

Chadi Assi Faculty of Engineering and Computer Science Concordia University, Montreal, Canada assi@ciise.concordia.ca

Martin Maier Optical Zeitgeist Laboratory Institut National de la Recherche Scientifique (INRS) Montreal, QC, H5A 1K6 Canada maier@emt.inrs.ca

Nasir Ghani Department of Electrical and Computer Engineering University of New Mexico, USA nghani@ece.unm.edu

Jorge M. Finochietto National University of Córdoba (UNC), Córdoba Argentina jfinochietto@efn.uncor.edu

**Important Dates:** 

Paper submission: 30 September, 2011 Acceptance notification: 30 April, 2012 Final papers due: 1 July, 2012 Publication: Fall 2012

## Submission Guidelines:

All manuscripts and any supplementary material should be submitted through Elsevier Editorial System (EES). The authors must select "Optical-Wireless" when they reach the "Article Type" step in the submission process. The EES website is located at

http://ees.elsevier.com/comcom/.

## **CALL FOR PAPERS Special Issue of Computer Communications on Progress on Broadband Access Networks and Optical-**Wireless Convergence

http://www.elsevier.com/locate/comcom

## Scope:

Access networking plays an instrumental role in delivering the end-user experience, and has become a critical component for delivering new services such as voice-over-IP, IPTV, video streaming/conferencing. As a result, related technology offerings have seen wholesale advances-both across the wired and wireless sectors. Most notably, developments in broadband high-speed optics and electrical technologies (such as active/passive optical access, xDSL, cable) have totally redefined traditional "voice-centric" access paradigms. In concert, a host of wireless backhaul technologies has also emerged to deliver unprecedented levels of connectivity and mobility, including cellular, vehicular, long and short-range broadband access, etc. Along these lines, this special issue will focus on recent advances in broadband access fields, concentrating on the recent advances in broadband access networks and the convergence between optical and wireless technologies. We seek original completed and unpublished work not currently under review by any other journal/magazine/conference. Topics of interest include, but are not limited to:

- Last-mile access networks, optical access network architectures
- Passive optical networks (PON), Ethernet PON (EPON), Gigabit PON (GPON), LR-PON, and 10G-EPON
- Technologies, architectures, and challenges for next-generation PONs
- Resource management in next generation PONs
- Network monitoring and protection for next generation PONs
- Ethernet access networks
- Medium access control (MAC) and link layer issues
- Convergence of wired and wireless networks
- Hybrid fiber coaxial (HFC) systems
- Video streaming /high-bandwidth applications
- Cellular and broadband wireless backhaul and access networks
- Integration of wireless backhaul systems with PON networks
- Integration of Femtocells with PON networks •
- -Femtocell techniques and interference management
- Protocol design for optical wireless access networks.
- IPTV and HDTV over optical wireless.
- Advancements of WiFi/WiMax for fixed-wireless in metro & access nets.
- Broadband wireless access technologies
- Implementation and business models, e.g., open access network (OAN)
- Smart grid communications infrastructures

## Submission Format:

The submitted papers must be written in English and describe original research which is not published nor currently under review by other journals or conferences. Author guidelines for preparation of manuscript can be found at /www.elsevier.com/locate/comcom. For more information, please contact the guest editors or Editor-in-Chief, Prof. Marco Conti (marco.conti@iit.cnr.it)