

THE CHINESE UNIVERSITY OF HONG KONG

Centre for Advanced Research in Photonics & Department of Electronic Engineering Seminar

Silicon photonics at the University of Southampton By Dr Milan Milosevic, Optoelectronics Research Center, University of Southampton

Date: 21 November 2017 (Tuesday)

Time: 11.00 am -Noon

Venue: Rm 222, Ho Sin Hang Engineering Building, CUHK

<u>Abstract</u>: Silicon photonics, pioneered as a material platform for thirty years, is at present one of the most buoyant technologies in the world and is particularly regarded as a low cost solution for short reach interconnects for applications in the information and communication sectors, environmental engineering, and healthcare. The technology is able to make use of the large silicon manufacturing infrastructure already in existence for microelectronics industry, and is targeting mass markets.

This seminar will present silicon photonics research activities at the University of Southampton. The Silicon Photonics Group was formed by Professor Graham T. Reed in 1989. Over the last 28 years, the group has made a significant contribution in the field of silicon photonics and reported many world's first results, most notably in waveguides, optical modulators and detectors, couplers, filters, multiplexers, and transceivers. Collaborations with a number of industrial and academic institutions have been established. In the last few years, we have raised over £25M of funding to work mainly in the mainstream applications of silicon photonics such as telecommunications and high speed data computing at near infrared wavelengths as well as on sensing at longer wavelengths. In this seminar, a particular attention will be given to our recent results on ion implantation technique for wafer scale testing of silicon photonic circuits and photonic device trimming, and new research activities on hyperuniform silicon photonics will be presented.

About the Speaker



Dr. Milan Milosevic (m.milosevic@soton.ac.uk) is a research fellow at the Optoelectronics Research Centre, University of Southampton, working on both industrial and research council funded projects, led by Prof. Graham Reed. Previously he was working as an engineer and technology consultant in the US and Japan, and as a research fellow at the University of Surrey where he also obtained his PhD degree and received the Vice-Chancellor's Award for Early Career Excellence in 2012. He is particularly involved in high speed optical transceiver technology and is one of the pioneers in mid-infrared silicon photonics technology for emerging applications.

*** All are welcome to attend. Please contact. Prof H.K.Tsang hktsang@cuhk.edu.hk for enquiries ***