

International Symposium on Synthetic Biology and CRISPR Technology (iSynBioCT) 2026

Program Tentative

22 September 2026 (Tuesday)

Venue: Pujangga Hall (Lobby), Danau Golf UKM ([Location map](#))

Time	Activity	Presentation title
8.00 am	Registration & breakfast - Speakers, Participants and Sponsors Registration - VIP and Guest Arrival	
9.00 am	Program commencement National Anthem Negaraku Opening remarks by INBIOSIS Director - Prof. Dr. Syarul Nataqain Baharum Officiating remarks by UKM Deputy Vice Chancellor (Research & Innovation Affairs) - Prof. Dr. Ismanizan Ismail Opening ceremony - Launching of iSynBioCT (video presentation) - Announcement of i-Biohackathon 2026 Track Winners - Token of appreciation to UKM DVC, partners (ASBA, XMUM & GK Aqua) - Photo session	
9.50 am	Morning break (10 min)	
10.00 am	Keynote I Prof. Daisuke Kiga Waseda University/ASBA	High-Throughput Data Acquisition for AI-Designed Transcription Factors and Robotic Cell-Free Optimization
10.30 am	Plenary Assoc. Prof. Chun Loong Ho Shenzhen Institutes of Advanced Technology (SIAT) CAS/ASBA	The Bone Microbiome: Discovery, Origins, and Its Role in Skeletal Homeostasis
10.50 am	Plenary Assoc. Prof. Dr. Ahmad Bazli Ramzi Institute of Systems Biology (INBIOSIS) UKM/ASBA	Building a Demand-Driven Engineering Biology Ecosystem for Sustainable Biomanufacturing and Plastic Decarbonization Applications
11.10 am	Plenary Assoc Prof Dr Thanyaporn Wongnate Vidyasirimedhi Institute of Science and Technology/ASBA	Research and Innovation for Sustainable Waste Management in the Bio-based Economy

11.30 am	Technical Bernd Willems Twist Bioscience	From AI to DNA: The Role of Gene Synthesis in the Next Generation of Biotech
11.50 am	Technical Johnny Lau IKA Works (Asia) Sdn Bhd	Elevating your bioprocess with IKA Habitat
12.10 pm	iSynBioCT talk 1 Dr. Teoh Jian Peng SIAT CAS	Msc4y-Fermented Coffee Attenuates DSS-Induced Colitis and Cums-Induced Depression-Like Behavior In Mice
12.25 pm	Lunch break & Poster Presentation	
2.00 pm	Plenary Dr. Steven Aw Yoong Kit Xiamen University Malaysia/ASBA	Application of Metagenomics and Metabolomics as Tools for Advanced Bioprospecting of Marine Sediment Microorganisms
2.20 pm	iSynBioCT talk 2 Ts. Dr. Nor Azlan Nor Muhammad INBIOSIS UKM	AI x Protein: Integrating Artificial Intelligence into Protein Structure and Function Studies
2.35 pm	iSynBioCT talk 3 Assoc. Prof. Dr. Suriana Sabri Universiti Putra Malaysia (UPM)	From Stingless Bee Microbiota to Functional Sugar Biocatalysts: Genome-Guided Characterisation of a Trehalulose-Producing <i>Metschnikowia</i> sp.
2.50 pm	iSynBioCT talk 4 Dr. Mohamed Yusuf Mohamed Nazir Faculty of Science and Technology (FST) UKM	<i>Aurantiochytrium</i> sp. as a Microbial Cell Factory for Sustainable Docosaheanoic Acid
3.05 pm	iSynBioCT talk 5 Dr. Lee Khai Wooi Taylor's University	Engineering a Column-Free Metal-Ion Affinity Platform for Scalable Purification of His-Tagged Virus-Like Particles
3.20 pm	iSynBioCT talk 6 Dr. Ahmad Razi Othman Faculty of Engineering and Built Environment (FKAB) UKM	Activated Sludge Minimization via Enzymatic and Fungal Hybrid Technology
3.35 pm	Tea break (10 min)	
3.45 pm	iSynBioCT talk 7 Dr. Mira Syahfrien Amir Rawa UPM	Genetic Dereplication of Multiple Penicillium Expansum Biosynthetic Gene

		Clusters Enhances Discovery of Cryptic NRPS-Derived Cyclopeptides
4.00 pm	iSynBioCT talk 8 YRP Hazlam Shamin Ahmad Shaberi INBIOSIS UKM	An Accessible and Programmable Biofoundry Workflow for Automated Colony-Level Phenotyping in Microbial Strain Engineering
4.15 pm	iSynBioCT talk 9 YRP Cut Ulfah FKAB UKM	Metabolic Engineering of <i>Clostridium butyricum</i> JKT37 by CRISPR-Cas9 Nickase-Mediated adhE Deletion for Enhanced Biohydrogen Production
4.25 pm	iSynBioCT talk 10 YRP Muhammad Hezreef Arif Mohd Kamarul Arif Pang INBIOSIS UKM	Development of Modular CRISPR/dCas13a Platform for Programmable RNA Knockdown in Bioengineered Bacterial Chassis
4.35 pm	iSynBioCT talk 11 YRP Christal Winona Clyde Xiamen University Malaysia (XMUM)	Development of a Hygromycin-Based Plasmid Vector for <i>Chlorella sorokiniana</i> Genetic Engineering
4.45 pm	iSynBioCT talk 12 YRP Norain Zuhaida Adnan Ngan INBIOSIS UKM	Expression of Recombinant Hydroxymethylfurfural (HMF) Oxidase for Whole-Cell Bioproduction of 2,5-Furan Dicarboxylic Acid (FDCA)
4.55 pm	iSynBioCT talk 13 YRP Wong Young Yau INBIOSIS UKM	Development of <i>Cupriavidus necator</i> -Based Cell-Free Expression System for Synthetic Cell Applications
5.05 pm	End of session/tea time	

23 September 2026 (Wednesday)

Venue: Pujangga Hall (Lobby), Danau Golf UKM ([Location map](#))

Time	Activity	Presentation Title
8.00 am	Registration & breakfast - Speakers, Participants and Sponsors Registration - Speaker and Guest Arrival	
9.00 am	Roundtable Discussion on Malaysian Engineering Biology Framework Moderator: Assoc. Prof. Dr. Ahmad Bazli Ramzi	
10.30 am	Morning break (10 min)	
10.40 am	Keynote Dr. Teh Chee Keng SD Guthrie, Malaysia	Integrated Genomic Technologies to Transcend Barriers in Oil Palm Improvement
11.10 am	Plenary Dr. Manoj Lakshmanan ZACROS Corporation	Biomanufacturing for Bio-Based Materials
11.30 am	Plenary Ts. Elya Masya Mohd Fishal FGV R&D Sdn Bhd	Frontier Technologies in Microbial Product Development for Sustainable Agriculture
11.50 am	Plenary Dr. Mohd Faisal Ibrahim FKAB UKM	Automation, Robotics and Smart Harvesting in Oil Palm: Solution or Illusion to Stagnant Productivity?
12.10 am	iSynBioCT talk 14 Assoc. Prof. Dr. Tan Boon Chin Universiti Malaya (UM)	CRISPRi-Mediated Modulation of the Phenylpropanoid Pathway through Repression of Cinnamate 4-Hydroxylase in <i>Nicotiana tabacum</i> Cell Cultures
12.25 pm	Lunch break & Poster Session	
2.00 pm	Plenary Mr. Giva Kuppusamy GK Aqua Sdn Bhd	From RNAi to AI: Building a Frontier-Technology Stack for Tropical Aquaculture - the Giant Freshwater Prawn as a Case Study
2.20 pm	Technical Sew Chang Wei IME Trading Sdn Bhd	From Protocol to Payload: Deploying Collaborative Robots in Biology and Chemistry Laboratories
2.35 pm	iSynBioCT talk 15 Assoc. Prof. Dr. Siti Fatimah Zaharah Mohamad Fuzi	Carbon Nanotubes as Biocatalyst Improved Xylanase Production from Immobilized Recombinant <i>Kluyveromyces</i>

	Universiti Tun Hussein Onn Malaysia (UTHM)	<i>lactis</i> via Response Surface Methodology Approach
2.50 pm	iSynBioCT talk 16 Assoc. Prof. Dr. Wee Seng Kew Universiti Malaysia Kelantan (UMK)	From Biomolecules To Biomining: Applying Rare-Earth Proteins in REE Processing
3.05 pm	iSynBioCT talk 17 Dr. Mohd Asyraf Kassim Universiti Sains Malaysia (USM)	From Carbon to Cell Factories: Deciphering Microalgal Carbon Metabolism and its Regulation for Lipid and Carbohydrate Biosynthesis
3.20 pm	iSynBioCT talk 18 Assoc. Prof. Ts. Dr. Hajar Fauzan Ahmad Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA)	From Microbiomes to One Planet: Tracking Antimicrobial Resistance Across Humans, Food and the Environment
3.35 pm	Tea break (10-min)	
3.45 pm	iSynBioCT talk 19 YRP Zhou Chenyu INBIOSIS UKM	Comparative Proteomic Analysis of Halogenated Anthraquinone Derivative and Doxorubicin in MDA-MB-231 Cell Line
3.55 pm	iSynBioCT talk 20 YRP Mohamad Firdhaus Ramli INBIOSIS UKM	<i>In Silico</i> Design of Semenogelin-Targeting Aptamers as Molecular Recognition Elements for Carbon Dot-Based Forensic Biosensing
4.05 pm	iSynBioCT talk 21 YRP Luo Zhanqing INBIOSIS UKM	Retinal Proteomics Reveals the Therapeutic Potential of Magnesium Taurate Against Diabetic Retinopathy
4.15 pm	iSynBioCT talk 22 Dr. Nur 'Izzati Ismail FKAB UKM	Siderophore-Producing Rhizobacteria as a Microbial Biosolution for Sustainable Agriculture
4.30 pm	iSynBioCT talk 23 Dr. Che Haznie Ayu Che Hussian INBIOSIS UKM	Engineering Microbial Cell Factories: From Molecular Design to Bioprocess Development
4.45 pm	Closing ceremony - Certificate presentation & Photo session	
5.35 pm	End of session/ tea time	

Conference Presentation Guideline

Keynote talk: 30 minutes (Inclusive of 5-10 minutes of Q&A)

Plenary talk: 20 minutes (Inclusive of 5-10 minutes of Q&A)

Technical talk: 15/20 minutes (Inclusive of 5 minutes of Q&A)

iSynBioCT Speaker presentation: 15 minutes (inclusive of 5 minutes of Q&A)

iSynBioCT Young Researcher presentation (YRP): 10 minutes* (inclusive of 2 minutes of Q&A)

Poster presentation: 5 minutes (inclusive of 2 minutes of Q&A)

Roundtable Discussion on Malaysian Engineering Biology Framework

Meeting: 90 minutes