

## Recent Advances in Retinal Imaging!

### ABSTRACT:

Over 250 million people in the world are blind or visually impaired. But 75% of visual impairment can be treated or entirely prevented if detected early, monitored effectively, and treated promptly. Various retinal imaging instruments have been developed to assist the screening, diagnosing and monitoring of vision critical eye diseases. These instruments range from traditional ophthalmoscope to digital fundus camera; from ocular tomography (OCT) to laser scanning ophthalmoscope. In this presentation the speaker will attempt to explain the principle of retinal imaging; give an overview on the advances in retinal imaging; and discuss the opportunities for innovation in vision care and retinal imaging.

**Admission is FREE!**

**Refreshments will be served!**

**Location: 4359 Mackenzie Building, Carleton University.**

**Map: <https://carleton.ca/campus/map/>**

**Time: 6:00 – 7:30 PM**

**Date: August 19<sup>th</sup>, 2019**



**Dr Kexing Liu** is the president and CEO of OcuXcel Corporation, a technology company based in Kanata, Ontario, dedicated to providing advanced technology solutions and developing new products from a global tech workforce for ophthalmology and vision health. Kexing received his Ph.D. degree from University of Manchester (UMIST), UK. One of his first professional and technology contribution was in pioneering the integration and qualification of GPS navigation technology into the on-board flight management systems for civil aviation as a project leader at CMC Electronique, Montreal. Later he joined a start-up called Cambrian Systems Corporation, Kanata, He was one of the the principal architects for the world's first metro DWDM system product - OPTera (OM5K) at Cambrian. The company was later acquired by Nortel Networks. The OM5K as an extremely profitable line of product has generated over US\$3 billion revenue for Nortel (now Ciena) since the acquisition. Later on, Kexing had an opportunity to serve as the principal of Mira Connections, a consulting business helping medical device companies on systems engineering and management issues.

Most recently Kexing has architected multispectral digital ophthalmoscope for retinal health screening. Kexing has published more than 30 scientific papers on fiber optics and photonics. He is inventor/co-inventor for 17 granted patents ranging from photonics, optical communications systems, control systems engineering, and ophthalmology instruments. Kexing is a senior member of IEEE and is currently serving as the chair of an IEEE Canada committee responsible for outreach.

***This event is organized by IEEE WIE and sponsored by IEEE Photonics Society - Ottawa Section!!***