Wireless technologies form a fundamental pillar of modern-day life, making it possible for us to easily and rapidly interact with individuals and businesses locally as well as halfway around the world. The world is data hungry. But it is not just humans contributing to this demand. With the advent of the Internet of Things (IoT), Internet of Space, and 5G technologies, what were once passive, inanimate objects are now participating in the conversation. Moreover, progress is being made on all levels, ranging from the emergence of competing semiconductor technologies to innovations in front-end topologies and systems. It is an exciting time to be a microwave engineer!

The 2019 IEEE Radio & Wireless Week (RWW 2019), sponsored by the IEEE Microwave Theory and Techniques Society, will provide a technical forum on all aspects of wireless technology. This year, RWW will be colocated with two additional events that will undoubtedly enhance the experience. These are the IoT Summit, which was a marked success last year, as well as the 91st Automatic RF Techniques Group Microwave Measurement Symposium (ARFTG). I am happy to welcome you to this IEEE Microwave Magazine special issue on RWW 2019.

RWW 2019 is composed of five colocated IEEE meetings that cover a multidisciplinary spectrum of wireless and microwave technologies and applications. These meetings are the Radio and Wireless Symposium, Topical Meeting on Silicon Monolithic Integrated Circuits, IEEE Topical Conference on RF/Microwave Power Amplifiers, IEEE Topical Conference on Wireless Sensors and Sensor Networks, and IEEE Topical Workshop on the Internet of Space. This special issue includes five feature articles representing each of these conferences:

- “Can You Hear Me Now?: Challenges and Benefits for Connectivity of Hearing Aids and Implants” by Jan-Christoph Edelmann and Thomas Ussmueller
- “Radar Taking Off: New Capabilities for UAVs” by Philipp Hügler, Fabian Roos, Markus Schartel, Martin Geiger, and Christian Waldschmidt

(continued on page 147)
Dr. Whicker achieved notable recognition, having been awarded a Ford Foundation Fellowship, the IEEE Young Engineer Award, and the Aviation Week Laureate Award for RF wafer scale integration.

Dr. Whicker's family has asked that those wishing to honor his memory donate to the IEEE Foundation in his name online at https://www.ieeefoundation.org/how-to-give/tribute-giving or by sending a check to IEEE Foundation, 445 Hoes Lane, Piscataway, NJ 08854. Donations in Dr. Whicker’s memory will support the IEEE Life Members Graduate Study Fellowship in Electrical Engineering.

From the Guest Editor’s Desk (continued from page 29)

- “Think Outside the Band: Design and Miniaturization of Absorptive Filters” by Matthew A. Morgan
- “The RFID Connection: RFID Technology for Sensing and the Internet of Things” by Hengying Shan, John Peterson III, Sutton Hathorn, and Saeed Mohammadi
- “Compact, Portable, and Easy to Use: A Perspective on Transistor Modeling for Gallium Nitride High-Power Amplifier Design” by John Wood.

As you can see, there is something here for everyone. The range of topics also reflects the broad impact that wireless technologies have on our lives, touching on telecommunications, health, space, and so much more. In addition to the five feature articles, this special issue includes several columns from RWW 2019 Steering Committee members describing the conference’s themes, technical program, and workshops.

As guest editor of this IEEE Microwave Magazine special issue on RWW 2019, I would like to thank Editor-in-Chief Robert Caverly for giving us the opportunity to introduce readers to our upcoming RWW 2019 events.

I also want to thank Associate Editor Christian Fager and Assistant Editor Sharri Shaw for their help and support in the publication process of this special issue.

I encourage you as readers of IEEE Microwave Magazine to take time to browse through these articles and get a feeling for the various topics offered by our individual conferences. I hope you will enjoy reading this special issue on RWW 2019 and consider joining us for this special week. See you in Orlando!

Book/Software Reviews (continued from page 144)

Modeling,” explains resistors, capacitors, and transistors.

The second section details the design of power amplifiers and includes ample “tips and tricks.” Chapter 4, “Power Amplifier Design,” discusses class A, class B, class C, matching, stability, gain, voltage standing wave ratio, broadband and balanced amplifiers, and Doherty linearization. Chapter 5, “LNAs,” examines low-noise amplifiers (LNAs) and reviews thermal noise, short noise, noise modeling, and low-noise design. Chapter 6, “Passive Circuity,” covers the Bode–Fano limit, transmission-line discontinuities, directional couplers, isolators and circulators, switches, phase shifters, attenuators, filters/diplexers, splitters/combiners, baluns, mixers, and antennas.

The last section concludes with a focus on component integration, providing detail on design methods for military operations, high manufacturing yield, and preventing measurement issues. Chapter 7, “Microwave Integrated Circuits,” reviews monolithic microwave integrated circuit hybrid, multichip modules packaging, component design, manufacturing practices, and engineering practices for high yield. Chapter 8, “Transmit/Receive Module Integration,” discusses integration techniques, crosstalk, leakage, oscillation, ground loops, coupling, electromagnetic interference shielding, and thermal and mechanical considerations. Chapter 9, “On the Measurement Bench,” explains test fixture design and provides tips for making it all work.

This book includes a great deal of practical RF/microwave engineering knowledge to solve real-world issues, not only in designing but in manufacturing as well. Every RF/microwave engineer should have a copy on his or her desk as a “go-to” book.