

BioSyM Seminar Series 2017

d'Biomager – A Quantitative Phase Imaging Add-on for Microscopes

Professor Anand ASUNDI

Date : 20th February 2017, Monday
Time : 4 pm to 5 pm
Venue : CREATE Tower, Level 2, Theatrette



Abstract

Quantitative Phase Imaging has found new applications in the Biomedical Field. Their non-contact and non-staining approach lend them to real-time cell imaging and monitoring. One such systems which can be integrated to any microscope is the d'Biomager from d'Optron Pte. Ltd. Singapore. This system uses the principle of Transport of Intensity Equations to get quantitative phase and for that matter other imaging modalities from any microscope. The system adapts to the camera port of the microscope and using patented imaging and processing technologies provides near real-time imaging of live cells. The principles and some applications of this system would be described in this talk. In addition, a brief introduction of Optics and Photonics in Singapore together with some other applications of Optics for Life will be discussed.

Short Biography

Prof. Anand Asundi got his PhD from Stony Brook University. He is currently Professor and Director of the Centre for Optical and Laser Engineering in the School of Mechanical and Aerospace Engineering at the Nanyang Technological University in Singapore and a High End Foreign Expert at Shanghai University. He is founder and CEO of d'Optron Pte Ltd., Editor of Optics and Lasers in Engineering and Fellow of SPIE, the International Society of Optical Engineers and Institution of Engineers, Singapore. He is founding chair of the Optics and Photonics Society of Singapore and Chairman of the icOPEN conference series in Singapore and exported overseas in 2016.