



BiCMOS and Compound Semiconductor Integrated Circuits and Technology Symposium

Sheraton San Diego Hotel and Marina, San Diego, CA, USA

Sunday, October 14, 2018 – Wednesday, October 17, 2018



BCICTS 2018

BCICTS: the merger of BCTM and CSICS

Featuring topics related to BiCMOS and Compound Semiconductor Technologies:

- Analog, RF, and Microwave ICs
- mmW & THz ICs
- Process and Device Technology
- Modeling/Simulation
- Device Physics
- High Speed Digital, Mixed Signal, and Optical ICs

Short Course (Sunday, Oct. 14):

Phased Arrays and Massive MIMO: Technology and Systems

Renowned experts from academia and industry will share their views on technology and systems for active antenna systems used in massive MIMO, 5G, and beyond.

BCICTS 2018's Short Course will feature:

Mark Rodwell (UCSB) **Arun Natarajan (OSU)** **Amitava Ghosh (Nokia)**

Primer Course (Monday Morning, Oct. 15):

SiGe Technology and mmW Layout Techniques

Renowned experts from industry teach present more tutorial and fundamental instruction for those new to the field or wanting a refresher. This will include SiGe technology and mm-wave layout tips and tricks components.

Pascal Chevalier (ST-Microelectronics) **Shahriar Shahramian (Bell Labs/Nokia)**
SiGe Technology *mm-Wave Layout Techniques*

Plenary Speakers:

Alvin Joseph, (GLOBALFOUNDRIES)
Technology Positioning for mmWave Applications: 130/90nm SiGe BiCMOS versus 28nm RFCMOS

Jonathan Klamn (UCSB)
Indium Phosphide Photonic Integrated Circuits: Technology and Applications

Matthew Morton (Raytheon)
The RF Sampler: Chip-scale Frequency Conversion and Filtering Enabling Affordable Element-level Digital Beamforming

Ulrich Pfeiffer (Institute for High-Frequency and Communication Technology, University of Wuppertal)
Current Status of Terahertz Integrated Circuits - from Components to Systems

Invited Talks:

- SiGe HBT PA design for 5G (28 GHz and beyond) - Modeling and Design Challenges
- On-Wafer Transistor Characterization to 750 GHz –the approach, results, and pitfalls
- Scaling Millimeter-wave Phased Arrays: Challenges and Solutions
- Materials, Processes, and Markets for Monolithic III-V Devices in Silicon Integrated Circuits
- SiGe BiCMOS Current Status and Future Trends in Europe
- GaN HEMT for Space Applications
- FinFET for mmWave - Technology and Circuit Design Challenges
- Nonlinear Embedding of FET Devices for High Efficiency Power Amplifier Design
- Non-linear RF Modeling of GaN HEMTs with Industry Standard ASM GaN
- Carrier Transport in BJTs: From ballistic to diffusive and off-equilibrium
- Analog Optical RF-Links for Large Radio Telescopes
- 650 Volt GaN: Highest Quality-Highest Performance Drives Market Ramp

Exhibition:

The Exhibition will feature informative and interesting displays with corporate representatives on hand to answer any questions you may have. If you are interested in exhibiting, please contact our exhibit services manager, listed below, or visit our website at www.bcicts.org for more information.

Conference General Chairs:

Peter Magnee Brian Moser
NXP Qorvo
Ph: +31 6 227 88465 Ph: +1 336 678 8573
peter.magnee@nxp.com brian.moser@qorvo.com

Technical Program Chairs:

Pete Zampardi Sorin Voinigescu
Qorvo University of Toronto
Ph: +1 805-480-5087 Ph: +1 416-946-8664
peter.zampardi@qorvo.com sorinv@ece.utoronto.ca

Conference Manager:

Catherine Shaw, CMP
C Shaw, LLC
Phone: +1 516-888-0617
E-mail: cs@cshawevents.com

Exhibit Services Manager:

Candi Wooldridge
MP Associates
Phone: +1 303-530-4562
E-mail: candi@mpassociates.com

