

## GUEST EDITORIAL

# EuMW special issue

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It has meanwhile become a tradition for the *European Microwave Association* (EuMA) to devote a special issue of its *International Journal of Microwave and Wireless Technologies* to its major and most prestigious conference event, the annual *European Microwave Week* (EuMW). Its most recent edition, the 16th EuMW, took place from October 6–11, 2013, in Nuremberg, Germany, at the Nürnberg Convention Center. With its three separate conferences, the 8th *European Microwave Integrated Circuits Conference* (EuMIC), the 43rd *European Microwave Conference* (EuMC), and the 10th *European Radar Conference* (EuRAD) the EuMW gathered 1500 scientists and practitioners from all over the world to discuss the most recent advances in all relevant microwave topics.

With some 1055 contributions the Call for Papers resulted in a record number of paper submissions from which, based on the scoring of 500 reviewers, the Technical Programme Committee (TPC) found 579 to be within the scope of the conference and scientifically or technically acceptable. Based on the scores of the reviewers and on the recommendations of the TPC, the authors of the top ranked papers were invited to submit extended papers. These had to fulfill severe conditions, especially with respect to significant extension of scientific content as compared to the original conference paper, and were again subjected to a rigorous review process.

As an outcome of this very selective process a total of 25 papers have been accepted for publication in this special issue. One contribution, though, which was not ready in time, will appear in the next regular issue of this journal. The selected papers cover the broad range of subjects presented during the EuMW and address applications ranging from microwave frequencies up to the terahertz region. This includes some of the latest advances on active circuits, but also on means of tuning and reconfiguring them. Innovative designs of passive components and sensors are discussed as well and quite a variety of novel antenna configurations and related aspects are presented. A large number of contributions deal with various facets of system applications and, in particular, with radar.

This Guest Editorial would not be complete without acknowledging the invaluable effort of the reviewers, the Editor-in-Chief, and the editorial staff for helping to make this special issue of the *International Journal of Microwave and Wireless Technologies* a hopefully interesting and long-lasting contribution to microwave technology. Last but not least, we would like to thank the authors for contributing and congratulate them for their excellent work.



**Manfred Berroth** received the Dipl.-Ing. degree in Electrical Engineering from the University of the Federal Armed Forces, Munic in 1979 and the Dr.-Ing. degree from Ruhr-University, Bochum in 1991. From 1980 until 1986 he was engaged in radar air traffic services and head of a communication center. In 1987 he joined the Fraunhofer Institute for Applied Solid State Physics (IAF), Freiburg, where he worked on device modeling of heterojunction field effect transistors and design of analog, digital, and mixed signal circuits in the GHz frequency range. After 1991 he became head of the department for development of devices and circuits and in 1995 Deputy Director of the IAF. Since October 1996 he holds the chair for Electrical and Optical Communication Engineering at the University of Stuttgart. His research interests are on modeling and characterization of electronic and optoelectronic devices and integrated circuits. He has authored and co-authored more than 100 papers and gave more than 20 presentations at international conferences. He reviewed papers for international journals like IEE Electronic Letters, IEEE MTT, CAS, and ED.



**Arne F. Jacob** received the Dipl.-Ing. degree in Electrical Engineering in 1979 and the Dr.-Ing. degree in 1986 from the Technische Universität Braunschweig, Germany. From 1986 to 1988 he was a Fellow at CERN, the European Organization for Nuclear Research, Geneva, Switzerland. In 1988 he joined Lawrence Berkeley Laboratory, University of California at Berkeley for almost three years as a Staff Scientist at the Accelerator and Fusion Research Division. In 1990, he became a professor at the Institut für Hochfrequenztechnik, Technische Universität Braunschweig. Since October 2004 he has been a Professor at the Technische Universität Hamburg-Harburg, Hamburg, Germany, where he heads the Institut für Hochfrequenztechnik. His current research interests include the design, packaging, and application of integrated (sub-)systems up to millimetre frequencies, and the characterization of complex materials. Arne F. Jacob is a member of the EuMA, the VDE-ITG, and the URSI Commission B, and a Fellow of the IEEE. He was Chair of the 2013 European Radar Conference (EuRAD 2013).



**Lorenz-Peter Schmidt** received the Dipl.-Ing. and the Dr.-Ing. degrees in Electrical Engineering from the Technical University of Aachen, Germany, in 1974 and 1979. In 1979, he became a PostDoc with the University of Texas, Austin. From 1980 to 1998, he was with AEG-Telefunken, Ulm, Germany (now AIRBUS, Defence &

Space), where he later became the Head of the Corporate Advanced Millimeter-Wave Technologies Department. His R&D activities included GaAs MMIC design up to 100 GHz, millimeter-wave interconnect and packaging technologies,

radar sensors, transceiver front-end technology, and antennas and in the range of 10–100 GHz. Since 1998, he has been a Full Professor and the Head of the Institute of Microwaves and Photonics at the University of Erlangen-Nuremberg, Germany. His main research interests are in the field of millimeter wave and terahertz components and antennas as well as active and passive high-resolution imaging systems. Dr. Schmidt is a Member of VDE, Past-Chairman of the VDE/ITG Expert Group on Microwave Techniques, and a member of the German IEEE MTT/AP Chapter Commission. In 2003, he served as the General Chairman of the European Microwave Week and in 2013 as the EuMC Chairman. In 2013 he received the Microwave Prize of the MTT Society.