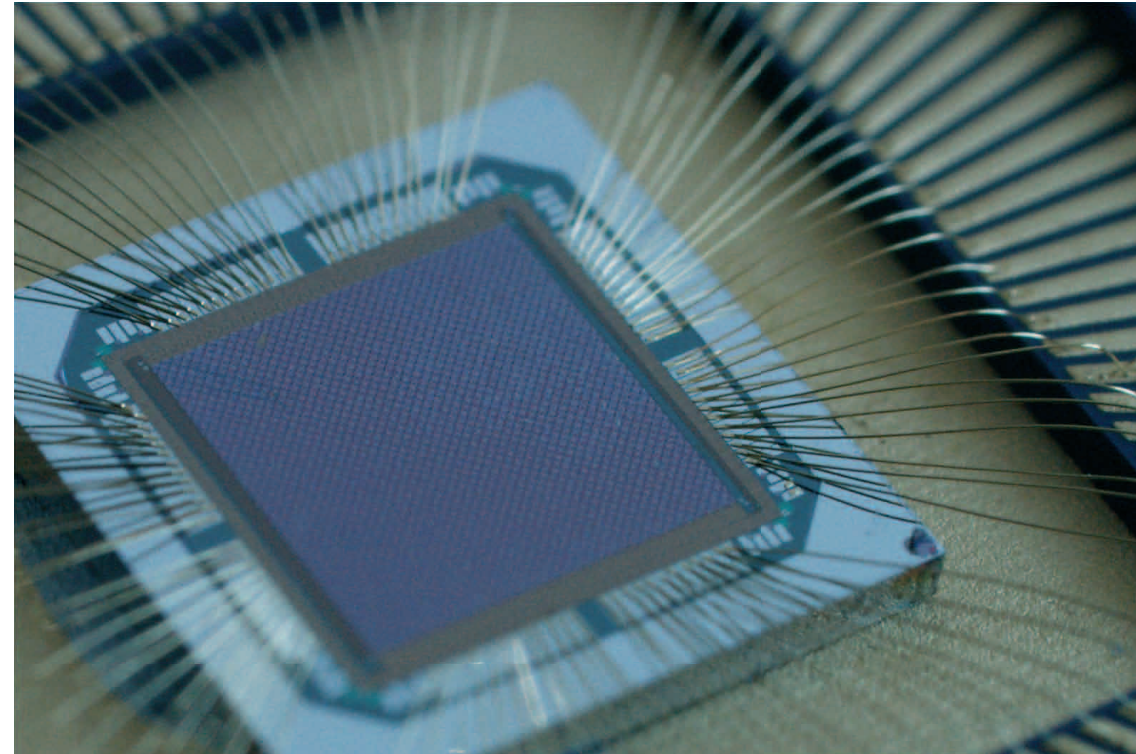
AIT Austrian Institute of Technology GmbH  
Hubert Brückl, Anton Köck  
Kerstin Formanek

## IN COOPERATION WITH

Techkonnex - High-Tech Promotion  
Margit Malatschnig

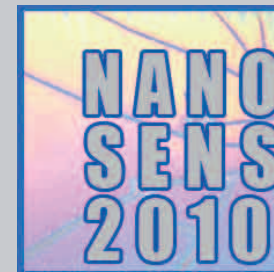


THIS CONFERENCE IS  
SUPPORTED BY



29 - 30 April 2010, Tech Gate Vienna, Austria

# FIRST ANNOUNCEMENT



## NANOSENSORS FOR INDUSTRIAL APPLICATIONS

## INVITATION

Continuing the success in 2007 and 2008, the 3rd conference NANOSENS 2010 highlights latest developments of nanosensors for industrial applications!

Future trends in semiconductor and sensor technology foresee the assembly and integration of devices at multiple levels, ranging from nano- to micro- and macroscale. The nanoscale provides enhanced performance, the microscale implements various material platforms to achieve a broad range of functionalities, and the macroscale enables interaction with the real world.

**Heterogeneous Integration (HI)** is the formula to bridge the gap between the nanoscale with its great variety of materials and novel properties, and systems that humans can interact with.

The **objective of HI** is the "More than Moore" integration of different functionalities ranging from sensors and signal processors to photonics or energy into a single package.

The **challenge of HI** is the implementation of components with basically incompatible manufacturing technology into a single device.

The **key to HI** is the combination of an increasingly wider set of expertise, ranging from microelectronics, sensors & actuators to the bio-nano convergence domain.

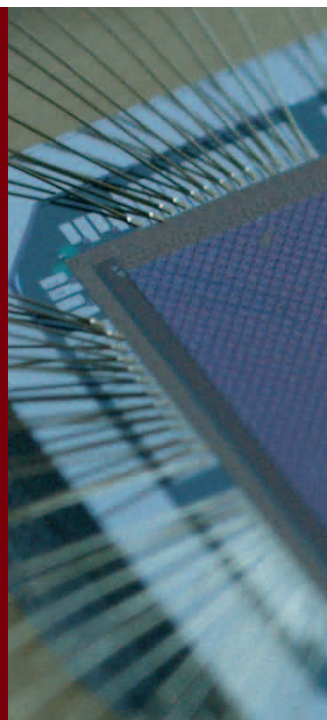
## GENERAL INFORMATION

### SUBMISSION OF ABSTRACTS

Along with invited talks, prospective authors are invited to submit abstracts to the topical session which is most appropriate to the theme of their work. The template available on the website has to be used for abstract preparation. Abstracts should be submitted to [office@nanosens.at](mailto:office@nanosens.at) until **29 January 2010** and will be reviewed by **15 March 2010**.

### EXHIBITION

The exhibition is an excellent opportunity to receive maximum marketing exposure in addition to gathering knowledge and networking with key experts in the fields of Nanotechnology. The conference provides opportunities for companies to meet up with potential new customers, or strengthen existing customer relationships by inviting them to the conference.



## SESSIONS

**Nanotechnology pushes the frontiers of sensor technology!**

### HETEROGENEOUS INTEGRATION

Heterogeneous Integration implements multi-functional components based on different technologies and materials into a single package. Heterogeneous Integration includes nano-, bio-, and biomimetic technologies and closes the gap between the world of nanodevices and systems that humans can interact with.

### NANOSENSORS FOR BIOMEDICAL AND ENVIRONMENTAL APPLICATIONS

Nanosensors are smaller, more sensitive, demand less power, and react faster than their macroscopic counterparts. The heterogeneous integration of nanosensors opens the door to new biomedical and environmental applications.

### FUNCTIONAL LAYERED SYSTEMS

Complex layered systems add more functionality and increase performance in a large variety of industrial applications. Functional layered systems are based on novel alternative materials and processes which have to be adapted to standard semiconductor technology.

### 3D-SYSTEM INTEGRATION

Compatibility with today's silicon technology is presently the key for the acceptance and realization in specialized microelectronic fabs. 3D-systems, can integrate heterogeneous components such as functional layers, sensors & actuators,  $\mu$ -fluidics &  $\mu$ -pumps, optical interconnects, heating systems, and nano-objects.

### REGISTRATION

Please register online on our website [www.nanosens.at](http://www.nanosens.at).

Closing date: **23 April 2010**

### CONFERENCE FEE

Early registration discount of € 370,- until **26 March 2010**, afterwards regular fee of € 420,-.

Student fee: € 250,-

One - day - tickets: € 250,-  
(all prices excl. 10% VAT).

### NANOSENS 2010 POSTER AWARD

All poster contributions will participate in the poster competition! An independent jury will award prizes to the best posters.

### SOCIAL EVENT

A get-together is organized at a traditional „Wiener Heurigen“ in the evening of the first conference day (included in the registration fee).

### HOTEL ACCOMMODATION

A list of hotels can be found on the conference-website [www.nanosens.at](http://www.nanosens.at).