

## **Pharad's VP of Engineering Dr Dalma Novak to Give Short Course at OFC 2015**

Hanover, MD — March 12, 2015– Dalma Novak, VP of Engineering at Pharad and President of the IEEE Photonics Society, will be giving a short course at the upcoming 2015 Optical Fiber Communication (OFC) Conference in Los Angeles, CA.

### **SC217 Optical Fiber Based Solutions for Next Generation Mobile Networks**

**Date:** Sunday, March 22, 2015, 1 – 4 pm

**Instructor:** Dalma Novak, PhD

#### **Course Description:**

The convergence of optical and wireless networks continues to evolve, ever since the first proposals of extending wireless coverage areas using optical fiber links several decades ago. Today the use of fiber optic links in wireless networks is becoming ever increasingly pervasive. Applications where such converged optical/wireless network technology is employed include backhaul and fronthaul solutions for next generation mobile networks, indoor distributed antenna systems, as well as ultrabroadband, high frequency wireless networks capable of providing users with very high bandwidth services.

This short course presents an overview of optical fiber based solutions for next generation mobile networks. The associated system architectures and signal transport technologies that enable the implementation of integrated optical wireless networks will be discussed. The various technical challenges and issues that must be addressed for the successful integration of these networks, which encompass very different requirements and specifications, will also be presented. Topics to be covered include:

- Requirements for next generation mobile networks
- Optical fiber based architectures for emerging systems
- Relevant technologies, solutions and implementation approaches

#### **Benefits and Learning Objectives:**

This course should enable participants to:

- Understand the motivation for the integration of next generation mobile communication systems with optical fiber networks;
- Identify the technical challenges related to the application of photonics and optical networking concepts to wireless communications;
- Understand and compare physical layer technologies that enable the integration of wireless and optical networks;
- Identify technologies that can improve the performance of integrated optical and wireless networks;

- Establish the trade-offs with alternative integrated network architectures

**Intended Audience:**

This is an advanced beginner course for people working in either the optical or wireless telecommunication fields who wish to broaden their knowledge and learn how optical fiber solutions are playing a role in the realization of emerging integrated optical/wireless networks.