

**IEEE GLOBECOM 2012 Workshop on
Green Internet of Things (G-IoT)**
3-7 Dec. 2012, Disneyland Hotel, Anaheim, California, USA

The term "Internet of Things" emanated to describe a number of technologies and research disciplines that enable global connectivity over the world-wide physical objects. Enabling technologies like RFID, sensor networks, biometrics, and nanotechnologies are now becoming very common, bringing the Internet of Things into real implementations addressing varying applications, including smart grid, e-health, intelligent transportation, etc. They foreshadow an exciting future that closely interconnects our physical world via green networks. Green networks in IoT will contribute to reduce emissions and pollutions, exploit environmental conservation and surveillance, and minimize operational costs and power consumption. The Green Internet of Things (G-IoT) is predicted to introduce significant changes in our daily life and would help realizing the vision of "green ambient intelligence". Within a few years we will be surrounded by a massive amount of sensors, devices and "things", which will be able to communicate via IP, act "intelligently", and provide green support for users in managing their tasks. These new smart objects will also be context-aware and able to perform certain functions autonomously, calling for new forms of green communication between people and things and between things themselves, where power consumption is optimized and bandwidth utilization is maximized. This development would not only be relevant to researchers, but also to corporations and individuals alike. It is hence the aim of our workshop to focus on both design and implementation aspects in green networks, or networks that can be utilized in providing green systems through IoT enabling technologies. At the same time, our workshop call is open for topics relevant to IoT in general.

With this spirit, we are soliciting original efforts describing both theoretical and practical research endeavors. We also encourage visionary and experimental descriptions. Short reports on work-in-progress will also be considered. The following is a non-exclusive list of topics of interest:

- Green Implementations and testbed issues,
- Green services & applications in IoT,
- Green communications & network architectures,
- Context awareness & signaling for energy saving strategies,
- Cooperative relaying for energy saving,
- Protocol design, including cross-layer and opportunistic approaches,
- Wireless relay, including fixed and mobile elements in IoT,
- Integrated RFIDs and Sensor Networks (RSNs) in green applications,
- Mobility & network management in green IoT,
- Cognitive radios and dynamic spectrum management,
- Performance evaluation in green networks,
- Green and ubiquitous computing in IoT,
- Cooperation in homogeneous & heterogeneous networks,
- Federation in wireless networks towards green IoT,
- Smart objects,
- Green localization in IoT.

Organizing Committee

Workshop Chairs

Dr. Hossam Hassanein

[Queen's University, Canada]

Dr. Ayman Radwan

[Inst. Telecomunicações, Portugal]

TPC Chairs

Dr. Fadi Al-Turjman

[Queen's University, Canada]

Dr. Jonathan Rodriguez

[Inst. Telecomunicações, Portugal]

Important Dates

Registration: June 22, 2012

Submission: June 22, 2012

Notification: August 15th, 2012

Camera-ready: Sept. 15th, 2012

Submission

Through EDAS

Accepted and presented papers will be published in the IEEE GLOBECOM 2012 Conference Proceedings and IEEE Xplore®. More submission details will be found at www.cs.queensu.ca/G-IoT12

