RSCE 2026

REGIONAL SYMPOSIUM ON CHEMICAL ENGINEERING

INNOVATING CHEMICAL ENGINEERING FOR A SUSTAINABLE FUTURE



TUESDAY, 10 / 11 / 2026

9:00 AM - 4:00 PM

UNIVERSITI MALAYA



SCAN TO REGISTER

REGISTER NOW →

SECURE YOUR SEAT TODAY!

WORKSHOPS :

SESSION 1

BEYOND ENERGY EFFICIENCY THROUGH PRACTICAL ENERGY ANALYSIS FOR SUSITAINBALE CHEMICAL PROCESSES

By Associate Professor Ir. Ts. Dr. Tan Inn Shi



SESSION 2

ENVIRONMENTAL SUSTAINABILITY IN FOOD SAFETY / SECURITY AND SMART FARMING

By Associate Professor Ir. Dr. Fathiah Mohamed Zuki



SESSION 3

SUSTAINABILITY TO CARBON ACCOUNTABILITY : UNDERSTANDING ESG, GHG ACCOUNTING, STANDARDS AND REGULATIONS

By Ir. Dr. Jegalakshimi Jewaratnam



TENTATIVE PROGRAM

- Session 1: 9.00 - 11.00 am
- Tea break: 11.00 - 11.05 am
- Session 2: 11.05 - 1.05 am/pm
- Lunch break: 1.05 - 2.00 pm
- Session 3: 2.00 - 4.00 pm

EVENT HIGHLIGHTS

- Regional Networking
- Industry and Academic Insight
- Sustainable Engineering
- Connect with Chemical Engineering Community

SCAN FOR MORE INFORMATION

CONTACT US

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30th Regional Symposium on Chemical Engineering

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BEYOND ENERGY EFFICIENCY THROUGH PRACTICAL EXERGY ANALYSIS FOR SUSTAINABLE CHEMICAL PROCESSES



SPEAKER

Associate Professor Ir. Dr. Tan Inn Shi

Deputy Dean of Research and Development
at Curtin University Malaysia

WORKSHOP OVERVIEW

Go beyond basic energy efficiency by mastering practical exergy calculations in Excel to pinpoint process losses and design sustainable engineering solutions.

LEARNING OUTCOMES

- Distinguish energy vs exergy analysis
- Calculate physical exergy
- Identify exergy-loss hotspots
- Recommend process improvements

TWO-HOUR MODULE SCHEDULE

0-20 min	20-45 min	45-75 min	75-105 min	105-120 min
Fundamentals	Calculations	Excel exercise	Case study	Improvement

PARTICIPANT INFORMATION

- Materials provided： Handouts / Exercise files provided
- Participant requirement : Laptop with Microsoft Excel
- Specialised software not required

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30th Regional Symposium on Chemical Engineering

ENVIRONMENTAL SUSTAINABILITY IN FOOD SAFETY / SECURITY AND SMART FARMING

SPEAKER

Assoc. Prof. Ir. Dr. Fathiah Mohamed Zuki, CEng, MIChemE

Head of the UM Centre of Excellence for Food Security and Intelligence Farming



WORKSHOP OVERVIEW

Explore sustainable food production, smart farming technologies, and environmental monitoring through interactive lectures and a practical, hands-on field session at the Universiti Malaya Rooftop Farm.

LEARNING OUTCOMES

- Explain core concepts of sustainable agriculture, climate impacts, and global food security.
- Identify key environmental parameters (air, water, soil) affecting crop production.
- Operate portable environmental monitoring equipment across specialised farm stations.
- Collect, interpret, and apply environmental data for smart agricultural decision-making.

TWO-HOUR MODULE SCHEDULE

0-30 min	30-60 min	60-100min	100-120min
Sharing Session	Equipment Briefing	Hands-on Fieldwork	Discussion and Wrap-up

PARTICIPANT INFORMATION

- Target Participants: Academics, industry practitioners, and undergraduate/postgraduate students.
- Venue: Seminar Room & Universiti Malaya Rooftop Farm.
- Equipment Provided: Portable air detectors, water meters, and soil monitoring instruments.
- Requirements: Laptop or notebook for data recording; comfortable attire suitable for rooftop farm visit.

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30th Regional Symposium on Chemical Engineering

SUSTAINABILITY TO CARBON ACCOUNTABILITY: UNDERSTANDING ESG, GHG ACCOUNTING, STANDARDS AND REGULATIONS



SPEAKER

Ir. Dr. Jegalakshimi Jewaratnam

Chemical Engineering Academic and Researcher, Universiti Malaya

WORKSHOP OVERVIEW

Navigate the evolving sustainability and carbon landscape by connecting ESG, GHG accounting (Scope 1, 2, 3), ISO standards (ISO 14064, ISO 50001), and emerging climate reporting frameworks (IFRS S1/S2, NSRF, CBAM) to real-world organisational practices.

LEARNING OUTCOMES

- Differentiate Scope 1, Scope 2, and Scope 3 greenhouse gas emissions and carbon footprint fundamentals.
- Understand the roles of ISO 14064-1, ISO 14064-3, and ISO 50001 in GHG quantification and energy management.
- Interpret key reporting standards and regulations, including IFRS S1/S2, Malaysia's NSRF, NETR, and EU CBAM.
- Identify actionable carbon management and ESG integration opportunities within academic or industrial contexts.

TWO-HOUR MODULE SCHEDULE

0-20 min	20-45 min	45-75 min	75-105 min	105-120 min
Fundamentals	GHG Accounting	Standards and Auditing	Frameworks and Market Rules	Action & Strategy

PARTICIPANT INFORMATION

- Materials provided: Workshop slides, standard summaries, and reference reading materials.
- Participant requirement: Laptop or tablet for notes and case discussions.
- Specialised software: Not required (conceptual and framework-focused).

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