



# 'Best paper' award for UCy-Kios researcher

The 'best paper' award was given at a major international scientific conference to the KIOS Research and Innovation Centre of Excellence researcher Dr Tania Panayiotou and her Cyprus-based collaborators. The paper presented research to improve the performance of optical networks which could potentially reduce the operational and capital expenditure for telecommunication network providers.

This award demonstrates and proves the high-quality research which is being undertaken in Cyprus, providing international visibility and recognition for the research performed in the field of information and communications technologies (ICT) and in particular in the area of Critical Infrastructure Systems.

The award winning paper entitled "A Probabilistic Approach for Failure Localisation" was presented at the 21th IEEE

International Conference on Optical Network Design and Modeling (ONDM) in Budapest, Hungary. This IEEE conference addresses cutting-edge research in established areas attracting significant interest from several international leading research centers from universities and industry.

The conference focuses on novel and emerging topics in the areas of optical networking, optical systems and optical network architectures, wireless optical networks, photonic integrated networks, as well as control and management developments in optical networks. The award-winning paper addresses the critical problem of fault localisation in transparent optical networks. In such networks localising network failures (i.e., fiber cuts, equipment failures, etc.) is not trivial. Usually, upon a failure incident, network technicians are called for real-time localisation of the failure

using monitoring data. The mean time to repair (MTTR) the failures can vary from several hours to days depending on where the failure actually occurred. Reducing the MTTR is of critical importance as network failures may severely affect the network availability and can cause severe service disruption.

The research was a joint effort and the award winning team includes Dr Tania Panayiotou, Dr Sotirios Chatzis (Assistant Professor, Department of Electrical Engineering, Computer Engineering, and Informatics at the Cyprus University of Technology), and Dr Georgios Ellinas (Associate Professor, Department of Electrical and Computer Engineering at the University of Cyprus, Faculty member of KIOS Research and Innovation Center of Excellence).

