With the explosive growth of wireless communication industry, the energy consumption of wireless networks and devices is experiencing a dramatic increase. On the other hand, replacing batteries for low-cost devices in energy-constrained networks (e.g. wireless sensor networks) is either impossible or expensive. To deal with these issues, energy harvesting appears as an emerging solution which has received a lot of interest, as it powers mobile devices by scavenging energy from the ambient environment (solar, wind, vibration, thermoelectric effects, ambient radio power, etc.). The use of energy harvesting nodes is a promising approach to further increase the energy efficiency of wireless communication systems. In addition, however, it brings about new challenges to the efficient design of communication systems, as there are many theoretical and practical open problems involved.

The objective of this special issue is to bring together high-quality research papers that report the latest research advances in the area of energy harvesting wireless communications.

Potential topics include, but are not limited to:

- Information-theoretical aspects of energy harvesting wireless communications
- Performance analysis of energy harvesting wireless communications
- Multi-antenna technologies for energy harvesting wireless communications
- Cognitive technologies for energy harvesting wireless communications
- Multiuser energy harvesting wireless communications
- Simultaneous energy and information transfer
- Energy harvesting wireless cooperative communications
- Security issues for energy harvesting wireless communications
- Energy cooperation in energy harvesting wireless communications
- Cross-layer design and optimization for energy harvesting wireless communications
- Hardware implementations for energy harvesting wireless communications
- Emerging applications of energy harvesting wireless communications
Submission instructions:

Before submission authors should carefully read over the Instructions for Authors, which are located at jwcn.eurasipjournals.com/authors/instructions. Prospective authors should submit an electronic copy of their complete manuscript through the SpringerOpen submission system at jwcn.eurasipjournals.com/manuscript according to the submission schedule. They should choose the correct Special Issue in the “sections” box upon submitting. In addition, they should specify the manuscript as a submission to the “Special Issue on Energy Harvesting Wireless Communications” in the cover letter. All submissions will undergo initial screening by the guest editors for fit to the theme of the Special Issue and prospects for successfully negotiating the review process.

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Submission Schedule
Manuscripts due:
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