

IET Optoelectronics Call for Papers



SPECIAL ISSUE ON: Next Generation Optical Access

Broadband access supported by optical fibre technology is becoming a reality across the globe, but although GPON, G/E PON and curb switch Ethernet are seeing rapid deployment a wide range of research topics remain. This special issue of IET Optoelectronics will publish the latest work in optical access and supporting technologies. Currently, a wide array of technologies are under investigation for future Fibre to the Home networks, with many exciting advances in WDM-PON, ring based access architectures, OCDMA-PON and extended and long-reach architectures. To support these new architectures, novel components and low-cost variants of existing components are being developed, with recent advances in many areas including reflective SOA technology, burst-mode receivers and novel fibre structures.

It is also clear that, in the medium term at least, no single technology will dominate. Technologies complementary to Fibre to the Home, such as Radio over Fibre, VDSL and free-space optics, will also have roles to play in offering cost effective broadband access. In addition, Radio over Fibre offers opportunities for convergence between fixed and mobile/nomadic networks. This convergence requires designers to rethink the traditional boundaries of the access network, suggesting benefits from an integration of fixed and wireless services as well as access and metro networks.

Topics considered include but are not limited to:

- advanced G/E-PONs
- WDM-PON architectures and techniques
- Radio over Fibre techniques
- Metro Access Convergence and Extended reach
- high bandwidth Free-Space-Optics (FSO)
- hybrid access architectures
- hybrid optical-xDSL systems
- QoS in Access Networks
- dynamic bandwidth allocation techniques
- techno-economic bench-marking of access solutions
- fault and performance monitoring in access
- protection and robustness issues
- deployment field trials models
- MAC layer design issues for access networks
- UWB over Fibre
- security issues in access networks
- OCDMA for Optical Access

Original papers covering all theoretical and applied areas of optical access and support technologies are invited.

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

Proposed publication schedule:

Deadline for submission of papers:

31 July 2009

Authors to have received a

1st decision by:

30 November 2009

Final notification of acceptance by:

31 January 2010

Online and Print publication:

Mid 2010

Special issue guest editor:

Dr John Mitchell

University College London, UK

E: jmitchell@ee.ucl.ac.uk

IET Publishing Dept. contact:

Miss Joanna Lawrie

(IET Optoelectronics Editorial Assistant)

E: jlawrie@theiet.org