

SiRF 2018

Dietmar Kissinger



At the 2018 IEEE Radio & Wireless Week (RWW 2018), which takes place 14–17 January, the IEEE Topical Meeting on Silicon Monolithic Integrated Circuits in RF Systems (SiRF), one of five parallel topical conferences/ meetings that make up RWW, will celebrate its 18th year. In most countries around the world, one's 18th birthday represents the age of majority, the threshold of adulthood as recognized or declared by law. It is a funny coincidence, because the technologies, circuits, and systems SiRF will focus on in its 18th year have clearly reached an important level

Dietmar Kissinger (dkissinger@ ihp-microelectronics.com) is with IHP, Frankfurt, Germany, and the Technische Universität Berlin, Germany. He is the RWW 2018 Executive Committee chair.

Digital Object Identifier 10.1109/MMM.2017.2738462 Date of publication: 12 October 2017 of maturity. After a wild childhood, which revolutionized mobile communications, silicon RF reached puberty, the typical age to begin exploring limits. Pushing against limits brought silicon RF to millimeter-waves and terahertz frequencies, casually conquered radar applications, and moved radar from being a widely understood but specialized technique into the mass market of automotive sensors.

After these wild years, we now have an almost adult technology, recognized for its performance and reliability in realizing even complex circuits and RF systems. Based on its solid foundation, this adult technology is now on the cutting edge in the exploration of new directions and is helping to support several big trends in research, science, and technology. In fact, 5G mobile communications—with its highly demanding millimeter-wave phased arrays—would be impossible without the mature technology of silicon RF. Additionally, the Internet of Things clearly demands highly optimized lowpower silicon RF transceivers.

Ultimately, right now we can only guess about the full potential of cheap millimeter-wave and terahertz transceivers for radar sensors, but it is clear that autonomous driving would not be possible without silicon RF. Working in this ever-changing branch of the industry may be more interesting than ever before, because all these new applications demand intelligent engineers with brilliant ideas, ideas that this maturing technology can allow to move toward fruition.

SIRF 2018 will take place in Anaheim, California, which is not only a good place to be in January, due to its moderate winter temperatures, but also

(continued on page 104)

Welcome to IEEE Radio & Wireless Week 2018 (continued from page 12)

during which senior executives from nearby companies will speak on a topic relevant to young engineers and scientists in the community.

The last time the MTT-S held a conference in Anaheim was IMS2010. In the last seven years, the Disneyland Resort and Disney California Adventure parks have been upgraded with several new rides and shows. Currently we have specially priced tickets for the Disneyland Resort, which can be obtained through a link on the RWW 2018 website.

A Note of Thanks

Thanks to all those who have helped make this a great issue, highlighting the many facets of RWW 2018. We especially thank the feature article authors, who have expanded their papers for publication in this issue of the magazine, and Dietmar Kissinger for serving as guest editor. Finally, a special thank you goes out to the MTT-S AdCom, RWW 2018 Executive and Steering Committees, and members of each conference's TPRC for the countless hours involved in bringing together this program. We look forward to seeing all of you in Anaheim!

SiRF 2018 (continued from page 23)

in close proximity to many hot spots of RF and wireless industry and research. Additionally, the Disneyland Resort is nearby and will offer special rates for conference attendees; so, as SiRF transitions to "adulthood," it can (like many other 18-year-olds) celebrate its coming of age with a birthday bash at the Magic Kingdom.

A technical committee consisting of 30 reviewers have helped to set up an interesting conference program with sessions addressing the field of wireless applications and circuits as well as passives, microelectromechanical systems, technology, devices, and modeling. The three days of SiRF 2018 will chronicle recent advances in our dynamic field and provide a platform for developing new ideas and candid exchange.

The program of regular presentations will be complemented by five excellent invited talks covering the full spectrum of the conference:

- Prof. James Buckwalter, University of California, Santa Barbara, and Prof. Q. Jane Gu, University of California, Davis, will give presentations on the latest research in highspeed RF circuits and systems.
- Prof. Michael Schroeter, Technical University of Dresden, Germany,

will address innovative research in modeling and devices.

- Industry expert Dr. Peter Magnee will review work being done at NXP Semiconductors.
- Dr. Klaus Aufinger of Infineon Technologies will talk about recent technology improvements and Infineon's current road map.

We have worked hard to make SiRF 2018 an exciting and informative event. For the latest information, visit www .silicon-rf.org. Looking forward to seeing you in Anaheim!

M.

Are You Moving?



Don't miss an issue of this magazine update your contact information now!

Update your information by:

E-MAIL: address-change@ieee.org PHONE: +1 800 678 4333 in the United States or +1 732 981 0060 outside the United States

If you require additional assistance regarding your IEEE mailings, visit the IEEE Support Center at supportcenter.ieee.org.

© ISTOCKPHOTO.COM/BRIANAJACKSON

Ħ