

Organized by



THAILAND HALAL ASSEMBLY 2024



Toward Halal Trust Through Digital Technology 2AIs

“ความไว้วางใจด้านฮาลาลผ่านเทคโนโลยีดิจิทัลสองเอไอ”



READ ONLINE
SCAN

INTERNATIONAL
CONFERENCE

งานประชุมวิชาการด้านวิทยาศาสตร์
และนวัตกรรมฮาลาลนานาชาติ

19-20
DECEMBER
2024

at Al Meroz Hotel Bangkok

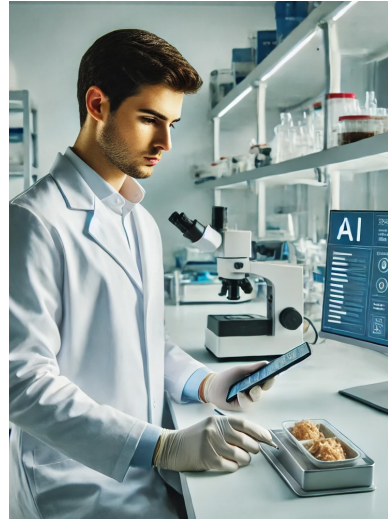
<https://www.thailandhalalassembly.com> | 🔍



Join us at the **Thailand Halal Assembly 2024**, an international conference on halal science and innovation, taking place on **December 19–20, 2024**, at Al Meroz Hotel in Bangkok. This year's is themed **"Toward Halal Trust through Digital Technology 2AIs"**, hosted by the Halal Science Center, chulalongkorn University.

The assembly brings together leading thinkers, researchers, and industry experts to discuss and explore advancements in halal science and technology. It features the International Halal Science and Technology Conference 2024 (IHSATEC), the 17th Halal Science, Industry, and Business Conference, and the International Halal Route Workshop. In addition, a special exhibition on halal innovation showcases Thailand's digital transformation of the halal industry through two key applications of AI

The first “AI” – Actual Implementation – highlights the integration of human expertise in systems like HAL-Q, halal forensic laboratories, innovations, and religious rulings (Fatwas). The second “AI” – Artificial Intelligence – uses AI to manage big data, supported by the THAIs platform, enhancing trust across industry, consumer, and business sectors in Thailand’s halal product and services. These innovations aim to reduce operational costs, improve competitiveness, and emphasize Thailand’s leadership in the digital age of halal industry.



We invite you to participate in this premier event to connect, innovate, and elevate the future of the global halal economy.



THAILAND **HALAL** ASSEMBLY 2024



INTERNATIONAL CONFERENCE

งานประชุมวิชาการด้านวิทยาศาสตร์ และนวัตกรรมฮาลาลนานาชาติ

19-20 DECEMBER 2024

at Al Meroz Hotel Bangkok

Toward Halal Trust Through Digital Technology 2AIs

“ความไว้วางใจด้านฮาลาลผ่านเทคโนโลยีดิจิทัลสองเอไอ”

Incorporating Three Leading Events

- **IHSATEC 2024:**

The International Halal Science and Technology Conference 2024

Conference Paper Submission Deadline
is on **29 November, 2024**

- **17th HASIB:**

The 17th Halal Science, Industry and Business Conference

- **International Halal Route Workshop**



SCAN ME
WEBSITE

GRAND OPENING CEREMONY



MR. AKANAT PROMPHAN

Minister of Industry, Thailand



H.E. MR. İHSAN ÖVÜT

Secretary General of the Standards and Metrology Institute for the Islamic Countries (SMIC), Türkiye



POLICE MAJOR GENERAL SURIN PALARAE

Secretary General of the Central Islamic Council of Thailand (CICOT), Thailand



PROF. DR. SOMBAT TREEPRASERTSUK

Vice President of Chulalongkorn University, Thailand



ASSOC. PROF. DR. WINAI DAHLAN

Founding Director, The Halal Science Center, Chulalongkorn University (HSC-CU), Thailand

SPEAKERS



ASSOC. PROF. DR. WINAI DAHLAN

Founding Director, The Halal Science Center, Chulalongkorn University, Thailand



PROF. DR. FARIDAH H. HASSAN

Department of Ranking at UTM Sileast, Universiti Teknologi MARA, Malaysia



PROF. DR. IRWANDI JASWIR

Dean for Academic, Research, and Publication at IIMART, the International Islamic University Malaysia (IIUM), Malaysia



PROF. DR. SURAINI BINTI ABD AZIZ

Professor at Faculty of Biotechnology & Biomolecular Sciences, Universiti Putra, Malaysia



PROF. DR. ABDELAZIZ BOURAS

Professor at College of Engineering, Qatar



PROF. DR. AHMED SEFFAH

College of Technological Innovation, Zayed University, UAE



ASSOC. PROF. DR. PAKORN PRIYAKORN

the Halal Standard Institute of Thailand



ASSOC. PROF. DR. NASSER AL-HABSHI

Assistant Dean for Postgraduate Studies & Research, Dept. Food Science and Nutrition, Sultan Qaboos University, Oman



ASSOC. PROF. WORASIT CHOOCHAIWATTANA

Chulalongkorn Business School, Chulalongkorn University, Thailand



ASSIST. PROF. DR. PRADORN SUREEPOONG

Assistant Director, The Halal Science Center, Chulalongkorn University, Thailand



DR. SIMAB KANWAL

Institute of Nutrition, Food Chemistry Unit, Mahidol University, Thailand



DR. ANANT DENYINGYHOT

Assistant Director, The Halal Science Center, Chulalongkorn University, Thailand



DR. KASINEE KATELEKHA

Assistant Director, The Halal Science Center, Chulalongkorn University, Thailand



DR. ACHAREE SUKSUWAN

The Halal Science Center, Chulalongkorn University, Thailand



DR. AMALIA MOHD HASHIM

Head of Laboratory, Halal Products Research Institute, Universiti Putra Malaysia, Malaysia



DR. NAWAWEE ARAWAN

Researcher, the Halal Science Center, Chulalongkorn University, Thailand



FARHAN TUFAIL

Director of Halal Certification Services, Switzerland



MUR SHARALYN

Manager of Halal Development Maja Ugama Islam Singapura (Islamic Religious Council of Singapore), Singapore

Organized by



CONFERENCE JUDGING COMMITTEES

SCIENCE & TECHNOLOGY



**PROF. DR. SURAINI
BINTI ABD AZIZ**

Professor at Faculty of Biotechnology & Biomolecular Sciences, Universiti Putra, Malaysia



PROF. DR. AHMED M. YOUSSEF

Professor of Packaging and Packing materials, National Research Center, Dokki, Cairo, Egypt.



**PROF. DR. SIRICHAH
ADISAKWATTANA**

Head of Phytochemical and Functional Food Research Unit for Clinical Nutrition, Chulalongkorn University, Thailand



PROF. DR. UMAIR ARSHAD

Professor / Chairperson Department of Food Science Government College University/Faisalabad, Pakistan



**ASSOC. PROF. DR. SUWIMOL
SAPWAROBOL**

Faculty of Allied Health Sciences Chulalongkorn University, Thailand



**ASST. PROF. DR. PANKUM
SOMBOON**

Bio-Electronic Research Laboratory (BERL), Department of Electrical Engineering, Chulalongkorn University, Thailand



**ASST. PROF. DR. MUHAMMAD SAJID
ARSHAD**

Department of Food Science Government College University, Faisalabad, Pakistan



**ASST. PROF. DR. SUKRIT
SIRIKWANPONG**

Lecturer, Department of Nutrition and Dietetics Chulalongkorn University, Thailand



DR. SIMAB KANWAL

Institute of Nutrition, Food Chemistry Unit, Mahiada University, Thailand.

SOCIAL SCIENCE & MARKETING



**PROF. DR. H. SAPTA
NIRWANDAR, S.E.,**

DESS Chairman of Indonesia Halal Lifestyle Center & Indonesia Tourism Forum, Indonesia



PROF. DR. FARIDAH HJ HASSAN

Department of Ranking at IITM Global, Universiti Teknologi MARA, Malaysia



**ASSOC. PROF. DR. SRAWUT
AREE**

Director of Muslim Studies Center of Chulalongkorn University, Thailand



DR. ANTHONY SALES

Regional (Director of FOST XI DOST Halal Science and Technology Program Lead), Philippines

IHSATEC 2024: 17th HASIB

The International Halal Science and Technology Conference 2024 (IHSATEC): 17th Halal Science Industry and Business (HASIB)

Poster & Oral presentation

IHSATEC 2024: International Halal Science and Technology Conference 2024 is pleased to invite academicians and scientists to participate and submit your abstracts and full papers covering all aspects of Halal Science and Technology fields.

- Food Science and Nutrition
- Food safety and Management
- Natural Products and Bioactive Compounds
- Biotechnology and Molecular Biology
- Cosmetic Science
- Blockchain and Internet of Things (IoT)
- Health and Physical Science
- Nanoscience and Technology
- Digital Marketing and Data Driven
- Business and Marketing

Reward for academic presentation

1. The Best Oral Presentation
2. The Best Paper
3. The Best Poster Presentation
4. Popular vote poster presentation



Kindly visit <https://www.ihsatec.com> for detailed information.





IHSATEC : HASIB





JHASIB

Journal of Halal Science, Industry and Business

Journal of Halal Science, Industry, and Business (JHASIB) is a peer-review journal published by The Halal Science Center, Chulalongkorn University Thailand and Research Synergy Foundation Indonesia. JHASIB publish bi-annually in May & November.

CALL FOR PAPER

JHASIB's aims and scope focusing on the discussion of Halal-related matters, categorized into three principal themes:

• Halal Science

Halal Science, Technology and innovation, Food Science and Nutrition, Natural Products and Bioactivate Compound, Cosmetic Science, Biotechnology and Molecular Biology, Health and Medical Science, Nanoscience and Technology, Environment and Green Technology

• Halal Industries

Halal Block Chain and Digital Transformation, Post COVID-19 Management, The Implementation of Halal Regulation, Artificial Intelligence (AI), Halal Policy, Regulation and Law

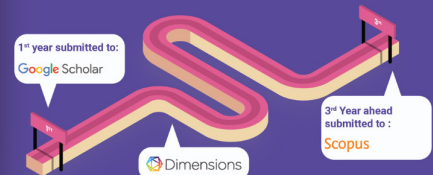
• Halal Business

Digital Marketing and Data-Driven Marketing, e-business and Mobile Commerce, Islamic Finance, Halal Education, Halal Tourism and Hospitality

Benefit for author:

- Free of Charge to Submit in Journal
- Free Registration Fee* to Join RSF International Conference
- Opportunity to be selected as Editorial Team/reviewer Team/Trainer in Research Synergy Foundation*
- Opportunity to be selected as Keynote Speaker at RSF International Conference

*Conferences will be selected by RSF Board



Supported by :



+62 81-1234-1734

jhasib@researchsynergypress.com

@researchsynergyfoundation

HALAL SMEs ZONE

The showcase of entrepreneurs' potential to present innovative products that have been developed by the Halal Science Center Chulalongkorn University, with developments in the production process, products, and marketing both domestically and internationally. Entrepreneurs who presented their product innovations in this activity were selected by qualified committees as being ready and having the potential to receive the Halal SMEs innovation award, totaling 18 establishments from food and non-food products, such as Suwirun Tea Shop Thailand Premium Organic Tea, Madi Kombucha, Vanapan Vegan Nail Care, and many other products.





Thailand Halal Assembly 2024 Exhibition: “TOWARD HALAL TRUST THROUGH DIGITAL TECHNOLOGY 2AIs”

The exhibition at Thailand Halal Assembly 2024 focuses on the concept of “Halal Trust Through Digital Technology 2AIs”, which integrates **Actual Implementation** with **Artificial Intelligence (AI)** to build confidence in halal products and industries in Thailand.



AI 1 : Actual Implementation

involves the real-world application of technologies to inspect and control compliance halal standards.

AI 2: Artificial Intelligence

utilizes technology that enhances the accuracy and efficiency of data management and halal systems.



The exhibition covers four key areas:

1. HAL-Q (Halal Assurance & Liability Quality System):

A halal quality management system using digital technology and AI to improve inspection efficiency, along with the application of **Big Data** and **Halal Blockchain** for transparency in the production process.

2. Laboratory Testing:

The use of **AI** and **Machine Learning** in testing samples for contaminants and analyzing data quickly.

3. H Numbers: A system for identifying raw materials and chemicals that meet halal standards using AI.

4. Halal Blockchain: The use of blockchain technology to create a traceability system for halal products, increasing transparency and preventing data tampering.



This exhibition highlights the use of digital technology and AI to support Thailand’s halal industry, enhancing its credibility and strengthening its position on the global stage.



HSC INNOVATION ZONE

No.	Group	Halal Innovation Product	Inventor
1	Cosmetic	Acne cream product mixed with kaolin, bentonite and black cumin seed oil	Zamzam Ar-ur, Nassarin Palame, Assist. Prof.Dr.Sukrit Sirikwanpong, Assoc. Prof. Dr. Winai Dahlan
2		Natural sunscreen plus black cumin seed oil	Nassarin Palame, Zamzam Ar-ur, Assist. Prof.Dr.Sukrit Sirikwanpong, Assoc. Prof. Dr. Winai Dahlan
3		Antioxidant-Riched Hydrating Lip Balm from Perilla Seed Pomace extract	Baddariyah sohsansa, Nareeya Waloh, Assist. Prof.Dr.Sukrit Sirikwanpong, Assoc. Prof. Dr. Winai Dahlan
4		Anti acne film forming solution	Baddariyah Sohsansa, Nareeya Waloh, Dr. Acharee Suksuwan, Firadao Boonmalert, Assoc. Prof. Dr. Winai Dahlan
5		Najis Cleansing Clay Liquid Soap	Assoc. Prof. Dr. Winai Dahlan
6		Liposome Nanoparticle from Krill Oil for Storing Perilla Seeds Extract	Nareeya Waloh, Baddariyah Sohsansa, Dr. Acharee Suksuwan, Firadao Boonmalert, Suwaibah Sulong, Dr.Sukrit Sirikwanpong, Assoc. Prof. Dr. Winai Dahlan
7		Antibacterial Clay Suspension Solution	Kasinee Katelakha, Baddariyah Sohsansa, Nareeya Waloh, Assoc. Prof. Dr. Winai Dahlan

HSC INNOVATION ZONE

No.	Group	Halal Innovation Product	Inventor
8	Food	Red Tilapia Fish Noodles Fortified with Wolffia and the Production Method	Firadao Boonmalert, Sarin Chaovasuteeranon, Kunthira Salae, Dr.Najwa Yanya Santiworakun, Assoc. Prof. Dr. Winai Dahlan
9		Halal plant-based liquid egg	Dr. Kasinee Katelekha, Dr.Najwa Yanya Santiworakun, Firadao Boonmalert, Suwaibah Sulong, Assoc. Prof. Dr. Winai Dahlan
10		Microcapsule Powder from Cold-pressed Black Seed Oil and Its Production Method	Dr. Najwa Yanya Santiworakun, Assistant Professor Dr. Tipyanate Ariyapitipan, Associate Professor Dr. Winai Dahlan
11		Low Fat Milk Fortified with Microcapsule Containing Black Cumin Seed Oil	Assoc. Prof. Dr. Winai Dahlan, Asst. Prof. Dr. Tipyanate Ariyapitipan, Dr. Najwa Yanya Santiworakun, Netnapa Ontao
12		Functional Salad Dressing Fortified with Omega-6 and Its Process	Netnapa Ontao, Dr. Najwa Yanya Santiworakun, Hasam Chebako, Assoc. Prof. Dr. Winai Dahlan
13		Japanese Sweet Potato Based Custard Fortified with Omega-6 and Its process	Suwaibah Sulong, Netnapa Ontao, Dr. Najwa Yanya Santiworakun, Assoc. Prof. Dr. Winai Dahlan
14		Healthy Salad dressing forties with Functional Ingredients from Wolffia	Hasam Chebako, Dr. Najwa Yanya Santiworakun, Netnapa Ontao, Assoc. Prof. Dr. Winai Dahlan
15		AI-formulated Halal Taro crisps	Dr. Kasinee Katelekha, Hasam Chebako, Suwaibah Sulong, Firadao Boonmalert, Sarin Chaovasuteeranon

HSC INNOVATION ZONE

No.	Group	Halal Innovation Product	Inventor
16	Food	Sweetened margarine with a balanced omega fat ratio	Assist. Prof.Dr.Sukrit Sirikwanpong, Assoc. Prof. Dr. Winai Dahlan, Rinrapat Thitiratpokin, Chutimon Eamsrisub, Matichon Lokkamloe
17		Omega fat-balancing sauce for stir-fried holy basil dish	Assist. Prof.Dr.Sukrit Sirikwanpong, Assoc. Prof. Dr. Winai Dahlan, Matichon Lokkamloe, Krittika Shunthornpokin, Papatwan Chujid, Usa Manyeunyong
18		Ready to reconstitute protein fortified with microcapsule derived from black cumin seed oil	Dr.NajwaYanyaSantiworakun, Netnapa Ontao, Dr. Acharee Suksuwan, Assoc. Prof. Dr. Winai Dahla
19		Marian Plum Jelly	Dr.Nureesun Mahamud, Firadao Boonmalert, Sarin Chaovasuteeranon, Dr.NajwaYanyaSantiworakun, Assoc. Prof. Dr. Winai Dahlan
20	Test Kits	Rapid Test kit on Non-Halal Animals in Halal Food Products	Dr.Anat Denyingyhot, Theerarak Srinulgray, Pornpimol Mahamad, Arnakorn Ruangprach, Suwainah Sa-I, Tuanyasmin Saerae, Mongkol Vesaratchavest, Winai Dahlan, Suwimon Keeratipibul
21		Porcine DNA Detection Kit	Dr. Pornpimol Mahamad, Assoc. Prof. Dr. Winai Dahlan, Sukanya So-audon, Saveeyah Kahong, Monrudee Khemtham, Assoc. Prof. Vanida Nopponpunth



HALAL HEALTH SCIENCE INNOVATION PROJECTS

The “Halal Scientist Competition & Healthcare Innovation” organized by the Halal Science Center Chulalongkorn University, showcases cutting-edge projects in Halal health science by high school students. This annual competition began with training for project mentors, followed by workshops for students who advanced through the first round, and culminated in the Coaching & Incubation stage and the thrilling Final Pitching. The competition reflects the creativity and dedication of Thai youth in developing innovative scientific projects. This year, the following remarkable projects were selected to be presented at the Thailand Halal Assembly:

- “Fabrication of Lithium Disilicate Glass-Ceramic Crowns for Dental Restoration” by Satri Nonthaburi School, Nonthaburi.
- “Synthesis of Zinc Oxide Nanoparticles Using Bagasse Extract for Antibacterial Dishwashing Sponges” by Patanawittaya School, Yala.
- “Developing Application for Diabetic Retinopathy Classification from Retina Images Using Deep Learning” by the Demonstration School of Prince of Songkla University (Secondary Division), Pattani.
- “Gel patch for muscle relief pain from Samed Khao essential oil, Thung Talay Community” by Songkhla Islamic Foundation School, Songkhla.
- “The development of innovative possibilities for test kits for urinary tract stone disease Urinary screening stone test (USST)” by Thamwittaya Foundation School, Yala.

HALAL ROUTE WORKSHOP

Explore the “Halal Route” application – a revolutionary tool that is transforming and simplifying halal tourism, making it more accessible to everyone. This workshop will showcase its innovative features, reveal its potential, and highlight how it empowers businesses, travelers, and stakeholders within the global halal ecosystem.

Workshop Highlights:

- **Keynotes on the vision and impact** of the Halal Route application in halal tourism and ecosystem, its market potential, and the benefits to key stakeholders.
- **Interactive session** where participants can hands-on explore the app’s functions and benefits.
- **Q&A and Feedback** to share your thoughts, ask questions, and contribute to shaping the future of halal tourism.



Event Details

Date: December 19, 2024

Time: 13:00 – 15:15

Location: Rifaee Room

Join us to be part of this exciting journey into the future of halal tourism!



TENTATIVE CONFERENCE PROGRAM

19 December 2024 (Thursday)		20 December 2024 (Friday)	
Time (GMT +7)	Room-I (Grand Meroz Room)	Room-II (Rifaae Room)	Room-I (Grand Meroz Room)
08:00 - 09:00	Participants Registration		
09:00 - 09:30	IHSATEC2024; 17 th HASIB		
09:30 - 10:00	Grand Opening Ceremony at Grand Meroz Room Session-5: Halal Compliance with A New Frontier Food and Nonfood Innovation		
10:00 - 10:30	Exhibition visit by Chairman of Ceremony Tea/Coffee Break		
10:30 - 11:00	Keynote Session Thailand Halal Trust and Confident with AIs		
11:00 - 11:30	IHSATEC2024; 17 th HASIB Session 6: Oral Presentation (OP) Science, Technology, and Innovation (8 min presentation + 2 min Q&A)		
11:30 - 12:00	Session 1: Advanced Power AIs for Halal Trust		
12:00 - 12:30	Lunch and Dhuhur prayer		
12:30 - 13:00	Lunch and Dhuhur prayer		
	Participants Registration IHSATEC2024; 17 th HASIB Poster Presentation Poster Viewing		Participants Registration IHSATEC2024; 17 th HASIB Tea/Coffee Break
	Grand Opening Ceremony at Grand Meroz Room Exhibition visit by Chairman of Ceremony Keynote Session Thailand Halal Trust and Confident with AIs IHSATEC2024; 17 th HASIB Session 6: Oral Presentation (OP) Science, Technology, and Innovation (8 min presentation + 2 min Q&A)		IHSATEC2024; 17 th HASIB Poster session (3 min presentation + 2 min Q&A) • Cluster 1: Business & Marketing, Social Science • Cluster 2: Science, Technology, and Innovation
	Grand Opening Ceremony at Grand Meroz Room Exhibition visit by Chairman of Ceremony Keynote Session Thailand Halal Trust and Confident with AIs IHSATEC2024; 17 th HASIB Session 6: Oral Presentation (OP) Science, Technology, and Innovation (8 min presentation + 2 min Q&A)		IHSATEC2024; 17 th HASIB Poster session (3 min presentation + 2 min Q&A) • Cluster 3: Science, Technology, and Innovation

19 December 2024 (Thursday)		20 December 2024 (Friday)	
Time (GMT +7)	Room-I (Grand Meroz Room)	Room-II (Rifaae Room)	ARCHWAY
13:00 - 13:30	IHSATEC2024; 17 th HASIB	Halal Route Workshop Session 1 "Halal Route: Unlocking the Future of Halal Thai Tourism"	Room-I (Grand Meroz Room) Lunch and Jumaat prayer
13:30 - 14:00	Session-2: Halal Wellness and Beauty		
14:00 - 14:30	IHSATEC2024; 17 th HASIB	Session 2 "Interactive Workshop of the Halal Route Application"	Session 7: Fostering Collaboration and Establishing Academic Networks between Thailand and GCC Countries: Exploring Partnerships and Technology Transfer Opportunities
14:30 - 15:00	Session-3: Oral Presentation (OP) Science, Technology, and Innovation (8 min presentation + 2 min Q&A)		
15:00 - 15:30	Tea/Coffee Break	Poster Presentation Poster Viewing	
15:30 - 16:00	IHSATEC2024; 17 th HASIB	Session-4: Oral Presentation (OP) Science, Technology, and Innovation (8 min presentation + 2 min Q&A)	Tea/Coffee Break Award Ceremony • Halal SMEs award • IHSA TEC2024 awards / Junior Halal Science awards
16:00 - 16:30	Preparing for Welcoming Dinner		
17:00 - 17:30	Maghrib prayer at Astiatque the Riverfront	Closing Ceremony	
17:30 - 18:00		End of The Conference	
18:00 - 18:30			
18:30 - 19:00			
19:00 - 20:30	Welcome Dinner		



*** Please scan the QR code to check the current schedule.



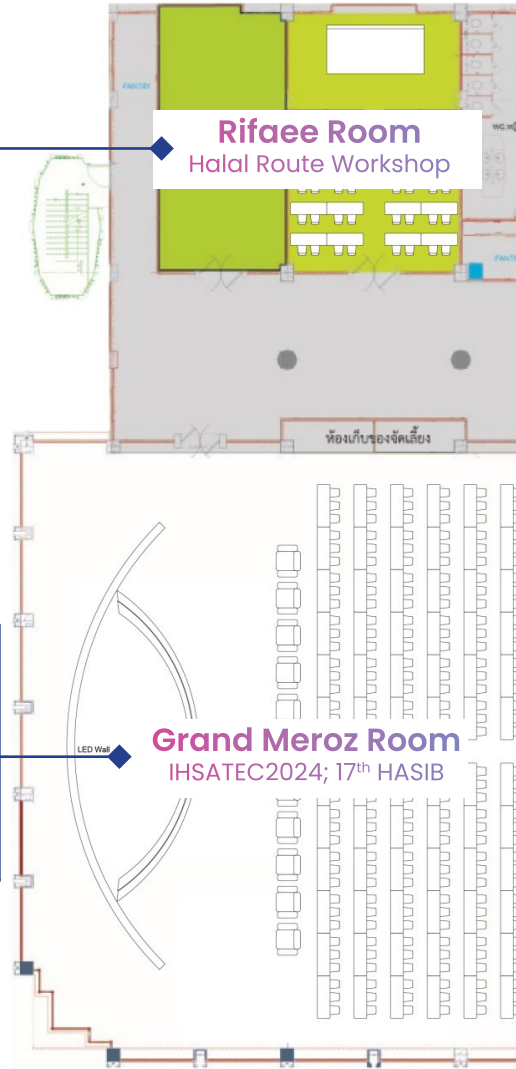
FLOOR PLAN

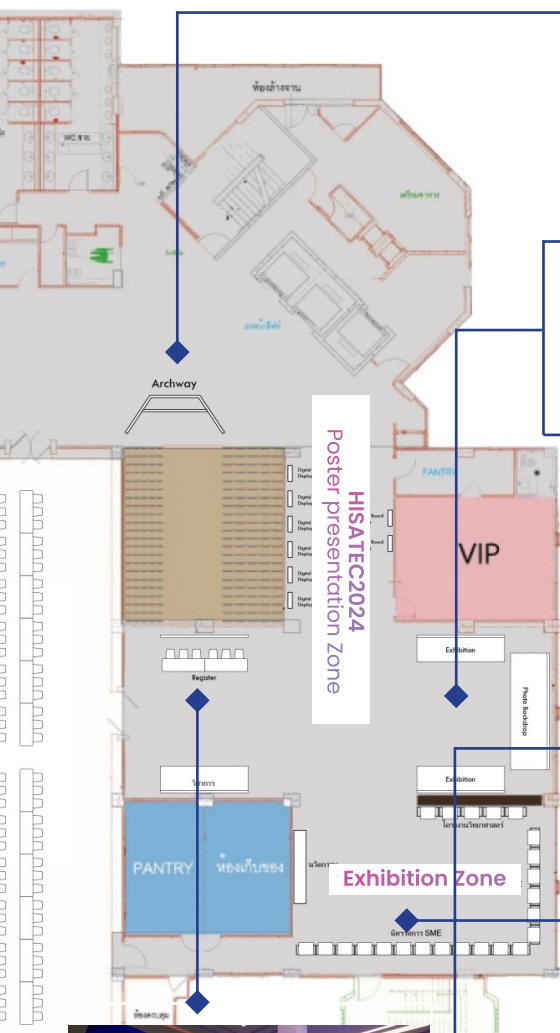


Rifaee Room
Halal Route Workshop



Grand Meroz Room
IHSATEC2024; 17th HASIB





ACCOMMODATION



Airport Rail Link - Ramkhamhaeng Station



Sports Authority of Thailand



Emsphere

SIAM PARAGON

ICON SIAM



Suvarnabhumi Airport

Donmueang International Airport

Please scan the QR code to evaluation for
 The International Halal Science and
 Technology Conference 2024 (IHSATEC):
 17th Halal Science Industry and Business (HASIB)



Overall Evaluation
 THA 2024



Keynote Session THA 2024:
 Thailand Halal Trust
 and Confident with Als



HASIB 1 Session 1:
 Advanced Power Als for
 Halal Trust



HASIB 2 Session 2:
 Halal Wellness
 and Beauty



HASIB 3 Session 5:
 Halal Compliance with
 A New Frontier Food and
 Nonfood Innovation



HASIB 4 Session 7:
 Fostering Collaboration and
 Establishing Academic
 Networks between Thailand
 & GCC Countries: Exploring
 Partnerships & Technology
 Transfer Opportunities



Halal Route Workshop Session 1:
 Halal Route: Unlocking the Future
 of Halal Thai Tourism & Session 2:
 Interactive Workshop of
 the Halal Route Application



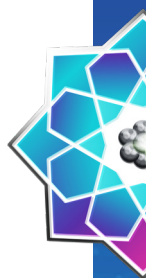
Oral Presentation THA 2024
 (Academic Presentation)



Poster Exhibition
 THA 2024
 (Academic Presentation)



Exhibition THA 2024





THE HALAL SCIENCE CENTER CHULALONGKORN UNIVERSITY

254 CU Research Bldg., Floor 11-13th Phayathai Road.,
Wangmai, Pathumwan, Bangkok, Thailand, 10330
Tel : (+66) 2 218 1054 E-mail : info.hsc.cu@gmail.com