

**Call for papers**  
**Green Computing, Networking, and Communications Symposium**  
**(GCNC), ICNC 2015**

Anaheim, California, USA, February 16-19, 2015  
<http://www.conf-icnc.org/2015>

**Symposium Co-chairs**

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**Scope**

Green computing has recently become a major research topic due to its various economical and environmental impacts. Recent studies have shown that the amount of greenhouse gas emissions produced by computers, communication systems, and other information and communication technologies (ICT) alone is almost equivalent to that of the entire aviation industry. Moreover, according to many studies, ICT and computing resources account for 2% to 10% of the world power consumption, due to the ever increasing diffusion of electronic devices.

To reduce these environmental problems and maintain a sustainable environment, novel paradigms, methods, techniques, tools, and systems are needed so as to develop green computing and communication technologies with high energy efficiency, low greenhouse gas emissions, and better re-use of resources and material.

The ICNC Green Computing, Networking, and Communications Symposium aims at bringing together researchers and visionaries from academia, research laboratories, and industries working towards the ultimate goal of green ICT. To this end, this symposium solicits original theoretical, experimental, and design approaches that can cope with this paradigm shift towards green computing. The symposium also solicits the application of computing, communications, and networking technologies towards the development of sustainable energy systems that may include modernization of the electric power grid and the integration of distributed energy resources. Topics of particular interest include, but are not limited to the following.

- Green computing models, simulations, designs, and paradigms
- Energy-aware software-defined network management
- Energy harvesting in HetNet deployments
- Realization of Smart Grids by the application of ICT
- Design and analysis of the smart power grid
- Energy-aware computing and communications
- Energy-efficient networking and computing infrastructures
- Energy-efficient multimedia systems
- Energy-efficient cloud computing
- Energy-aware resource allocation and scheduling mechanisms
- Green materials and devices designs
- Usage of renewable energy for green ICT operation
- Cross-layer optimization of green networking infrastructures
- Life-cycle analysis of computing equipment
- Ambient energy harvesting, storage, and recycling Climate and ecosystem monitoring
- Energy-efficient data center and cloud technologies
- Green high-performance computing and applications
- Integration of Distributed Energy Resources and EVs utilizing ICT
- Applications of energy efficient connected systems

## **Submission Guidelines**

Please follow the author instructions at <http://www.conf-icnc.org/2015/author.htm>

Direct paper submission weblink of this symposium can be found at <http://www.conf-icnc.org/2015/cfp.htm>

## **Short biography of co-chairs**

### **Dr. Berk Canberk**

Dr. Canberk received his PhD degree in Computer Science from Istanbul Technical University, Turkey, and his MSc degree in Digital Communications Engineering from Chalmers University of Technology, Sweden, in 2011 and 2005 respectively. He was a post-doc scholar in Broadband Wireless Networking Laboratory (BWNLab) at the School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, USA, in 2011. He was also a research scholar in BWNLab during 2008-2009. He is currently an assistant professor in the Computer Engineering Department of Istanbul Technical University. He is an editor in IEEE Transactions in Vehicular Technology, area editor in ELSEVIER Computer Networks and associate editor in WILEY International Journal on Communication Systems. Dr. Canberk has been involved in several international conferences as technical program co-chair, regional chair, publicity chair, tutorial chair and TPC member. His current research interests include software defined wireless networking, energy-aware cognitive radio network management, next generation green LTE networks and femtocell deployments.

### **Dr. Swades De**

Dr. De received his PhD in electrical engineering from the State University of New York at Buffalo in 2004. He is currently an associate professor in the Department of Electrical Engineering at IIT Delhi. He was an assistant professor in the Electrical and Computer Engineering Department at New Jersey Institute of Technology, NJ (2004-2007). He was a postdoctoral researcher at ISTI-CNR, Pisa, Italy (2004) and has nearly five years of industry experience in India in communication hardware and software development. His research interests include performance studies, resource efficiency in multihop wireless and high-speed networks, broadband wireless access, and communication and systems issues in optical networks. Dr. De currently serves as an Associate Editor of IEEE Communications Letters and Springer Photonic Network Communications journal.

### **Dr. Dave Cavalcanti**

Dr. Dave Cavalcanti is Principal Member Research Staff at Philips Research North America, NY since 2005. He received his PhD in computer science and engineering in 2006 from the University of Cincinnati, USA. His experience includes wireless communications and networking, cognitive radio, industry standardization, and machine to machine (M2M) applications in lighting controls, energy management and healthcare systems. He has contributed to development of several wireless standards (e.g. IEEE 802.11, 802.15, 802.22) and edited several publications in the area of wireless communications and networking. Currently, he serves as Chair of the IEEE Computer Society Technical Committee on Simulation (TCSIM).