

## Foreword

On behalf of the Organizing Committee we would like to welcome you at the 2016 International Conference on Simulation of Semiconductor Processes and Devices (SISPAD) in Nuremberg.

With its long-lasting history, the SISPAD conference series is a world-wide forum for the presentation and discussion of outstanding recent advances and developments in the field of numerical modeling and simulation of semiconductor processes, devices and circuits.

The first SISPAD conference took place 20 years ago in Tokyo, Japan, as the successor of the three preceding conferences NUPAD, VPAD and SISDEP, which were each held on a bi-annual basis in the USA, Japan and Europe, respectively. The last European SISDEP conference was held in 1995 in Erlangen, Germany, about 10 miles away from the SISPAD 2016 conference site. It was also organized by Fraunhofer IISB. So in fact we now celebrate the 20th anniversary of SISPAD, and in doing so the conference does not only come back to Germany, but also to the Metropolitan area of Nuremberg in the heart of Franconia which forms the northern part of Bavaria. In the conference program we celebrate the anniversary with a keynote speech “20 Years of SISPAD: Adolescence of TCAD and Further Perspectives” by Prof. Mark Law from the University of Florida, and by a conference dinner speech given by Prof. Siegfried Selberherr, one of the founders of SISPAD. We also look into the future with the invited presentation “Future Perspectives of TCAD in Industry” given by Dr. Terry Ma of Synopsys. Five further invited presentations address other focal topics of SISPAD.

The conference organizers are happy for having received 138 contributed abstracts with first authors from 25 countries and four continents. This reflects the truly intercontinental nature of the SISPAD conference series. From the abstracts received, 64 oral presentations and 20 posters were selected by the 25 members of the Technical Program Committee.

Three workshops held on September 5 are accompanying SISPAD 2016 and deal with interconnect simulation, the simulation of spin-based devices, and design-technology co-optimization.

The conference organizers are happy to introduce you to the local flavor of Franconia via the style of the conference site Hotel Méridien, the conference dinner held at the historical room of the Old Town Hall, and the conference reception held at the “Germanisches Nationalmuseum”. All these sites are within walking distance in or at the rim of the historical center of Nuremberg.

We are very grateful to this year’s SISPAD sponsors ams, ANSYS, COVENTOR, Global TCAD Solutions, Infineon, QuantumWise, SILVACO, STMicroelectronics, Synopsys, and the German Research Foundation DFG. The IEEE and the IEEE EDS provide technical co-sponsorship. We thank the Steering Committee for having assigned SISPAD 2016 to the organizers and to Nuremberg, the members of the Technical Program Committee for their efforts to review the papers and to assemble an exciting conference program, the seven invited speakers, all authors who submitted abstracts to SISPAD 2016 or present at the conference, and all colleagues who value the efforts of these teams by participating in the conference. Finally we want to thank all members of the Local Organizing Committee and all other people who have contributed to provide a very good environment and infrastructure for the conference.

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