



## Guest Editors

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## Important dates

Paper submission:  
**15-09-2011**

Acceptance notification:  
**15-11-2011**

Final papers:  
**15-12-2011**

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# Call for Papers

## A Special Issue of *Computer Networks* On "Green Communication Networks"

Communication networks are increasingly leveraged to reduce the environmental impact of human activities by improving energy efficiency in many sectors of the world economy. Moreover, networking functionalities are central to power delivery and promise benefits through smart grid applications and support for distributed renewable sources. On the other hand, it has been recognized that the energy consumption and scalability of communication networks themselves can become an issue due to the rapid growth of traffic and infrastructure. The design of "green" networks has become a focus for research in academia and industry. Keeping pace with network expansion requires new paradigms for energy use in networks including improving the efficiency of networking devices and adapting the network energy consumption to the varying traffic load.

This special issue solicits submissions of original work and survey papers on all aspects of green wired and wireless networks.

Topics of interested include (but are not limited to):

- Architectures and protocols for improving energy efficiency in wired networks
- New energy-aware routing and switching devices
- Energy consumption measurements and models
- Networking issues for energy efficient content distribution and applications
- Networking issues for green cloud computing
- Energy efficient networking technologies (Ethernet, Optical networks, IP networks, MPLS, etc.)
- Design of energy efficient networks
- Green future mobile networks
- MAC, routing and transport protocols for green wireless
- Energy efficient wireless devices
- Energy management of wireless access networks
- Energy-aware radio planning
- Bounds and limits on energy efficiency
- Energy-Performance tradeoff
- Experiments, testbeds and prototypes



## Submission format

The submitted papers must be clearly written in excellent English and describe original research which is neither published nor currently under review for other journals or conferences. Papers must not exceed 25 pages (one-column, at least 11pt font) including figures, tables and references. Author guidelines for preparation of manuscript can be found at <http://www.elsevier.com/locate/comnet>.

## Submission Guideline

All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select as **“SI:Green Communication Networks”** when they reach the **“Article Type”** step in the submission process. The EES website is located at: <http://ees.elsevier.com/comnet/>