

REGISTRATION

Registration to INC9 is open at www.inc9.de.

Special conference fees are available for students. You can either register as full conference or single day delegate using the online registration form.

Please note, that in addition to the conference you can book a special day trip to Dresden (sightseeing tour + visit to Infineon Dresden) on Monday, May 13 just before the conference starts. Following the conference we offer some free Lab Visits in Berlin. Detailed information is available at the conference website.

Call for Posters

Please follow the instructions at www.inc9.de for the submission of posters. The best posters will win a prize.

PRE-CONFERENCE PROGRAM

Monday, May 13, 2013

Optional Visit to Dresden (Sightseeing Tour + Infineon)

INC9 CONFERENCE PROGRAM

Tuesday, May 14, 2013

Registration | European Nano Day / Short Course nanoHUB
Reception + Posters (European Collaborations)

Wednesday, May 15, 2013

INC Day 1 | Conference Dinner (Evening)

Thursday, May 16, 2013

INC Day 2 | Poster Session + Reception

Friday, May 17, 2013

INC Day 3 (Morning)

POST-CONFERENCE PROGRAM

Friday, May 17, 2013

Optional Lab Visits in Berlin (Afternoon)

INC9 CONFERENCE OFFICE



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Conference Location

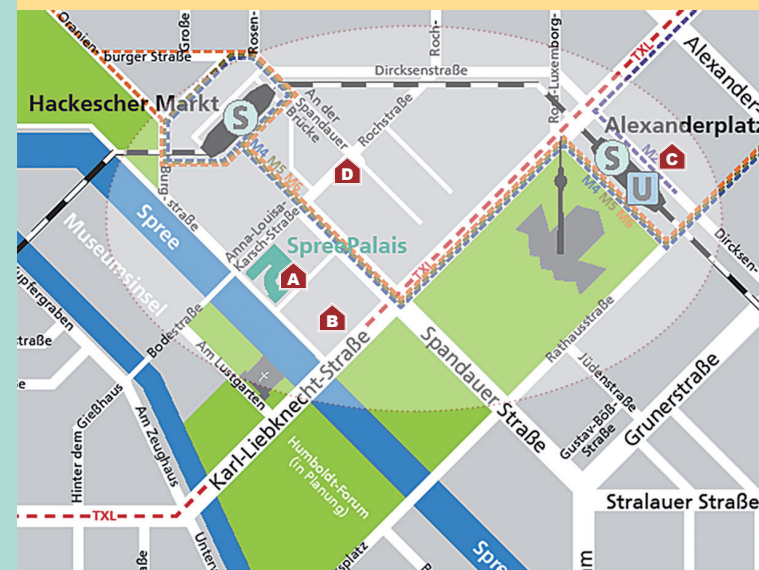
SpreePalais at the Berlin Cathedral
Anna-Louisa-Karsch-Str. 2, 10178 Berlin

Accommodation

Hotels within walking distance to the Conference Site:

- ADINA Apartment Hotel Berlin (Hackescher Markt), www.adina.eu
- Radisson BLU Hotel Berlin, www.radissonblu.com
- Park Inn by Radisson Berlin, www.parkinn-berlin.de

Details will be sent to you with the confirmation of your conference registration.



- A Conference Location**
- B Radisson BLU Hotel**
- C Park Inn Hotel (by Radisson)**
- D Adina Apartment Hotel (Hackescher Markt)**

INC9

Berlin, Germany
May 14-17, 2013

THE 9TH INTERNATIONAL NANOTECHNOLOGY CONFERENCE ON COMMUNICATION AND COOPERATION

REGISTER NOW AT WWW.INC9.DE

WELCOME TO INC9

Welcome to the 9th International Nanotechnology Conference on Communication and Cooperation. This conference, originally founded by Mike Roco (NSF) and Paolo Gargini (Intel) as a forum for promoting new nanotechnologies, has become a widely accepted event where decision-makers, scientists and students from the three organizing regions meet and discuss both the latest scientific results and the cooperation needs among the regions.

Nanotechnology has become a key enabling technology. It is one of the most important technologies in solving today's societal challenges by combining nanoelectronics, nanophotonics, and new materials into nanosystems with extremely small feature sizes. In parallel, complexity of (nano)systems has increased dramatically which requires more and more international cooperation. This conference bridges the gap between technology and application, between Japan, the US and Europe for the benefit of industry and society.

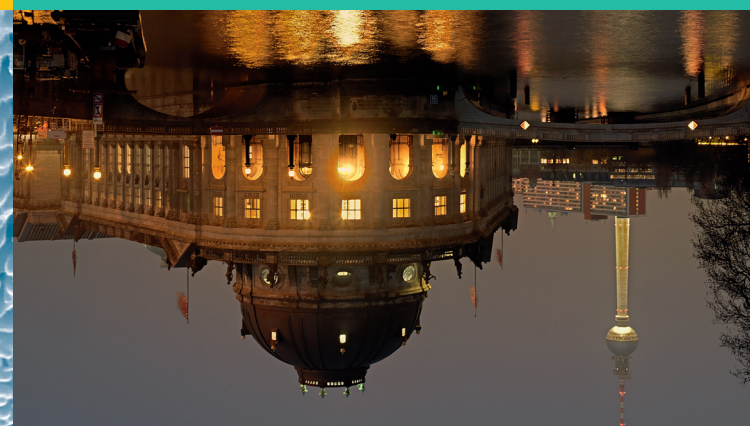
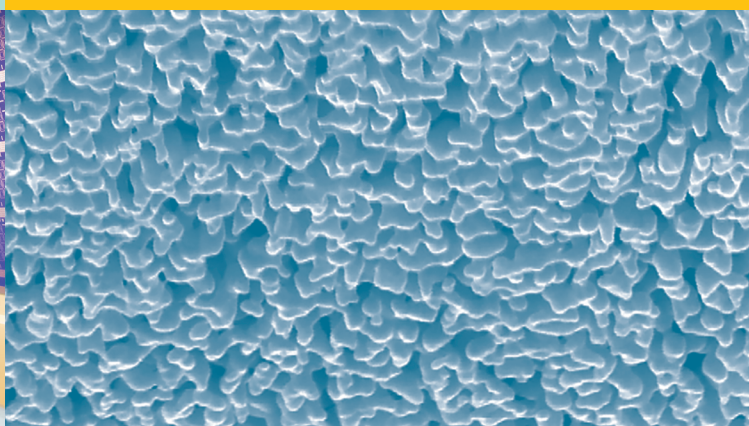
Prof. Dr. Hubert Lakner
Chairman of the Board of Directors
Fraunhofer Group for Microelectronics

CONFERENCE PROGRAM
FRIDAY, MAY 17
INC DAY 3

CONFERENCE PROGRAM
THURSDAY, MAY 16
INC DAY 2

CONFERENCE PROGRAM
WEDNESDAY, MAY 15
INC DAY 1

CONFERENCE PROGRAM
TUESDAY, MAY 14
EUROPEAN NANO DAY



TUESDAY, MAY 14, 2013 EUROPEAN NANO DAY

8:15 - 9:00	Registration
9:00 - 9:15	Opening Address Ulrich Buller, Fraunhofer-Gesellschaft
9:15 - 9:45	Nanotechnology in Europe: Opportunities and Challenges Theodoros Karapiperis, EC
9:45 - 11:00	European Programs <ul style="list-style-type: none"> • <i>Materials for Innovation</i>, Marcin Sadowski, EC • <i>European Horizon for Nanophotonics and Photonics</i>, Martyn Chamberlain, EC • <i>Nanoelectronics and AAL</i>, Gisele Roesems, EC
11:00 - 11:30	Coffee Break
11:30 - 12:15	National Initiatives <ul style="list-style-type: none"> • <i>Smart Cities and Communities: An Italian Funding Initiative where KETs Serve Societal Challenges</i>, Enrico Macii, ENIAC Italy • <i>The Commercialization of Future Technologies in Germany</i>, Max Milbredt, GTAI Germany
12:15 - 13:30	Lunch
13:30 - 15:30	Key Enabling Technology Nanoelectronics <ul style="list-style-type: none"> • <i>Key Enabling Technologies for Europe</i>, Dirk Beernaert, EC • <i>Nanoelectronics in Europe – the Landscape and the Roadmap</i>, Mart Graef, TU Delft • <i>Silicon Europe – Cluster Alliance for European Micro- and Nanoelectronics Industry</i>, Thomas Reppe, Silicon Saxony <ul style="list-style-type: none"> – <i>Minalogic – The Grenoble Cluster</i>, Laurent Malier, Leti – <i>Energy Efficient Nanoelectronics as Enabler for a Smart Specialization in Nanotechnologies for Health</i>, Peter Simkens, DSP Valley – <i>Silicon Saxony e.V. – Europe’s Most Successful Regional High-Tech Cluster</i>, Heinz-Martin Esser, Silicon Saxony – <i>Holland High Tech: a Complete Semicon Value Chain</i>, Ben van der Zon, High Tech NL
15:30 - 16:00	Coffee Break
16:00 - 17:00	European Flagships <ul style="list-style-type: none"> • <i>The Human Brain Project – Relevance for Nanoscience</i>, Karlheinz Meier, Heidelberg University • <i>Graphene Flagship – Converting Scientific Excellence to Technological Impacts</i>, Tomas Löfwander, Chalmers
17:00 - 18:15	Short Course on nanoHUB Gerhard Klimeck, Purdue
18:15 - 21:00	Posters on European Collaborations and Reception

WEDNESDAY, MAY 15, 2013 INC DAY 1

8:15 - 9:00	Registration
9:00 - 9:30	Opening Addresses <i>Europe:</i> Ulrich Buller, Fraunhofer-Gesellschaft <i>Japan:</i> Teruo Kishi, NIMS <i>USA:</i> Mihail C. Roco, NSF
9:30 - 9:50	Scope of INC9 Paolo Gargini, ITRS
9:50 - 10:15	Coffee Break
10:15 - 12:20	Session We-1: Regional Update <ul style="list-style-type: none"> • <i>Japan (Government):</i> Hideyuki Yamagishi, CAO • <i>USA (Government):</i> Mihail C. Roco, NSF • <i>Europe (Government):</i> Willy v. Puymbroeck, EC • <i>Japan (Industry):</i> Haruo Akahoshi, Hitachi • <i>USA (Industry):</i> Paolo Gargini, ITRS • <i>Europe (Industry):</i> Andreas Wild, ENIAC • <i>The INC Grassroots Tech Future Survey</i>, Kosmas Galatsis, UCLA
12:20 - 13:30	Lunch
13:30 - 14:30	Conference Keynote <i>Epitaxial Graphene – from Flakes to Wafers</i> , Thomas Seyller, Chemnitz University of Technology
14:30 - 15:45	Session We-2: Nanoelectronics 1 - From More Moore... <ul style="list-style-type: none"> • <i>High-Performance Silicon Nanowire MOSFETs for Ultra-Low Power LSI</i>, Masumi Saitoh, TOSHIBA • <i>Thermal Properties of Carbon Materials</i>, NN • <i>INSITE: Translating Technology Insight into Design Insight</i>, An Steegen, IMEC
15:45 - 16:15	Coffee Break
16:15 - 17:30	Session We-3: Nanoelectronics 2 - ... towards Quantum Devices <ul style="list-style-type: none"> • <i>HyENEXSS: Computing Device Design and Characterization Platform for Nanoelectronics</i>, Koichi Fukuda, AIST • <i>Quantum Materials</i>, Robert Westervelt, Harvard University • <i>Molecular Electronics</i>, Paolo Lugli, Technical University of Munich
17:30 - 18:20	Session We-4: Future Perspectives <ul style="list-style-type: none"> • <i>Graphene Transistors and 2D Electronics</i>, Giuseppe Iannaccone, University of Pisa • <i>Leapfrogging Beyond CMOS and von Neumann Architectures. What can we expect?</i>, Andras Moritz, University of Massachusetts Amherst
19:30 - 23:00	Conference Dinner

THURSDAY, MAY 16, 2013 INC DAY 2

8:15 - 9:00	Registration
9:00 - 10:15	Session Th-1: Bridge to Photonics <ul style="list-style-type: none"> • <i>High Density Optical Interconnects by Using Silicon Photonics</i>, Yutaka Urino, PETRA • <i>Integrated Silicon Nanophotonics</i>, Gernot Pomrenke, USAF • <i>Photonics for Communication</i>, Hans-Joachim Grallert, Fraunhofer-Gesellschaft
10:15 - 10:45	Coffee Break
10:45 - 12:15	Session Th-2: Bridge to Materials <ul style="list-style-type: none"> • <i>2D Oxide Materials Beyond Graphene</i>, Minoru Osada, NIMS • <i>Semiconductor Nanomembranes for Applications in Unconventional Electronics</i>, John A. Rogers, University of Illinois Urbana/Champaign • <i>Nanomembranes for Electronic, Magneto-electronic and Photonic Applications</i>, Oliver Schmidt, Leibniz-Gemeinschaft
12:15 - 13:30	Lunch
13:30 - 14:45	Session Th-3: Bridge to Energy Efficiency <ul style="list-style-type: none"> • <i>TIA Power Electronics</i>, Hajime Okumura, AIST • <i>Low Power CMOS</i>, Harry Atwater, Caltech • <i>Solid State Lighting</i>, Richard van Silfhout, Philips
14:45 - 15:15	Coffee Break
15:15 - 16:30	Session Th-4: Bridge to Medical Engineering <ul style="list-style-type: none"> • <i>Detection of Biomolecular Recognition Using Bio-transistors</i>, Yuji Miyahara, Tokyo Medical and Dental University • <i>Ultra Low Power Nanosystems for Personal Health and Personal Environmental Monitoring</i>, Veena Misra, North Carolina State University • <i>Addressing the More than Moore Challenges from within the OEM Community</i>, Erik Jung, iNEM/ Fraunhofer-Gesellschaft
16:30 - 17:15	Session Th-5: International Cooperation <ul style="list-style-type: none"> • <i>Report from IPWGN</i>, Lothar Pfitzner, Fraunhofer-Gesellschaft • <i>Materials Design for Spintronic Applications</i>, Claudia Felser, Max-Planck-Gesellschaft • <i>Benchmarking Beyond CMOS Devices</i>, Jouni Ahopelto, VTT <p>Invited Region Russia</p> <ul style="list-style-type: none"> • <i>Radiophotonics: New Opportunities for International Cooperation</i>, Alexander A. Gorbatshev, P.N.Lebedev Physical Institute of RAS, Moscow
17:15 - 20:00	Poster Session and Reception

FRIDAY, MAY 17, 2013 INC DAY 3

8:15 - 9:00	Registration
9:00 - 10:15	Session Fr-1: Bridge to Innovation & Societal Challenges <ul style="list-style-type: none"> • <i>Green Innovation Potential of Hydrocarbon-producing Algae</i>, Makoto Watanabe, University of Tsukuba • <i>US Innovation Policies with Illustrations for Nanotechnology @ NIST</i>, Michael F. Molnar, NIST • <i>Nanoelectronics and Embedded Systems: From Energy Efficient Electric Vehicles to Internet of Energy</i>, Ovidiu Vermesan, SINTEF
10:15 - 10:45	Coffee Break
10:45 - 11:00	Poster Award Presentation by Hubert Lakner, Fraunhofer-Gesellschaft
11:00 - 11:30	Panel Discussion: Future Perspectives of Nanotechnology <ul style="list-style-type: none"> • Dirk Beernaert, EC • Paolo Gargini, ITRS • Mihail C. Roco, NSF • Hubert Lakner, Fraunhofer-Gesellschaft • Gilbert Declerck, IMEC • Toyohiro Chikyo, NIMS • Toshiro Hiramoto, University of Tokyo <p><i>Introduction & Moderation:</i> Kosmas Galatsis, UCLA</p>
11:30 - 11:45	INC10 Announcement David Seiler, NIST
11:45 - 12:00	Closing Remarks Hubert Lakner, Fraunhofer-Gesellschaft
12:00 - 13:00	Lunch

Organizer: INC9 Global Committee

Partners:
Japan AIST, JEITA, NIMS
USA CNSI, DOD AFOSR, NIST, NSF, SEMATECH, SIA, SRC
Europe EC, CEA, ENIAC, Fraunhofer Mikroelektronik, IMEC



READY TO TAKE OFF?

See you next year at INC10 in Washington.

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