



**7<sup>th</sup> International Symposium on 'High Capacity Optical Networks and Enabling Technologies'**  
**Laser Enhanced Science & Engineering for Green ICT**

**HONET'10**



**December 19 - 21, 2010**

**Cairo, Egypt**



*Organized and Hosted by:*

**University of North Carolina Charlotte (UNC Charlotte), USA**  
**National Institute of Laser Enhanced Sciences (NILES),**  
**Cairo University, Egypt**

*Alumni Co-Organizers:*

**Alexandria Higher Institute of Engineering & Technology (AIET), Egypt**  
**Pharos University in Alexandria (PUA), Egypt**  
**Universiti Sains Malaysia (USM), Penang, Malaysia**  
**National University of Sciences & Technology (NUST), Pakistan**

### **Vision**

To bring together professionals and practitioners from the academia, industry and government functionaries from around the world, with an objective to share knowledge and experience in the field of ICT and enabling technologies for global partnerships and collaborations aiding economic growth to support peace and prosperity in the world.

### **Call for Papers**

#### **General Information**

Global **Optical Networks** enable the **High-speed Internet** by utilizing various photonic- and wireless-networks, lambda grids, and fiber-optic links over the vast landscape. These are the workhorse for Information and Communication Technologies (ICT) from the architectural, security, signal transport and application perspectives. While **Photonics and Optoelectronics** are the disciplines that have emerged from

the “Laser Enhanced Science & Engineering” which starts from fundamental principles of optics and optical materials and encompasses the micro/nano-fabrication of semiconductor devices, components, and functional modules and sub-assemblies. On the application side, such devices enable the ICT.

IEEE ComSoc (past co-sponsor) will be requested to be a technical sponsor of the annual symposium, which will be preceded by a focused workshop, and will span over three days of technical and visionary presentations as well as testbed experiences; and will include keynote addresses and various plenary sessions on areas consistent with the theme and objectives. As a part of its legacy, the major objective of this **7<sup>th</sup> International Symposium** is to bring together participating US, Egypt, SAMENA (South-Asia, Middle-East, & North-Africa) region and other world-wide researchers, educators, students, and industry professionals for sharing the knowledge and experience and furthering collaborations. The HONET 2010 thematic focus is “**Laser Enhanced Science & Engineering for Green ICT**”. HONET has now a broader appeal of “Enabling Technologies covering lasers, photonic-devices, and other complementary communication technologies as well as nanotechnologies in medicine and information.” It expands to cover nanophotonics for high-speed internet from building-block components to e-Science and e-Healthcare applications, network security and enabling technologies. More info will be available at: <http://honet-ict.org>

### Papers

Authors are invited to submit **R&D and visionary papers**, presenting original research work related to the practice and theory of ‘High-capacity Optical Networks & Enabling Technologies’. All submissions must describe original and pertinent research, development, and future vision. The topics of interest should include, but not limited to the following:

• Green ICT-Energy Efficient Devices & Networks	• Emerging Nanotechnologies and ICT Applications
• Optical Internet – the Future Internet Development	• IPV6 – Emerging Testbeds for Global Networks
• ICT Service Oriented Architectures	• Convergence of Metro/ Optical Access Networks
• Lasers, Solar Cells and LEDs	• Optical Switching & Routing
• Network Security, Survivability and Reliability	• Optical Network Test & Monitoring, and Field Trials
• Wireless, RoF, and Satellite Communications	• Wireless Mesh & Sensor Network Applications
• Nanophotonics and Enabling Technologies	• e- Applications (education, medicine, social networks)
• Traffic Engineering and Multi-granularity Grooming	• Optical Networks for Storage, Grids & Cloud Computing
• Optical Packet & Burst Switching	• Multiplexing (WDM, OTDM, OCDM) and ROADMs

These topics should be discussed in terms of research concepts, state-of-the-art, standards, implementations, developments, field trials/experiments, educational goals and new applications. Submitted or substantially similar papers must not be under review currently for any other publication. The accepted papers will be peer reviewed using “IEEE standards and criteria”. Authors should note that only the accepted and presented papers will be eligible for proceedings. The accepted but unregistered and/or unattended/un-presented submissions will be omitted from all proceedings. Further updates on the workshop/symposium can be found at <http://honet-ict.org> and its companion websites.

### Instructions for Authors

All paper submissions will be handled electronically. Authors should prepare a PDF compliant version of their papers which should not exceed seven (7) double-column pages. Paper format template with font sizes and the guidelines, and IEEE copyright form are available at the HONET website. The first page of the paper must contain an informative title, abstract, and name(s) of author(s) with respective affiliations, postal address(es), phone/fax numbers, and email address(es). The corresponding author must be clearly identified. Additionally, five keywords relevant to the research paper or theme area must also be listed on as per template. All submissions will be peer-reviewed, and the accepted papers will be published in proceedings in IEEE Xplore, and will be indexed with the major indexes.

**All HONET papers must be submitted at <http://www.easychair.org/conferences/?conf=honet10>** . And deadlines are 11:59 pm US Eastern Standard Time (EST).

### Important Dates

<b>Paper Submission:</b>	<b>September 30, 2010</b> <del>July 31, 2010</del>
<b>Acceptance Notification:</b>	<b>October 30, 2010</b> <del>September 20, 2010</del>
<b>Camera Ready Due:</b>	<b>November 15, 2010</b> <del>October 20, 2010</del>

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#### Hotels Info:

1	Saint George 3★	Giza	Single/Double	150 EGP/200 EGP
2	Om-Kolthoom 3★	Zamalek	Single/Double	400 EGP/480 EGP
3	Shepherd 4★	Garden City	Single/Double	Rates on # of room nights
4	Pyramiza 5★	Dokki	Single/Double	600 /750 EGP/Intl. Intl.139/159US\$

**Opening Ceremony:** NILES, Cairo University

**Sessions:** *Sunday-Tue:* December 19-21, 2010, NILES, Cairo University, Egypt