

## IET Communications Call for Papers

### SPECIAL ISSUE ON:

### Ultra-Wideband System Design, Signals and Coding



Ultra-wideband (UWB) radio technology uses the radio spectrum in a fundamentally different way from other radio communications technologies. Over the last decade fundamental research concerning antennas and propagation for UWB transmission has enabled new insights to be ascertained. The research has shown that due to the very wide fractional bandwidth of signals, new characteristics such as fade, shadowing and path loss is exhibited. To enable best possible wireless link performance it is necessary to match the channel characteristics to the modulation and coding scheme. This has opened up the possibility to design new classes of codes for UWB channels.

This call for papers invites original high quality submissions relating to signal and code design for the UWB channel, as well as novel applications and future direction of the technology.

#### Topics of interest include, but are not limited to:

- error statistics and modelling
- design and performance of channel codes
- encoder and decoder design, performance and complexity
- energy consumption
- spreading code design and performance
- signal generation and detection techniques
- space-time codes
- multiple-antenna signal processing
- medium access control
- network architecture and protocols
- rate-less code design and performance
- system trials and performance benchmarking
- UWB beyond Personal Area Networks (PAN)
- future directions, applications and challenges

All papers must be submitted through the journal's Manuscript Central system:  
<http://mc.manuscriptcentral.com/iet-com>

#### Proposed publication schedule:

**Deadline for submission of papers:** 01 Dec 2010

**Authors to receive a 1st decision by:**  
28 February 2011

**Final notification of acceptance:**  
31 June 2011

**On-line and print publication:**  
Q3 2011

#### Special issue guest editors:

**Prof. Bahram Honary**  
(Corresponding Editor)  
Lancaster University, UK  
**E:** b.honary@lancaster.ac.uk

**Prof. David Edwards**  
University of Oxford, UK  
**E:** david.edwards@eng.ox.ac.uk

**Dr. Ben Allen**  
University of Oxford, UK  
**E:** ben.allen@eng.ox.ac.uk

#### IET Publishing Dept. contact:

**Paul Rowley**  
Editorial Assistant  
IET Communications  
**E:** prowley@theiet.org

**Professor H. F. Rashvand**  
Series Editor  
Director, Advanced Communications  
University of Warwick  
**E:** h.rashvand@warwick.ac.uk