

# First Announcement

## WoDiM 2010

16<sup>th</sup> Workshop  
on Dielectrics in Microelectronics  
June 28 – 30, 2010 in Bratislava, Slovakia

### Scope

New challenges offered by the application of dielectric materials in microelectronics will be discussed during the 16th Workshop on Dielectric Materials, WoDiM 2010. The goal of the WoDiM 2010 conference is to create a stimulating international platform for application-oriented scientists to exchange ideas and the latest experimental results covering the physics, technology and characterisation of dielectric materials in silicon integrated circuits.

### Topics

#### *Emerging dielectric materials, technologies and new device approaches*

Theory of dielectric materials, interface science of dielectrics in contact with semiconductors & metals  
Advanced technologies for thin dielectric film growth (ALD, MOCVD, PLD, MBE,...)  
Characterisation of dielectrics with high sensitivity & spatial resolution, characterisation at nano-scale  
Multiferroics, 2-DEG at dielectric interfaces, emerging dielectric materials  
Novel oxide-based approaches to engineer SOI and GOI wafers

#### *Dielectrics for aggressively scaled CMOS and other field effect devices*

High-k dielectrics on Si  
High-k dielectrics on high mobility semiconductors: Ge, III-V, III-N  
High-k/metal gate stack, characterisation, scaling, stability  
Defect characterisation, engineering of dielectrics, leakage currents  
Electrical characterisation and reliability of devices with alternative dielectrics

#### *Dielectrics for memory applications*

High-k dielectrics for MIM (DRAM etc.)  
Resistive switching in dielectrics  
Dielectrics for non-volatile memories (flash, nanocrystal-based memories,...)  
Ferroelectrics

### Invited speakers

Bibes, M., CNRS/Thales and University Paris-Sud, Orsay, France  
Dimoulas, A., Institute of Materials Science, NCSR Demokritos, Athens, Greece  
Frank, M. M., IBM, Yorktown Heights, New York, USA  
Hashizume, T., Hokkaido University, Sapporo, Japan  
Kaczer, B., IMEC, Leuven, Belgium  
Kummel, A. C., University of California, San Diego, La Jolla, California, USA  
Lucovsky, G., NC State University, Raleigh, North Carolina, USA  
Paskaleva, A., ISSP, Sofia, Bulgaria,  
Ritala, M., University of Helsinki, Helsinki, Finland  
Schlom, D. G., Cornell University, Ithaca, New York, USA  
Waser, R., RWTH Aachen, Aachen, Germany  
Wenger, Ch., IHP, Frankfurt (Oder), Germany,  
Zubko, P., University of Geneva, Geneva, Switzerland

**WoDiM 2010** will be organized by the Institute of Electrical Engineering, SAS, Bratislava

For further informations, please consult our web page: <http://www.wodim2010.sk/>

