

Free Admission with
Limited Seat

REGISTRATION FORM

Name :

Institutions :

Phone Number :

Email Address :

Please fill up the registration form before **10th October 2016** and submit it to Encik Fahirul Izwan Bin Abdul Malik (En. Hadi) for seat reservation, at fahirul@usm.my / serc@usm.my

Science and Engineering Research Centre (SERC)

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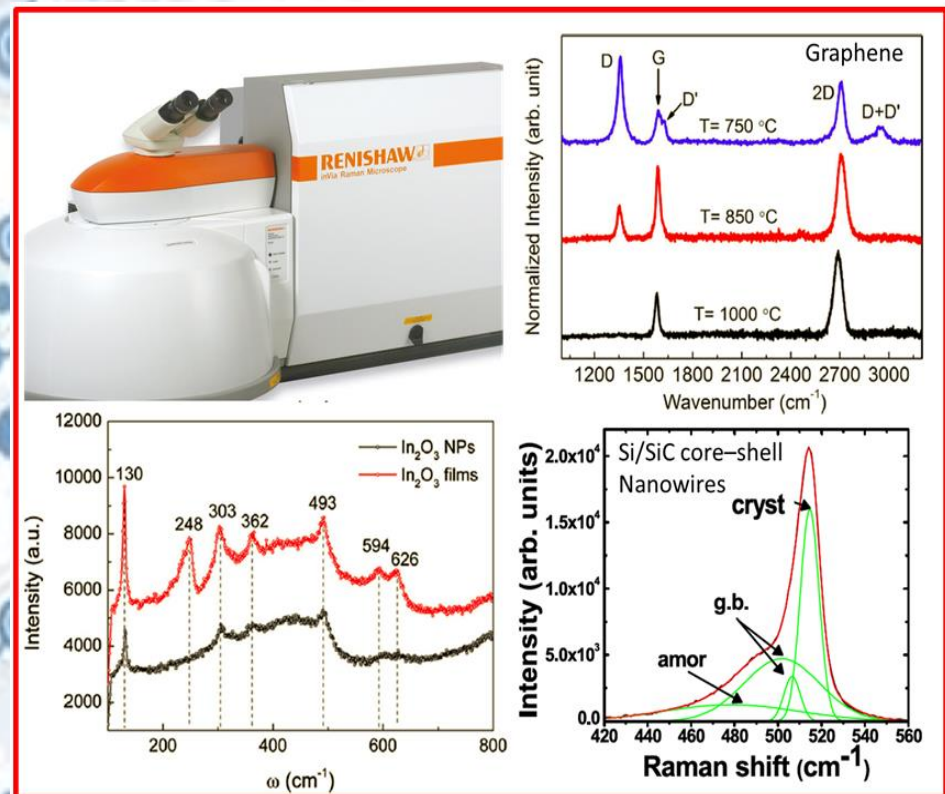
Workshop on Confocal Raman Microscope

“Its science, technology & application”

-Academics, Researchers, Students are Invited-

17th OCT 2016

Science and Engineering Research Centre (SERC)
Universiti Sains Malaysia (USM)



Introduction

Raman spectroscopy is a spectroscopic technique used to observe vibrational, rotational, and other low-frequency modes in a system. Raman spectroscopy is commonly used in chemistry, material science and physics to provide a fingerprint by which molecules/substance can be identified.

inVia is the ultimate research-grade confocal Raman microscope. It is simple to operate yet delivers outstanding performance and reliable results, for even the most challenging experiments. Produce both rich, detailed, chemical images and highly specific data from discrete points. With unparalleled flexibility, scientists and engineers, worldwide, trust inVia.

This workshop will focus on topic of *"The science and technology behind the Confocal Raman Microscope and its application across the sciences"*. Hands on sections are included to enhance the understanding of participants on Raman characterization in materials science.

The Speaker



Dr. Ken Williams

Ken Williams received his BSc from the University of Wales in Swansea in 1976. He subsequently obtained his D Phil from the University of York in 1981 with a thesis on 'Resonance Raman studies of free radical species', under the direction of Professor Ron Hester. From York he went to work at the British Petroleum Research centre where he applied and developed Raman instrumentation and methods for the benefit of the petrochemical and energy industries. In 1992 he left

BP and took up the post of the Applications and Marketing Director in the newly formed Spectroscopy Division of Renishaw. Since the early days of the launch of the Renishaw Confocal Raman microscope he has worked to extend the application areas and instrument development to enhance the product that has become the world's premier bench top Raman microscope system. He was elected as a Fellow of the Royal Society of Chemistry in 2002 for his contribution to Raman spectroscopy. He has been the Industrial supervisor for a number of PhD students during his career and published over 80 research papers and two patents. He is currently the International Sales Director and Applications Specialist within the Division.

Program

- 8.45am : Registration
- 9.15am : Opening of the Workshop /Welcome Speech
- 9.30am : **Technical Session I : Presenter: Dr. Willis Sin**
« Fundamentals of Raman Spectroscopy and Instrumentation Talk Through »
- 10.30am : Q&A Session
- 10.45am : Break & Refreshment
- 11.00am : **Technical Session II : Speaker: Dr. Ken Williams**
« Live-Track Technology and Its Importance in Raman Analysis of 2-D Materials, OLED and Lithium Battery»
- 12.00pm : Q&A Session
- 12.30pm : Lunch and Prayer
- 2:00pm : **Technical Session III : Speaker: Dr. Ken Williams**
« The application of SERS and TERS in selected sample analysis. AFM & Raman Integration»
- 3.00pm : Break & Refreshment
- 3:30pm : Equipment Demonstration by **Dr. Willis Sin**
(633 nm Raman Measurement)
Practical Analysis on *Selective Individual Samples *
- 4:30pm : Q&A Session
- 4.45pm : End of the Workshop

Organized By:



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