



Department of Electrical and Computer Engineering

Title: *Optical Communications: What does the future hold?*

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**Room KENTP. ΠΤΕΡ. - E113, Old Campus
University of Cyprus**

Abstract: The establishment of optical fiber as the dominant mean of data transfer a few decades ago, vastly changed the telecom world and led to the Internet era that we experience today. The evolution path of optical communications never stopped since its introduction and even now it faces great challenges and experiences drastic changes. So, what are the driving forces of the evolution of optical communications today? We discuss the current status of optical communication technology and highlight the reasons for its continuous evolution. We identify key domains that researchers are now focusing their efforts and also discuss the role of photonic integration in the commercialization of optical technology. Finally, the introduction of optical communication technologies to datacom is discussed.

Biography: Dr. Dimitris Apostolopoulos was born in Athens, Greece. He followed his studies in the School of Electrical and Computer Engineering, National Technical University of Athens, and received his PhD in 2009 from the same department for theoretical and experimental studies on all-optical broadband systems for switching and buffering in packet networks. Dr. Apostolopoulos is currently a senior researcher at the Photonics Communication Research Laboratory of the National Technical University of Athens (NTUA) and a senior research associate of the Institute of Communication and Computer Systems (ICCS). His research interests are focused on the design and development of novel optical processing systems/sub-systems for optical interconnection and high-capacity next generation optical networks. He has authored and co-authored more than 50 contributed and invited scientific publications in IEEE and OSA journals and conferences, including post-deadline presentations, and has organized several workshops in conferences on optical fiber communications. He also serves as a scientific committee member at the International Conference on Nanosciences and Nanotechnologies. Dr. Apostolopoulos has been actively involved in a number of EU-funded research projects within FP6 and FP7, in which he held leading positions. He actively participates in the FP7 funded ICT-PLATON, ICT-RAMPLAS and ICT-PHOXTROT projects.