

# Selected Areas in Communications Symposium Millimeter-wave Communications Track

#### **Symposium Co-Chairs**

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The 2015 IEEE International Conference on Communications (ICC) will be held in London, UK from 8-12 June 2015. Themed "Smart City & Smart World," with its proximity to Tech City, the fastest growing technology cluster in Europe, this flagship conference of IEEE Communications Society will feature a comprehensive technical program including twelve Symposia and a number of Tutorials and Workshops. IEEE ICC 2015 will also include an exceptional Industry Forum & Exhibition program including business panels and keynote speakers. We invite you to submit your original technical papers, and industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2015 Conference Proceedings and submitted for inclusion in IEEE Xplore®/IEEE Digital Library. Full details of submission procedures are available at http://www.ieee-icc.org/2015.

# **Scope and Topics of Interest**

Globally there are major shortages encountered in the bandwidth available in the microwave bands. This has led to much interest in the exploitation of the comparatively broad spectrum available in the millimetre-wave bands. These frequency bands offer excellent opportunities as well as a different set of constraints due to their propagation characteristics. In particular, the broad bandwidths available are likely to make it a key technology for integration with optical fibre networks to support the back/front-hauling of 5G wireless services or to provide cost-effective access for close-to-customer access systems. The Millimeter-Wave Communications (MWC) Track of the Symposium on Selected Areas on Communications will cover both the underlying technologies and techniques as well as their integration into communications networks. It looks to provide a forum for discussion of the latest research from novel devices/subsystems, through system trails, experiments and propagation studies to advanced network architectures.

The aim of the Millimeter-Wave Communications (MWC) Track is to provide a forum that brings together scientists and researchers from all over the world to present their cutting-edge innovations in all aspects of the field. Papers on practical applications and R&D results from industry and academic/industrial collaborations are particularly encouraged.

The MWC Track of the SAC Symposium solicits original contributions in, but not limited to, the following topical areas:

- Millimeter-wave Communications architectures
- · Standardisation of millimeter-wave communications
- Single-carrier vs. multi-carrier in the mm-wave bands
- Mobile back/front haul using millimeter-wave technologies
- Millimeter-wave Heterogeneous and small cell networks (HetSNets)
- Photonic and integrated fibre millimeter-wave systems
- · Millimeter-wave access networks
- · Propagation measurements and channel modeling in the millimeter-wave bands
- · Security and privacy for mm-wave communications
- Advanced spatial diversity / MIMO in millimeter-wave communications

## **Submission Guidelines**

Prospective authors are invited to submit original technical papers by the deadline 15 October 2014 for publication in the IEEE ICC 2015 Conference Proceedings. All submissions should be written in English with a maximum paper length of Six (6) printed pages (10-point font) including figures without incurring additional page charges (maximum 1 additional page with over length page charge if accepted).

Standard IEEE Transactions templates for Microsoft Word or LaTeX formats found at http://www.ieee.org/portal/pages/pubs/transactions/stylesheets.html

Alternatively you can follow the sample instructions in template.pdf at http://www.comsoc.org/confs/globecom/2008/downloads/template.pdf

Only PDF files will be accepted for the review process and all submissions must be done through EDAS at <a href="https://edas.info/newPaper.php?c=17739&track=57959">https://edas.info/newPaper.php?c=17739&track=57959</a>

### **Co-Chairs Biographies**

John E. Mitchell, received the Ph.D. degree in Electronic Engineering from UCL (University College London), UK in 2000. In 1999 he became a research fellow in the Department of Electronic and Electrical Engineering at UCL (University College London), becoming a Lecturer and Senior Lecturer in 2000 and 2006 respectively. His research interests cover optical and wireless communications technologies with specific interest in optical generation techniques for millimeter-wave communication systems and the use of RF techniques in optical networks, for example for radio-over fibre systems. He has previously led the Virtual Centre of Excellence in Access, part of the European Union, Framework Seven Programme, Network of Excellence, 'BONE', Building the Optical Network for Europe. Dr. Mitchell is a Chartered Engineer and a Member of the Institute of Engineering and Technology (IET) and IEEE Communications and Photonics Societies.