

IEEE International Conference on Communications
IEEE ICC 2014
Communications: The Centrepiece of the Digital Economy
10-14 June 2014, Sydney, Australia

Selected Areas in Communications Symposium
Nanoscale, Molecular and Quantum Networking Track

Symposium Co-Chairs

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The 2014 IEEE International Conference on Communications (ICC) will be held in the beautiful city of Sydney, Australia between 10 and 14 June 2014. The theme of this flagship conference of IEEE Communications Society for 2014 is “*Communications: The Centrepiece of the Digital Economy.*” The conference will feature a comprehensive technical program including twelve Symposia and a number of Tutorials and Workshops. IEEE ICC 2014 will also include an attractive expo program including keynote speakers, and Industry Forum & Exhibitions (IF&E). We invite you to submit your original technical papers, industry forum, workshop, and tutorial proposals to this event. Accepted and presented papers will be published in the IEEE ICC 2014 Conference Proceedings and in IEEE Xplore®. Full details of submission procedures are available at <http://www.ieee-icc.org/2014>.

Scope and Topics of Interest

The area of **Nanoscale, Molecular, and Quantum Networking** addresses communication and networking issues in nano-to-micro scale (or multiscale) systems, such as molecular, biological, chemical, and quantum systems, that are composed of large numbers of autonomous and distributed components. The topics of interest include theoretical modeling and analysis, experimental studies, proof-of-concept demonstrations, practical and industrial applications, and standardization of nanoscale communication (including nano-to-micro scale and multiscale communication).

Topics of Interest (not limited to)

Nanoscale, Molecular, and Quantum Networking

- Molecular communication and nano-networks
- Signal propagation and processing for nanoscale communication
- Channel modeling and capacity analysis for nanoscale communication
- Synchronization for nanoscale communication
- Media access control for nanoscale communication
- Switching and routing for nanoscale communication
- Localization and topology management for nanoscale communication
- Network architectures and protocols for nanoscale communication

- Energy efficiency in nanoscale communication
- Communication across different scales (e.g., nano-to-micro, micro-to-nano)
- Communication between living and non-living systems
- Bio-inspired approaches to nanoscale communication
- Emergent behavior of nano-to-micro scale systems
- Applications of nanoscale communication
- Standardization of nanoscale communication and networking

Submission Guidelines

Prospective authors are invited to submit original technical papers by the deadline 15 September 2013 for publication in the IEEE ICC 2014 Conference Proceedings and for oral or poster presentation(s). 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

<http://edas.info/>

Tadashi Nakano is an associate professor of Osaka University, Japan. He received his Ph.D. degree in information systems engineering from Osaka University in 2002. He later was with the Department of Computer Science, Donald Bren School of Information and Computer Sciences, University of California, Irvine, where he was a Postdoctoral Research Scholar from 2002 to 2007, and an Assistant Adjunct Professor from 2007 to 2009. Since 2009, he has been with the Graduate School of Engineering, Osaka University, where he is currently an Associate Professor. His research interests are in the areas of network applications and distributed computing systems with particular emphasis on interdisciplinary approaches. His current research is focused on Biological-ICT, including the design, implementation and evaluation of biologically-inspired systems and engineered biological systems.