



## Special Issue on **Cognitive Networking for Next-G Wireless Communications**

# CALL FOR PAPERS

As a promising technique for next-generation wireless communications, cognitive networking has demonstrated potential to deal with the problems of spectrum scarcity and higher transceiving rate requirement. Aside from the recent developments in cognitive radio research at the physical layer, such as spectrum sensing, multiuser access to spectrum, and interference mitigation, problems of cognitive networking covering all layers will become the significant challenges in developing Next-G wireless communications. The threats caused by this technique and countermeasures should be also considered properly. The special issue will be covered by the developments from physical layer, to MAC, network, and even cross-layer developments, optimizing strategies and security and privacy issues.

This special issue is to seek articles that address some of these challenges above in cognitive networking for next-generation wireless communications.

Potential topics include, but are not limited to:

- ▶ New modulation, coding, MIMO, and signal processing methods for cognitive networking
- ▶ Cognitive communication architectures and topology control
- ▶ Spectrum sensing and sharing strategies and management mechanisms
- ▶ Game theoretic optimization in cognitive networking
- ▶ Practical applications in small and femtocell networks
- ▶ Cross-layer optimization and resource management
- ▶ Cognitive techniques and networks for next-G wireless communications
- ▶ Multimedia transmission and copyright management
- ▶ Intrusion detection of cognitive radio networks
- ▶ Security issues and trust management problems in wireless networks
- ▶ Privacy preserving in next-generation wireless communications

Authors can submit their manuscripts via the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/ijdsn/nngwc/>.

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### **Manuscript Due**

Friday, 19 June 2015

### **First Round of Reviews**

Friday, 11 September 2015

### **Publication Date**

Friday, 6 November 2015