



Radio Wireless Week

15 - 19 JANUARY 2012, SANTA CLARA, CA, USA



IEEE



IEEE COMMUNICATIONS SOCIETY

<http://www.radiowirelessweek.org/>

**Paper Deadline
22 July, 2011**

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John T. Barr, *MTT*

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Topical Conferences

RF Power Amplifiers

Joe Staudinger, *Freescale*
Robert Caverly, *Villanova University*

Biomedical Wireless Technologies, Networks and Sensing

Mohamed Mahfouz, *Univ. of Tennessee*
Rizwan Bashirullah, *Univ. of Florida*

Sensors and Sensor Networks

Dietmar Kissinger,
Univ. of Erlangen-Nuremberg

Massood Zandi Atashbar,
Western Michigan Univ.

Workshops Co-Chair

Jon Martens, *Anritsu*

Plenary Session Chair

Jay Banwait, *Northrop Grumman Mission Systems*

Special Consultant and Advisor

George Heiter,
Heiter Microwave Consulting

Student Paper Competition

Co-Chairs

Rashaunda Henderson,
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Talal Al-Attar, *Santa Clara Univ.*

Paper Submission Management

Chair,

Jeremy Muldavin,
MIT Lincoln Laboratory

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Salam Akoum, *The Univ. of Texas at Austin*
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Microwave Magazine Special

Issue Editor,

Debabani Choudhury, *Intel*

Conference Management

Jennifer More, *Fly Events LLC*

First Call For Papers

The 2012 IEEE Radio and Wireless Week (RWW2012) will be held during the week of 15 January, 2012 in Santa Clara, CA, USA. This year, a new demo track will be held to provide an interactive forum for hands-on demonstration of latest wireless experiments and innovations. As with previous years, RWW2012 and SiRF2012 will continue to hold joint sessions. Three topical conferences held in parallel provide more focused sessions in the areas of Power Amplifiers for Wireless and Radio Applications (PAWR), Biomedical Wireless Technologies and Sensing Systems (BioWireless), and Wireless Sensors and Sensor Networks (WiSNet). A short call for papers is on the next page. More information is available through RWW2012 website at <http://www.radiowirelessweek.org/>. For RWS2012, papers featuring innovative work are solicited in (but not limited to) the following areas:

- 1. Passive Antennas**
 - Dipoles, Integrated and Patch Antennas
- 2. Propagation/Channel Modeling and Utilization**
 - Propagation/Channel Characterization and Modeling
 - Fading Countermeasures
 - Spectrum Sensing Technologies
- 3. Transceivers and Front-end Technologies, SOC and SiP**
 - Receiver and Transceiver Components
 - Active Sub-systems
 - Low-Power/Low Noise RF/Analog IC and System-On-Chip Solutions
- 4. MIMO, Signal Processing, and Smart Antennas**
 - Electrically Small and Smart Antennas
 - MIMO and Space-Time Processing
 - Relaying Technology
 - Cooperative/Collaborative Technology
- 5. High-speed and Broadband Wireless Technologies**
 - Broadband Fixed Wireless Techniques and Last-Mile Access Techniques
 - Powerline Communication Technologies
 - 3G/4G Wireless Communication Services
 - Ultra-Wideband (UWB) Systems
- 6. Software Defined Radios and Cognitive Radios**
 - Software/Hardware architectures and Algorithms
- 7. Wireless System Architecture and Modeling**
 - Ad Hoc Network Techniques for Anytime, Anywhere Internetworking
 - Wireless LAN Systems
 - Wireless Mesh and Broadband Local/Personal/Body Area Networks
 - Wireless Security and RFID Technologies
- 8. Emerging Wireless Technologies and Applications**
 - Heterogeneous Mobile Networks and Mobile Network Convergence
 - Multicasting and Broadcasting
 - Satellite Network Systems
 - Ultra-High Data Rate Communications Links
- 9. Digital Signal Processing as Applied to Wireless**
 - Digital/Analog Adaptive/Collaborative Signal Processing
 - Methods for Maintaining Signal Integrity and Signal Conditioning
- 10. Passive Components & Packaging**
 - Discrete, Embedded and Distributed Passive components
 - Filters, Couplers and Signal Separation Devices
 - Discrete and Highly Integrated Packaging

Papers describing technologies that enable Radio and Wireless Systems are welcome including:

- System Level Design, Modeling, and Simulation
- Multilayer integration of RF, energy and sensing components
- Signal Generation and Modulation Circuits
- Microwave Energy Transmission

Paper submission instructions will be found at <http://www.radiowirelessweek.org/>. **Submissions should be formatted according to the submission guide within a maximum of four pages (incl. all figures and references).** Only electronic submissions in PDF format will be accepted for review. Authors should indicate their preference for oral or poster presentation.

All submissions must be received by 22 July, 2011.

All accepted papers will be published in a digest and be included in IEEE Xplore. Submissions will be evaluated based on novelty, significance of the work, technical content, interest to the audience, and presentation.



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First Call For Papers

2012 IEEE Topical Conference on Power Amplifiers for Wireless And Radio Applications



Chairs:

Joe Staudinger, *Freescale*
Robert Caverly,
Villanova University

Power amplifiers are often the most critical component of RF/microwave communications systems and consequently the focus of intense research to achieve increased linearity and power efficiency. New forms of power amplification are being developed to meet the needs of the wireless communication equipment industry and the world's demand for greater information transmission. For the second year, PAWR will be held as part of the Radio Wireless Week. Papers featuring innovative work are solicited in (but not limited to) the following areas of RF/microwave power amplifier technology:

- High Power/Wideband Active Devices
- Power Amplifiers for Mobile, Avionics and Space
- Modeling and Characterization
- Power Amplifier Technology
- Advanced Circuit Design and Topologies
- Green Power Amplifier Technology
- Integration Technology
- Packaging and Reliability
- Linearization and Efficiency Enhancement Techniques
- Applications, Novel Architectures and System Analysis

2012 IEEE Topical Conference on Biomedical Wireless Technologies and Sensing Systems



Chairs:

Mohamed Mahfouz,
Univ. of Tennessee
Rizwan Bashirullah,
Univ. of Florida

The wireless revolution has begun to infiltrate the medical community with patient health monitoring, telesurgery, mobile wireless biosensor systems, and wireless tracking of patients and assets becoming a reality. The rapid evolution of wireless technologies coupled with powerful advances in adjacent fields such as biosensor design, low power battery operated systems, and diagnosing and reporting for intelligent information management has opened up a plethora of new applications for wireless systems in medicine. For the second year, BioWireless will be held as part of the Radio Wireless Week to specifically focus on the latest developments in this area. Papers featuring innovative work are solicited in (but not limited to) the following areas of Biomedical Wireless Technologies, Networks, & Sensing Systems:

- Miniaturization/Integration of Wireless Technologies and Micro Sensors for Medical Applications
- Personal Area Networks and Body Area Sensor Networks in Hospital Environments
- High Data Rate Wireless Protocols & Processing for Biosignals
- Wireless Positioning Technologies in Medicine
- Microwave Systems for Imaging, Diagnostics & Therapeutics
- Biomedical Devices for Remote Monitoring
- New Advances in Understanding Microwave Interaction with Biological Tissues
- Microwave Systems for Biological Applications
- Coexistence and Modeling of Wireless Technologies in Clinical Environments
- Health Monitoring, Energy Scavenging and Biosensor E-textiles

2012 IEEE Topical Conference on Wireless Sensors and Sensor Networks



Chairs:

Dietmar Kissinger,
Univ. of Erlangen-Nuremberg
Massood Zandi Atashbar,
Western Michigan Univ.

Sensors and sensor networks are critical components for manufacturing, structural health, security and transportation monitoring and location and tracking systems. For the second year, WiSNet will be held to specifically focus on the latest developments in the area of RF Sensors and Sensor Networks. Papers featuring innovative work are solicited in (but not limited to) the following areas of wireless sensors systems:

- Sensors For Communication, Radar, Positioning and Imaging Applications
- Integrated RF and MM-Wave Sensor Frontends Or Building-Blocks
- Indoor & Outdoor Local Positioning Technologies
- High-Precision Ultra-Wideband Techniques
- Wireless Sensors Networks and Smart Sensor Systems
- RFID Technologies and Applications
- Surface Acoustic Wave Technologies and Applications
- RF Tracking and Positioning Devices

Paper submission instructions will be found at <http://www.radiowirelessweek.org/>. Submissions should be properly formatted with all figures included **within a maximum of four pages**. Only electronic submissions in pdf format will be accepted for review. Authors should indicate their preference for oral or poster presentation. **All submissions must be received by 22 July, 2011.** All accepted papers will be published in a digest and be included in IEEE Xplore.