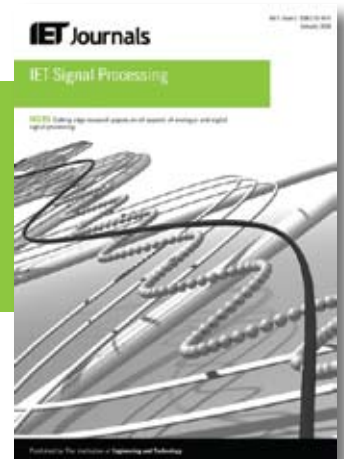


## IET Signal Processing Call for Papers



### SPECIAL ISSUE ON:

### Advanced Techniques on Multirate Signal Processing for Digital Information Processing

Multirate signal processing has become a key topic enabling efficient techniques for digital information processing in a variety of applications such as digital receivers for wireless as well as satellite communication systems, high performance audio and video, multimedia services, and signal compression. In the wireless communications arena, multirate signal processing techniques provide effective means to implement flexible receiver channelization filtering and sampling rate conversion for software and cognitive radio digital front-ends. As far as multimedia signal processing is concerned, recent techniques relying on multirate filter banks have resulted in improved subband coding techniques reflected in the JPEG-2000 multimedia standard, as well as on some modern audio compression formats such as MP3, AAC3 and ATRAC3plus, to cite but a few. The main aim of this special issue is to highlight state-of-the-art techniques on the most recent research advances in multirate signal processing. Novel contributions, previously unpublished, that are not being submitted to any other journal, are sought.

#### Topics of interests include, but are not limited to, the following subject categories:

- design and implementation of computationally efficient decimators and interpolators for oversampled sigma-delta A/D and D/A converters
- sampling rate conversion in software and cognitive radios
- signal processing solutions for the design of efficient digital front-end receivers
- polyphase DFT filter banks with application to channelization in broadband wireless transceivers
- multirate filter banks and polyphase networks
- efficient sub-band coding techniques for speech coding
- design and applications of multidimensional multirate systems
- supporting technologies and signal processing architectures for multi-function, multi-band transceivers
- design and applications of spectral methods
- compressed sensing techniques
- experimental testbeds
- hardware implementation and SoC solutions
- optimization of digital signal processing architectures

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

#### Schedule

**Deadline for submission of papers:** 31 Jan 2010

**Authors to receive a**

**1st decision by:** 31 May 2010

**Final notification of acceptance:**  
31 Aug 2010

**On-line and print publication:**  
Q4 2010 / Q1 2011

#### Special issue guest editors:

Lead Guest Editor:

**Dr. Massimiliano Laddomada**

Texas A&M University-Texarkana, USA

**E:** mladdomada@tamut.edu

**Dr. Gordana Jovanovic Dolecek**

Institute INAOE, MX

**Dr. Yong Ching Lim**

Nanyang Technological University,

Singapore

**Dr. Markku Renfors**

Tampere University of Technology,  
Finland

**Dr. Lars Wanhammar**

Linköping University, Sweden

#### IET Publishing Dept. contact:

**Elizabeth Thorogood**

IET Signal Processing

Editorial Assistant

**E:** ethorogood@theiet.org