Call for Workshop Papers

WS04: Energy Harvesting Communication Networks

The objective of this workshop is to bring together practitioners and researchers from both academia and industry in order to have a forum for discussion and technical presentations on fundamental and practically relevant questions related to many challenges arising from energy harvesting communication networks (EHCNs). It also aims to provide the industry with a fresh insight into the development of practical energy harvesting schemes in future wireless networks. Accepted and presented papers will be published in the conference proceedings and submitted to IEEE Xplore and other Abstracting and Indexing databases.

Original contributions are solicited in topics of interest to include, but not limited to, the following:

- Simultaneous wireless information and power transfer
- Wireless power transfer
- Information-theoretic fundamentals of EHCNs
- Energy accumulation modeling and associated network protocol design in EHCNs
- Energy cooperation strategies for EHCNs
- Cooperative and relay techniques in EHCNs
- Backscattering communications
- Large scale heterogeneous EHCNs
- Spectrum sensing and sharing in EHCNs
- Physical layer security in EHCNs
- Waveform design and optimization in EHCNs
- Energy harvesting IoT
- The application of emerging technologies in EHCNs
- MAC and routing protocols for EHCNs
- Interference exploitation and management in EHCNs
- Machine learning techniques for EHCNs
- Artificial intelligence-enabled EHCNs
- Power management circuit and systems for EHCNs
- Prototypes and testbeds in EHCNs
- Energy efficiency in EHCN
- EHCN for machine-type communications
- Energy harvester (linear/nonlinear) modelling and impact on signal/system design

Submission Guidelines

Only full papers are considered. The papers should be concisely written and should not be longer than five A4 pages (in IEEE two-column format, 10pt, according to the IEEE template). Papers must be submitted via EDAS.