

# WODIM 2018

20<sup>th</sup> Workshop on Dielectrics in Microelectronics  
June 11-14, 2018 | Berlin, Germany

## SCOPE

WODIM is a biennial event, which brings together chemists, physicists, technologists and electrical engineers from around the world to discuss the newest developments in all aspects of dielectric films / nanostructures in nanoelectronics as well as in new fields where dielectrics on semiconductor or metal provide low-power functionalities.

The forum is intended to provide an overview of the state of the art in these fields, and to promote discussion of the latest research results. Contributions from students are particularly encouraged. For this 20<sup>th</sup> edition, we will bring together experts in nanoelectronics and electrochemistry for discussing topics where both electronic and ionic phenomena are relevant and often intimately mixed. Challenges will be addressed and future perspectives drawn.

## TOPICS

- Advanced dielectrics for gate stack on Si, Ge and III-V for ultimate scaling
- Dielectrics on wide band gap materials
- Dielectrics for memories (flash, nc-Si, MIM, DRAM, RRAM, spin memories...)
- Dielectrics on carbon-based platforms
- Dielectrics on 2D materials
- Surface preparation for dielectric deposition and high electronic quality interface
- Advanced characterization methods of dielectrics and their interfaces
- Electrical characterization and reliability of devices with advanced dielectrics
- Physics and defect chemistry of dielectrics
- Theory and modeling of dielectrics
- Dielectrics for TFTs, amorphous or organic devices and photovoltaics
- Dielectric/semiconductor heterostructures for solar fuels & water splitting cells
- Dielectrics for integrated photonics & plasmonics
- Dielectrics for sensor applications
- Complex oxides integrated on semiconductors

## INVITED SPEAKERS

- **Martin ALBRECHT**, Institute for Crystal Growth (IKZ), Berlin, Germany
- **Eduard CARTIER**, IBM T.J. Watson, Yorktown Heights, USA
- **Xavier GARROS**, CEA-LETI, Grenoble, France
- **Sergei KALININ**, Oak Ridge National Laboratory, USA
- **Pooi See LEE**, Nanyang Technological University, Singapore
- **Ivona MITROVIC**, University of Liverpool, UK
- **Gang NIU**, Xi'an Jiaotong University, China
- **Clemens OSTERMAIER**, Infineon Technologies, Austria
- **Bipin RAJENDRAN**, New Jersey Institute of Technology, USA
- **Elena SAVINOVA**, University of Strasbourg, France
- **Uwe SCHROEDER**, NaMLab, Dresden, Germany

WODIM 2018 is organized by the Helmholtz Zentrum Berlin für Materialien und Energie and will be hosted at the Park Inn hotel at Alexanderplatz in Berlin, Germany.

## ORGANIZING COMMITTEE AT HZB

Catherine Dubourdieu, Nikoline Hansen, Hanno Kröncke, Saurabh Nagar, Marin Rusu, Sebastian Schmitt, Sophie Spangenberg

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Conference Chair: C. Dubourdieu



**Abstract deadline:**  
**Feb. 23, 2018**



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