

**Title:** Fiber Optical Parametric Amplifiers for Optical Communication

**Speaker:**

Professor Michel E. Marhic  
College of Engineering  
Swansea University  
Wales, UK

**Date:** Monday, 12 December 2011

**Time:** 4:00 pm

**Venue:** Room 603, Chow Yei Ching Building

**Abstract:**

The basic features of fiber OPAs will be reviewed, and possible areas of applications will be discussed, with particular emphasis on optical communication. The results of our recent experiments on amplification of 1 Tb/s signals will be presented, along with recent progress with phase-sensitive amplifiers (PSAs).

**Biography of the speaker:**

Michel E. Marhic received a PhD in EE from UCLA. He was on the faculty of the EE Department at Northwestern University, and on sabbatical leaves at USC and Stanford University. He was consulting professor at Stanford University from 1998 to 2006. He joined the Institute of Advanced Telecommunication at Swansea University in 2006, as chair professor and head of the photonics group. His research has been in several areas of applied optics. Over the past 15 years, emphasis has been on optical communication systems, and nonlinear optical interactions in fibers, particularly on parametric amplification. He is the author or coauthor of over 330 journal and conference papers, and had 8 patents awarded. He is the author of the first book on fiber optical parametric amplifiers, published by Cambridge University Press in 2007.

**Organizer:** Dr. K.K.Y. Wong