

IEEE WCNC 2016 Workshop on Green and Sustainable 5G Wireless Networks (GRASNET)

Scope

Reducing world-wide energy consumption and ensuring a sustainable planet is a major challenge in the next few years due to the raising economic and environmental effects. With the expected exponential growth of the market resulting from the increase of data rates with the launch of 5G networks and the mobile devices leading to the spread of the Internet Of Things, the energy consumption of wireless networks is expected to increase dramatically. 5G wireless networks research is gaining momentum with the emergence of new ideas and innovative solutions. Energy efficiency and sustainable solutions are the prime considerations for the 5G networks. Energy harvesting is a promising solution to combat the energy inefficiency problem and make wireless network sustainable.

This workshop seeks original papers addressing research contributions that address energy efficiency and sustainability problems in future communication networks; and the challenges, ranging from theory to practice. Technical papers should describe original research that is unpublished and not under review by any other conference/journal.

The topics of interests include but are not limited to:

- Energy efficient data offloading techniques
- Heterogeneous networks for energy efficiency
- Energy efficient cloud radio access networks (RAN) solutions for 5G networks
- Energy efficient signal processing techniques
- Energy efficient massive MIMO
- Energy efficient resource allocation mechanisms
- Distributed self-organized energy efficient designs
- Delay-energy tradeoff
- Application specific protocols for energy efficient communication designs
- D2D communication and energy efficiency
- Cross layer design for energy efficiency
- Cooperative systems for energy efficiency
- Utility maximization under different types of energy constraints
- Energy efficiency in mmWave communication
- Energy efficiency in backhaul design
- Resource efficiency metric in system design
- Wireless powered communication networks
- Energy harvesting communication
- Modeling renewable power sources
- Solar and thermal energy harvesting
- Energy harvesting base stations and relay systems
- Experimental evaluation of energy efficient communication solutions
- Standardization efforts and regulation
- Smart grid communication networks

Submission Guidelines

Authors are invited to submit original papers of no more than 6 pages (standard IEEE proceedings, two-column, 10 pt font, etc.), including figures, tables, and references, in PDF format. Accepted papers will be published in the WCNC 2016 conference proceedings, which will be submitted to IEEEXplore database. Submission implies that at least one of the authors will register and present the paper at the conference. Electronic submission is accepted through the EDAS web site at <https://edas.info>.

Important Dates

Paper submission (**extended and firm**): November 23, 2015

Paper acceptance notification: December 28, 2015

Camera ready paper upload: January 12, 2016