# ASEAN TRAINING WORKSHOP ON GMO (QUANTIFICATION OF GMOS USING DIGITAL PCR) $21^{ST} - 24^{TH}$ JULY 2025

### VENUE: DEPT. OF CHEMISTRY MALAYSIA, PETALING JAYA, SELANGOR & MENARA BIOMED, BANDAR SRI DAMANSARA, KUALA LUMPUR

### Programme

Day 1

Date/ Venue	Time	Activity
21 <sup>st</sup> July	9.00 – 9.30 am	Registration
(Dept. of Chemistry Malaysia)	9.30 – 10.00 am	Opening Ceremony by the Director-General of the Dept. of Chemistry
		Malaysia
	10.00 – 10.30 am	Morning Break
	10.30 – 10.30 am	Briefing of Workshop
	10.30 – 11.30 am	Topic 1: Overview of GMO Analysis in KIMIA Malaysia
	11.30 am – 12.30 pm	Topic 2: Principles of extraction and purification of DN
	12.30 – 2.30 pm	Lunch Break
	2.30 – 3.30 pm	Topic 3: Component, structure and replication of DNA, Principles of
		polymerase chain reaction (PCR & instrument) and component for the
		PCR
	3.30 pm – 4.30 pm	Topic 4: Principles of Quantitative Detection with digital PCR (dPCR)
	4.30 – 5.00 pm	Tea Break/ End of session

## Day 2

Date/ Venue	Time	Activity
22 <sup>nd</sup> July	8.30 – 10.30 am	Practical Session: Preparation of samples for DNA extraction
(Dept. of Chemistry Malaysia)	10.30 – 11.00 am	Morning Break
	11.00 am – 1.00 pm	Practical Session: Extraction and purification of DNA, DNA quantity,
		purity and integrity assessment
	1.00 – 2.30 pm	Lunch Break
	2.30 – 4.30 pm	Practical Session: Continue
	4.30 – 5.00 pm	Tea Break/ End of Session

## Day 3

Date/ Venue	Time	Activity
23 <sup>rd</sup> July	8.30 – 10.30 am	Practical Session: Preparation of PCR and plate setup
(Dept. of Chemistry Malaysia)	10.30 – 11.00 am	Morning Break
	11.00 am – 1.00 pm	<b>Practical Session:</b> Quantification of event GMO using digital PCR (dPCR)
	1.00 – 2.30 pm	Lunch Break
	2.30 – 3.30 pm	Practical Session: Continue
	3.30 – 4.30 pm	Discussion session: Interpretation and reporting of Results
	4.30 – 5.00 pm	Tea Break/ End of Session

### Day 4

Date/ Venue	Time	Activity
24 <sup>th</sup> July	9.00 – 10.00 am	Topic 5: Advance Technology in GMO analysis by Thermoscientific
(Menara Biomed, Bandar Sri	10.00 – 10.30 am	Visit to the BMS Laboratory
Damansara)	10.30 – 11.00 am	Morning Break
	11.00 am – 12.00 pm	Topic 6: Knowledge Sharing on GMO Technology
	12.00 – 12.30 pm	Q&A Session
	12.30 – 1.00 pm	Closing Ceremony by the Senior Director of Drinking Water, Food and
		Environmental Safety Analysis Centre
	1.00 – 2.00 pm	Lunch Break/ End of Session

