

REGISTRATION FEE

Participant Category	*Fee (RM)
Academician/Researcher	500
Industry	500
Student	300

*The workshop registration fee is inclusive of SST, lecture notes, lunch and refreshment.

To register and request for additional Raman characterization, please scan the QR code:

REGISTER FOR OUR EVENT



SCAN HERE

PAYMENT METHOD

Payment via Cheque, Bank Draft, Local Order (LO), Purchase Order (PO), Money Order should be made payment to : **USAINS HOLDINGS SDN. BHD.**

Payment via EFT/Bank-in:

Please email your bank-in slip (print your name and details on the slip)

Payee Name : **USAINS HOLDINGS SDN. BHD.**

Name of Bank : **Ambank (M) Berhad,**

Bank Address : Ground Floor, Bangunan Ambank Group, No. 55 Jalan Raja Chulan, 50200 Kuala Lumpur.

Account No. : **888-100-985-0380**

Swift Code : **ARBKMYKL**

Payment for registration fee and additional sample charged should be made before the closing date. Please scan payment proof then email to:

Nur Atiqah Hamzah

Tel. : +604-653 5681

Fax : +604-653 5639

Mobile : +60 13-474 6656

Email : atiqahhamzah@usm.my

Seat are limited!!!

CLOSING DATE: 16 October 2026

ORGANIZING COMMITTEE

This workshop is organized by Institute of Nano Optoelectronics Research and Technology (INOR), Universiti Sains Malaysia and co-organized by Crest Analytical Sdn Bhd. The organizing committee for this workshop comprises of the following individuals:

Advisors

Assoc. Prof Ts. Dr. Mohd Zamir Pakhuruddin, *INOR*

USM

Mr. Melvin Wong, *Crest Group of Companies*

Chairman

Assoc. Prof. Dr. Ng Sha Shiong, *INOR USM*

Secretariat

Nur Atiqah Hamzah

Nur Atiqah Md Rejab

Technical

Mohd Anas Ahmad

Syed Mohamad Syed Sahil

Logistics

Mohd Nazri Bakar

Bursary

USAINS Holding Sdn. Bhd



WONDERING WHERE TO STAY

Accommodation near the vicinity venue:

Hotel	Approx. distance from INOR/USM area	Type
U Hotel Penang	~1-2 km	2-3★
AC Hotel Penang	~2-3 km	4★
Eastin Hotel Penang	~2-3 km	4★
Amari SPICE Penang	~3-4 km	5★
Olive Tree Hotel Penang	~4-5 km	4★
Hotel Seri Malaysia Pulau Pinang	~4-5 km	3★
Iconic Marjorie Hotel, Penang, a Tribute Portfolio Hotel	~4-5 km	5★
Iconic Regency Service Residences, managed by Iconic Hotel	~4-5 km	Serviced residence
Lee Luxury Home	~1-2 km	Serviced accommodation



Advancing Materials Research with Confocal Raman Spectroscopy: Theory, Technology, and Applications



One FREE sample run!!!
#20% off for additional samples.

28 - 29 OCTOBER 2026

Auditorium B, sains@usm,

Persiaran Bukit Jambul, 11900

Bayan Lepas, Penang, Malaysia.

Organized by:



RENISHAW
apply innovation™

#Maximum four samples only.

INTRODUCTION

This comprehensive workshop provides a deep dive into Raman spectroscopy, a powerful and versatile technique for non-destructive materials characterization. Designed for academicians, researchers, postgraduate students, and industrial practitioners, the course will guide participants from the fundamental principles to the most advanced applications in materials science.

The workshop begins with a Theoretical Session on the fundamentals, covering the physics, hardware, and spectral interpretation of Raman spectroscopy. Following this foundation, experts from Renishaw will present Technical Sessions on the latest technological developments in Raman instrumentation and its advanced capabilities for surface characterization.



A key focus will be on practical applications, with a dedicated session on Raman Spectroscopy in Wide-Bandgap (WBG) Semiconductors and Materials Science, including the spectral analysis. The workshop will conclude with live demonstrations of the Renishaw inVia Qontor Confocal PL Raman Microscope, featuring its Real-Time LiveTrack focusing technology. Participants will gain practical experience with Raman measurements on selected samples and engage in application discussions.

By the end of this course, attendees will have a thorough understanding of the capabilities, limitations, and cutting-edge technology of Raman spectroscopy, empowering them to apply this technique effectively in their own research and work.

WHO SHOULD ATTEND

1. Academicians, researchers, post-graduate students and industrial practitioners.
2. This is a fundamental and practical workshop for new or experienced users who want to gain a better understanding of Raman spectroscopy for materials characterization and other applications.

THE SPEAKERS



Associate Professor Dr. Ng Sha Shiong received his PhD in Condensed Matter Physics from Universiti Sains Malaysia (USM), Malaysia. He currently serves as Deputy Director at the Institute of Nano Optoelectronics Research and Technology (INOR), Universiti Sains Malaysia (USM).

His research focuses on metal-organic chemical vapour deposition of III-nitride semiconductors for light-emitting, solar cell, and photodetector applications. Dr Ng also specialises in the optical and structural characterisation of wide-bandgap semiconductors. He is an Accredited Trainer under HRDCorp's Train-the-Trainer Certification Program and serves as trainer or co-trainer for several HRDCorp training programs. Since 2023, he has trained more than 350 managers and engineers across various industries.

Dr. Tan See Hua is the spectroscopy channel sales manager at Renishaw, responsible for ASEAN territory. He obtained his PhD in physical chemistry from Beijing Institute of Technology with a special focus on optical tweezing and Raman spectroscopy. See Hua was also an industry trained process engineer prior to joining the scientific instrumentation business.



He has more than 10 years of experience supplying various types of material characterisation equipment and providing post-sales support to manufacturing industries and R&D communities in both Singapore and Malaysia.



Dr. Willis Sin is a Support & Applications Engineer at Renishaw (Hong Kong). He received his bachelor degree from the Department of Chemistry of The Hong Kong University of Science and Technology and eventually earned his PhD in Bio-analytical Chemistry from the same institute.

He started his career as a research scientist in a biotechnology company and joined Renishaw in 2013. He is mainly responsible for the service and technical support in the South East Asia region.

Specifications of Raman System:

- Renishaw inVia Qontor Confocal PL Raman Microscope (with Real Time Live Track Focusing Technology).
- Excitation lasers: 532 nm and 785 nm
- Motorized xyz stage.
- Spectral resolution: 1 cm^{-1}

TENTATIVE PROGRAMMES

Day 1 (28 October 2026)

8.30-9.00am	Registration & Breakfast
9.00-9.15am	Introduction & Ice-Breaking
9.15-10.30am	Theoretical Session I: Assoc. Prof. Dr. Ng Sha Shiong (USM) <i>Fundamentals of Raman Spectroscopy: The Physics, The Hardware, and The Spectrum</i>
10.30-10.45am	Q&A Session
10.45-11.00am	Break
11.00-12.45pm	Technical Session II: Dr. Tan See Hua (Renishaw Singapore) <i>Recent Development in Renishaw Raman Technology</i>
12.45-1.00pm	Q&A Session
1.00-2.45pm	Lunch & Prayer
2.45-3.45pm	Technical session III: Dr. Tan See Hua (Renishaw Singapore) <i>Advanced Surface Characterisation for Materials Science</i>
3.45-4.00pm	Break
4.00-5.00pm	Standard Demonstration & Discussions I • Renishaw inVia Qontor Confocal PL Raman Microscope (with Real Time Live Track Focusing Technology) Demonstration & Raman Measurement on Selected Individual Samples, by Dr. Willis Sin (Renishaw, Hong Kong) • Application Discussion, by : Dr. Tan See Hua (Renishaw Singapore)
4.45pm	End of Workshop Day 1

Day 2 (29 October 2026)

8.30-9.00am	Breakfast
9.00-10.15am	Technical Session IV: Asso. Prof. Dr. Ng Sha Shiong (USM) Raman Spectroscopy in WBG Semiconductors and Materials Science: Applications and Spectral Analysis
10.15-12.45pm	Standard Demonstration & Discussions II • Renishaw inVia Qontor Confocal PL Raman Microscope (with Real Time Live Track Focusing Technology) Demonstration & Raman Measurement on Selected Individual Samples, by Dr. Willis Sin (Renishaw, Hong Kong) • Application Discussion, by : Dr. Tan See Hua (Renishaw Singapore)
12.45-2.15pm	Lunch End of Workshop

Special Promotion!!!

#Each participant is entitled to a **20% off** for additional Raman characterization (i.e., point measurement only). Maximum samples per participant are 4. Normal rate for the Raman measurement is RM100 per sample.

#Subject to terms and conditions.