



## Nano and Giga Challenges in Electronics, Photonics and Renewable Energy

Symposium and Summer School (Tutorial Lectures)  
Moscow - Zelenograd, Russia, September 12-16, 2011

**Co-chairmen:** *Yuri Gulyaev, Alexey Khokhlov, Victor Bykov, Stephen Goodnick, and Anatoli Korkin*

The **NGC2011** forum in Russia invites academic and industrial researchers to present tutorial, expository and original research papers dedicated to solving scientific and technological problems in electronics, photonics and renewable energy such as atomic scale materials design; bio- and molecular electronics; high frequency electronics; fabrication of nanodevices; magnetic materials and spintronics; materials and processes for integrated and subwave optoelectronics; nanoCMOS; new materials for FETs and other devices; nanoelectronics system architecture; nano optics and lasers; non-silicon materials and devices; quantum effects in devices; nano science and technology applications in development of novel solar energy devices, fuel cells and batteries. We also invite inventors, entrepreneurs and business leaders to explore the unique opportunity provided by our interdisciplinary forum for technical due diligence and potential commercialization of emerging new technologies. Sponsors and exhibitors are welcome and will be supported by the organizers in their needs for networking and marketing of their products and organizations.

**Hosted by** M.V. Lomonosov Moscow State University (MSU) and NT-MDT the NGC2011 meeting will be held at two locations, MSU (summer school and symposium) and in Zelenograd (Symposium and satellite workshop on nanotechnology instrumentation meetings), hometown of NT-MDT headquarters, suburban city of Moscow, where several leading Russian education and research centers and production facilities related to the electronics are located.

The first three meetings in the series of Nano & Giga Challenges conferences, NGCM2002 in Moscow, NGCM2004 in Krakow, and NGC2007 in Phoenix, were focused on the interdisciplinary research in electronics and photonics from the fundamentals of materials science to the development of new system architectures. The last NGC2009 forum in Canada and our next NGC2011 meeting in Russia expand the topics to renewable energy research and development based on semiconductor and other materials, including organic and biomolecular systems.

For further information and registration visit our web site at: <http://asdn.net/ngc2011>  
or contact [organizers@asdn.net](mailto:organizers@asdn.net)