

Final Announcement and Call for Papers

The main objective of the workshop is to bring together specialists who work in the field of dielectrics and all aspects of their application in the field of micro and nanoelectronics. The forum is intended to provide an overview of the state of the art in this significant field, and to promote a relatively informal atmosphere for the discussion of the latest research results. The workshop deals with a range of issues in the field of advanced and new dielectrics, such as: growth and deposition, modelling and simulation, physical and electrical properties, reliability and dielectric applications.

We invite you to submit an abstract for oral or poster presentation in one or more of the following areas:

- Advanced dielectrics on Si, III/V and Ge for advanced CMOS: High-k/metal gate stack; Low-k dielectrics
- Dielectrics for memories PCRAM, RRAM, CBRAM, DRAMs; Flash, nanocrystal-based, FRAM etc.
- MOS systems on GaN and SiC and other wide band gap semiconductors
- Dielectrics on 2D materials: metal dichalcogenides (MoS₂, WSe₂, MoSe₂ etc) and on Graphene
- Theory and modeling: growth of dielectrics by ALD, MOCVD, PLD, MBE, etc.; interfaces, 2D materials, circuit implications; Simulations and modeling of breakdown, reliability, trapping etc.
- Characterization methods with high sensitivity & spatial resolution; SOI and GOI wafer engineering;
- SiO₂ and oxynitrides (growth, characterization, reliability, radiation effects and applications); Reliability, Variability, electrical and physical characterization methods of classical and alternative dielectrics on single or multi-layered 2D systems
- Emerging dielectric materials and technologies: oxide/semiconductor interfaces in solar cells; Dielectrics for capacitors, MEMS and sensors applications; Light emission from dielectrics, Si/SiO₂ superlattices, nanoclusters embedded in dielectrics; Dielectrics for TFTs, amorphous or organic devices; MOS structures in rectennas and water splitting cells

On the high-k / III-V topic at WoDiM 2016 there will be a joint workshop with the EU Research Project COMPOSE³ (<http://www.zurich.ibm.com/news/14/compose3.html>).

INVITED SPEAKERS: Christopher Hinkle, UTDallas; Gaudenzio Meneghesso, Padua Univ.; James H. Stathis, IBM-USA; Jacopo Franco, IMEC; Nava Setter, EPFL; Christian Wenger, IHP; Barbara De Salvo, LETI; Hiroshi Iwai, Tokyo IoT; Erik Lind, Lund Univ.; Alain Bravaix, IM2NP; Moshe Eizenberg, Technion, Thierry Baron, CNRS; Vladimir Djara, IBM-Switzerland

SUBMISSION DEADLINE: March 30, 2016

Please send your 2 page abstract (including figures) preferably by e-mail (MS Word or pdf file) to wodim2016@imm.cnr.it, or e-mail to the Chair (no fax submissions). Please state your preference for oral or poster presentation. Submissions will be acknowledged and final notification will be sent in **mid April 2016**.

Papers presented at WoDiM 2016 shall be submitted for publication in the Jan/Feb JVST B 2017 issue of the Journal of Vacuum Science and Technology B.

Chair

Salvatore Lombardo,
WoDiM 2016
CNR-IMM,

Zona Industriale, Ottava Strada, 5, 95121 Catania, ITALY

Tel: + 39 095 5968 223, Fax: + 39 095 5968 312

e-mail: salvatore.lombardo@imm.cnr.it, salvatore.lombardo@cnr.it

Web Site: <http://wodim2016.imm.cnr.it>

WoDiM Committee: Anton Bauer, Volkhard Beyer; Mikael Cassé; Karim Cherkaoui; Catherine Dubourdieu; Karol Fröhlich; Blas Garrido Fernandez; Gérard Ghibaudou; Gabriella Ghidini; Paul Hurley; Fernanda Irrera; Ben Kaczer, Salvatore A. Lombardo, Montserrat Nafría Maqueda; Andreas Martin; Alessandro Paccagnella; Thomas Schroeder; Chadwin Young