

Wednesday, 08 September, 2010
Frontiers of the Nanoelectronics
International Symposium, Technische Universität
München



The symposium is part of the project "Nanoelectronics in Germany" conducted by acatech (German Academy for Science and Engineering). It will focus on the long term potential and the challenges of nanoelectronics. The symposium will take place in the Theresianum of TUM (Theresienstraße 21) on

September 8th (14:00-19:00) & September 9th (9:00-18:00), 2010.

Organizers: acatech, the TUM Institute for Advance Study, the TUM Institute for Nanoelectronics and the Fraunhofer Research Institution for Modular Solid State Technologies.

Chairpersons: K. Bock (Fraunhofer EMFT), P. Lugli (TUM) and P. Russer (TUM)

Speakers:

- G. Abstreiter (Technische Universität München) – Semiconductor nanowires
- Y. Arakawa (University of Tokyo) - Quantum dot and photonic crystal for advanced light sources
- C. Chang-Hasnain (University of California Berkeley) – Nanolaser on silicon substrate
- S. Deleonibus (CEA-LETI Grenoble) - Silicon nanoelectronics: challenges and opportunities
- T. Geelhaar (Merck KGaA, Darmstadt) – Materials for Printed Electronics
- R. Gross (Walther-Meissner-Institut Munich) - Solid State Nanostructures for Quantum Electronics
- K. Hahn (BASF SE, Ludwigshafen) – Materials for high efficient organic LED
- S. Harrer (IBM Yorktown) – The DNA-Transistor: Nanotechnology for DNA-Sequencing
- O. Hayden (Siemens Erlangen) – Magnetic flow cytometry
- K. Karrai (Attocube Systems) - Ultra-compact long-range interferometric displacement sensing
- H. Klauk (MPI Stuttgart) – Fabrication and Characteristics of Organic Nanoscale Transistors
- H. Kurz (AMO, Aachen) – Carbon electronics : The hype and hope of graphene
- C. Kutter (Infineon Technologies) – System on Chip Integration and System in Package Integration for Mobile Phone Applications
- G. Mohr (Fraunhofer EMFT, Munich) - Fluorescent nanosensors for application in medical research and biotechnology
- E. Molinari (University of Modena-Reggio Emilia) – Designing graphene nano/opto-electronics
- D. Pavlidis (TU Darmstadt/University of Michigan) – Nitride epitaxy and nanodevice technologies
- W. Porod (Notre Dame University) – Nanomagnetism for logic circuits
- H. Riel (IBM Zurich) – Towards ultimate scaling: semiconducting nanowires and molecular electronics
- M. Van Rossum (IMEC, Leuven) – Novel materials for CMOS-based nanoelectronics systems: stretching Moore's law?

Registration: The registration fee are 150 EUR. It includes conference booklet, coffee breaks, lunch and social dinner. A reduced student registration fee of 50 € is available. Please register with the attached registration form, either by fax +49. 89.54759–550 or mailto: gabriele.reiner@emft.fraunhofer.de.

Please visit the conference website www.nano.ei.tum.de/nano-frontiers for further information on the workshop. For any question please contact nano@ei.tum.de.

Cosponsored by: GAUSS Instruments, Siemens AG, Excellent Cluster "Nanosystem Initiative Munich"