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## 2009 IEEE INTERNATIONAL SOI CONFERENCE



*Full Moon over Golden Gate Bridge, San Francisco*

Courtesy of California Travel & Tourism Commission – C. Heeb

The premier conference dedicated to current trends in Silicon-On-Insulator technology will be held in Foster City, California, U.S.A., at the Crowne Plaza Hotel within Silicon Valley's high technology region. It will run October 6–8, 2009, preceded by a one-day tutorial Short Course on Monday, October 5th and will also feature a half-day educational class focusing on the fundamentals of SOI technology.

The conference was established with the support of IEEE to provide a forum for open discussion in all areas of silicon-on-insulator technologies and their applications. Ever increasing demand and advances in this technology make it essential to meet to discuss new gains and accomplishments, as well as to consider the new developments introduced in original papers presented at the conference.

### Short Course

Once again, the popular One-Day Tutorial Short Course will be offered preceding the 2009 SOI International Conference. Tutorial Short Course instructors have many years of experience in the field

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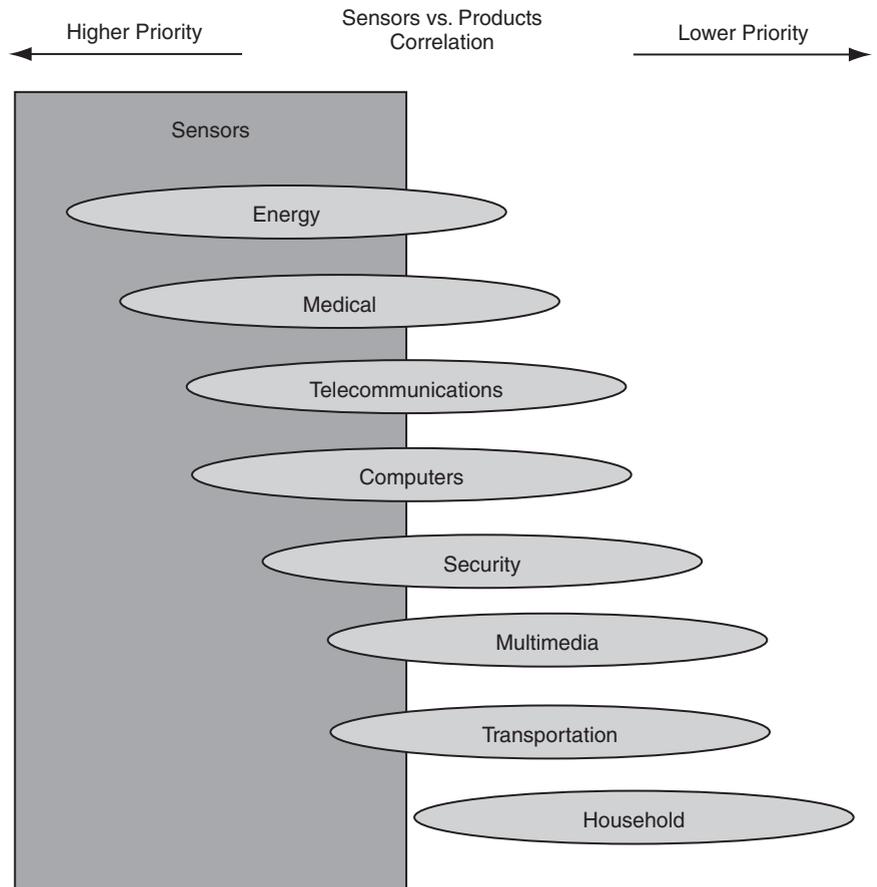
### YOUR COMMENTS SOLICITED

Your comments are most welcome. Please write directly to the Editor-in-Chief of the Newsletter at [nstojadinovic@elfak.ni.ac.yu](mailto:nstojadinovic@elfak.ni.ac.yu)

# INTERNATIONAL SURVEY ON PRIORITIES FOR NANO-ELECTROTECHNOLOGIES STANDARDS

The Electron Devices Society contributed to the success of a recent survey to build a consensus on priorities for international standards to accelerate innovations in nano-electrotechnologies. The survey was web-based and opened for approximately 6 months during 2008. The National Institute of Standards and Technology (NIST) and Energetics Incorporated collaborated with the International Electrotechnical Commission Technical Committee 113 (IEC TC 113) on nano-electrotechnologies to survey members of the international community about priorities for standards and measurements in this field. It elicited more than 450 completed survey responses from 45 countries. Energetics and NIST report on the survey results in a paper, *Priorities for Standards and Measurements to Accelerate Innovations in Nano-electrotechnologies: Analysis of the NIST-Energetics-IEC TC 113 Survey*, that will be published in the NIST Journal of Research, Volume 114, Issue 2, March–April 2009. A preprint version of the survey analysis is now available for download at [http://www.nist.gov/eeel/semiconductor/upload/NIST\\_Energetics\\_Survey.pdf](http://www.nist.gov/eeel/semiconductor/upload/NIST_Energetics_Survey.pdf).

Analyzing the survey results by two different statistical methods gave consistent priorities for items ranked in each of five nano-electrotechnology categories: 1) Properties, 2) Products, 3) Cross-cutting Technologies, 4) General Discipline Areas, and 5) Stages of the Linear Economic Model. The global consensus suggests that standards and measurements having the highest priorities are those for electronic and electrical properties of sensors



*Schematic of the correlation of the highest priority Cross-Cutting Technology item Sensors with the ranked items in the Products Category*

and fabrication tools that support performance assessments of nanotechnology enabled sub-assemblies used in energy, medical, and computer products.

Nano-electrotechnologies are expected to be one of the key technologies of the 21st century. They have enormous potential for the development of new products with exceptional performance. Recent reports indicate that the materials and equipment market for nanoelectronics was \$1.8 billion in 2005 and is expected

to grow to over \$4 billion in 2010. The continued rapid growth of nanoelectrotechnologies-based industries has required increased international standardization activities to support equitable and efficient business models. Effective international standards will permit the use of nano-enabled products in any nation.

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