**THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY**
**DEPARTMENT OF ELECTRONIC AND COMPUTER ENGINEERING**
**AND**
**IEEE PHOTONICS SOCIETY (HONG KONG CHAPTER)**

**JOINT SEMINAR**

# Advanced Photonic Integration and High-Index-Contrast Circuit

**by**

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## ***Abstract***

Since the Internet became generally available in the early 1990s, the demand for higher network speed and bandwidth has grown exponentially without any sign of slowing. Much of this growth is driven by the popular and bandwidth hungry video applications where the end user nearly always pays a flat fee for the Internet service. The service provider must develop new technologies that deliver improved systems performance while simultaneously reducing the cost per bit. Among the most forward technologies are advanced photonic integration where large numbers of optical components are integrated onto a single chip. Long in the research and development phase, these technologies are now seeing commercial deployment. We highlight the development and commercial deployment of both the PIC and PLC devices.

## ***Biography***

Sai Chu is a Member of Technical Staff at Infinera Corporation. He received a B.Sc in Computing and Computer Electronics from Wilfred Laurier University, in 1984, a M.Sc in Physics from University of Waterloo, in 1986, and a Ph.D. in Electrical Engineering from University of Waterloo, Canada. He has been involved in the research and development of optical waveguide design methods and planar lightwave circuits (PLC) for the last twenty years. For the last ten years, he has been focused in the commercialization of a proprietary high-index-contrast PLC platform that allows the densely integration of hundreds of optical components onto a single chip.

**DATE : 20 July 2009 (Monday)**
**TIME : 11:00 - 12:00 noon**
**VENUE : Rm 2304, 2/F (lift 17, 18)**
**Academic Complex, HKUST**

**~ ALL ARE WELCOME ~**