



ABSTRACTS OF THE INTERNATIONAL HALAL SCIENCE CONFERENCE 2023

Theme
**HALAL INDUSTRY
SUSTAINABILITY
THROUGH SCIENCE**

Organised by
**INTERNATIONAL INSTITUTE FOR HALAL RESEARCH AND TRAINING (INHART),
IIUM, MALAYSIA
HALALAN THAYYIBAN RESEARCH CENTRE,
UNISSA, BRUNEI DARUSSLAM**

Editors
**Noor Yuslida Hazahari
Nurhusna Samsudin
Haruna Babatunde Jaiyeoba
Nor Asila Nazmi**



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

URL: <https://books.aijr.org/index.php/press/catalog/book/155>

Series: AIJR Abstracts

Browse AIJR Abstracts Series at-

<https://books.aijr.org/index.php/press/catalog/series/abstracts>

Noor Yuslida Hazahari
Nurhusna Samsudin
Haruna Babatunde Jaiyeoba
Nor Asila Nazmi
(Editors)

Abstracts of the International Halal Science Conference 2023

IHASC23 (22-23 August 2023)

Organized by
International Institute for Halal Research and Training (INHART), IIUM, Malaysia
Halalan Thayyiban Research Centre, UNISSA, Brunei Darussalam

Published by
AIJR Publisher, Dhaurahra, Balrampur, India 271604



Abstracts of the International Halal Science Conference 2023
IHASC23 (22–23 August 2023)

Editors

Dr. Noor Yuslida Hazahari

International Institute for Halal Research and Training
International Islamic University Malaysia
Jalan Gombak, 53100 Kuala Lumpur, Selangor

Dr. Nurhusna Samsudin

International Institute for Halal Research and Training
International Islamic University Malaysia
Jalan Gombak, 53100 Kuala Lumpur, Selangor

Dr. Haruna Babatunde Jaiyeoba

International Institute for Halal Research and Training
International Islamic University Malaysia
Jalan Gombak, 53100 Kuala Lumpur, Selangor

Dr. Nor Asila Nazmi

International Institute for Halal Research and Training
International Islamic University Malaysia
Jalan Gombak, 53100 Kuala Lumpur, Selangor

Conference Organizer

International Institute for Halal Research and Training (INHART), International Islamic University (IIUM), Malaysia

In-Collaboration with

Halalan Thayyiban Research Centre, University Islam Sultan Sharif (UNISSA), Brunei Darussalam

Conference Venue

International Islamic University (IIUM), Malaysia

ISBN: 978-81-961472-9-7

DOI: <https://doi.org/10.21467/abstracts.155>

Type

Abstract Book

Series

AIJR Abstracts

Published

22 August 2023

Number of Pages

280

Copyeditor

Ms. M. Sharifa Azmi

Imprint

AIJR Books

© 2023 Copyright held by the author(s) of the individual abstract. Abstracts are not considered as pre-publication and hence author(s) are free for subsequent publications. Abstracting is permitted with credit to the source.

This is an open-access book under Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) license, which permits any non-commercial use, distribution, adaptation, and reproduction in any medium, as long as the original work is properly cited.

Published by



AIJR Publisher, Dhaurahra, Balrampur, India 271604

Disclaimer

This conference book of abstracts has been produced using author-supplied copy via conference organizer. Editing has been restricted to some formatting and style where appropriate. No responsibility is assumed by the publisher or conference organizer for any claims, instructions, methods, diagnosis, treatment, or policy contained in the abstracts: It is recommended that these shall be verified independently. Further, the conference organizer & AIJR publisher both remain neutral with regard to jurisdictional claims in published maps and institutional affiliations



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

22nd & 23rd AUGUST 2023

CONFERENCE BOOK of ABSTRACTS



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

22nd & 23rd AUGUST 2023

TABLE OF CONTENTS

Disclaimer	i
About International Halal Science Conference 2023	vii
About Conference Organiser	viii
Organising Committee	ix
Remarks From Chairperson	x
Programme Schedule	xi

Halalan Toyyiban for Sustainable Lifestyle (HTSL)

HTSL#64	Case Study: <i>Muallafs'</i> Lifestyle Transition Towards Halal Food Consumption in Brunei Darussalam	1
HTSL#65	The Credibility Procedure of Halal Supervisor in Brunei Darussalam	6
HTSL#68	Halal Label Analysis on Packaging Products at the Nutrition Installation of General Hospital in Caruban Madiun, Indonesia	11
HTSL#69	The Contribution of Natural Foods on the Sustainability of <i>Halalan Toyyiban</i> Lifestyle based on <i>Maqasid Syari'ah</i> in Brunei Darussalam	15
HTSL#71	Nutritional Food and Friendly Service: A Conceptual Framework for <i>Toyyib</i> Food Outlet	20
HTSL#78	Environmental Sustainability Through Genetically Modified Foods – An Islamic Ethical Perspective	25



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

22nd & 23rd AUGUST 2023

HTSL#81	Formulation and Physicochemical Properties Evaluation of an Innovative <i>Halalan Toyyiban</i> Healthy Bar to Boost Cognitive Performance	28
HTSL#89	The Significance of Halal Logo on Cosmetic Products: A Review	33
HTSL#95	Morphometric data of <i>Tachypleus gigas</i> and <i>Carcinoscorpius rotundicauda</i> from Pahang Balok River, Malaysia	38
HTSL#98	Vegan Alternatives as The Source of Halal Cosmetic Products: An Overview on Its Potential Benefits	42
HTSL#99	SMEs Perceptions on Food Adulteration in Brunei Darussalam	47
HTSL#100	<i>Halalan Toyyiban</i> : A Comprehensive Guide for Sustainable Lifestyle	52
HTSL#103	<i>Halalan Toyyiban</i> Concept in Food Production and Consumption for Lifestyle: Thailand's Industry Perspective	57
HTSL#104	Food and Substance Addiction Control and Policies: An <i>Halalan Toyyiban</i> Perspective	61
HTSL#120	Jackfruit Flour: Halal Processing Technologies and Application of Hazard Analysis Critical Control Point (HACCP)	65
HTSL#122	A Study on Human Capital Development for Muslim-Friendly Tourism	69
HTSL#123	Occupational Safety and Health in Halal and <i>Toyyib</i> Workplaces: A Review of <i>Maqasid Al-Shari'ah</i> Principles	74
HTSL#124	Overview on the Implementation of Halal Certification Among Home-Based Food Business (HBFB) in Malaysia	79
HTSL#125	Twenty Years of Bibliometric Analysis for Halal Pharmaceutical Research	84
HTSL#134	Comparison Studies on the Physicochemical and Functional Properties of Gelatin Extracted from Red Tilapia (<i>Oreochromis mossambicus</i>) Fish Skin and Bovine Skin Using Chemical Pre-treatment	89
HTSL#147	Sentiment Analysis of Indonesian Halal Cosmetic Products	94
HTSL#165	Biosensor Applications in Ensuring Sustainable Practices in the Halal Food Industry	99
HTSL#191	Portrait of an Individual Chicken Slaughterhouse Business in Assuring Halal Products in Society	104
HTSL#204	The Effect of Storage Conditions on Ethanol Content of Kombucha Tea	109
HTSL#217	Muslim-Friendly Tourism in Australia: Challenges and Prospects	114



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

22nd & 23rd AUGUST 2023

Islamic Perspective in Halal Science (IPHS)

IPHS#83	Halal Water Filtration System: An Empirical Study of BERSUCI Product	119
IPHS#86	Islamic Perspective in Halal Science: Analysis of <i>Ijtihad</i> Methodology of Halal and Haram in Contemporary Realities	123
IPHS#105	The Importance of Halal Labelled Meat Towards Muslim Consumers in Brunei Darussalam	127
IPHS#116	Halalan Toyyiban Attributes Shown in Selected Traditional Malay Medical Manuscripts	132
IPHS#132	The Relationship of The Causes of Pandemic Diseases with Animals Consumption: Observation Studies Based on Halal Standards in Islamic Law	136

Advance Materials for Alternative Ingredients (AMAI)

AMAI#80	COSMO – RS Based Prediction and Screening of Antimicrobial Activities of Deep Eutectic Solvents	140
AMAI#107	Curcumin and PLA-Curcumin Coating's Chromaticity and Colour Stability in Reaction to the Effectiveness of pH	144
AMAI#109	Natural Pigment of Selected Blue-Green Algae and their antioxidant and antimicrobials activities	149
AMAI#117	Antibacterial Activities and Efficacy of <i>Carica papaya</i> Seed Extract on <i>Fragaria x ananassa</i> (Strawberry)	153

Halal Forensic Technology (HFT)

HFT#112	Determining the Minimum Contamination Percentage of Chicken Plasma Protein in Surimi-Based Products Using Response Surface Methodology	168
HFT#114	Extraction Methods Comparison in Determine Deer DNA	166
HFT#223	An Automated DNA Extraction and PCR Analysis as A Rapid Method for Identification of Meat Species in Halal-Meat Products	167

Halal Management Science (HMS)

HMS#70	Halal Audit Procedure in Assuring the Safety and Quality of Local and Imported Halal Meat Product: A Preliminary Study	171
HMS#102	Ecdysis Failure in Asian Horseshoe Crab Larvae of <i>Tachypleus gigas</i> under Laboratory Observation	175
HMS#119	Synergising Halal Education Stakeholders' Administration and Governance in Malaysia	179



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

22nd & 23rd AUGUST 2023

HMS#145	Determinants of Halal Executive Competency in Food Manufacturing Companies in Malaysia	183
HMS#149	Consumer's Knowledge and Readiness in Accepting the Implementation of Mandatory Malaysia Halal Certification Scheme (MHCS)	188
HMS#153	Halalan Toyyiban Concept in the Broiler Chicken Farms in Subang, West Java, Indonesia: A Perspective on Current Operational Practices	193
HMS#160	A Review of Hindering Factors for Halal Certification Adoption Among Muslim-Owned Small and Medium Enterprises (SMEs) of Food Industry in Malaysia	198
HMS#186	Rapid, Sensitive and Label-Free Multiplex Meat Speciation Kit	203
HMS#187	The Management of Halal Logistics Service in Nippon Express: Issues, Challenges and Solutions	208
HMS#195	Literature Analysis of Risk and Solutions for Halal Beef Supply Chain	212
HMS#216	The Role of Data-Driven Marketing Strategy in Sustaining Halal SMEs	217
Halal Pharmaceutical (HP)		
HP#66	Formulation of Granules Effervescent from Avocado Seeds by Vary Concentration of Acid and Base	222
HP#67	The Effect of Sidr (<i>Ziziphus spina-christi</i>) Leaves Decoction to Overcome of Fluor Albus	227
HP#74	A Potential Halal Collagen-like Protein (RecCLPM-46) Exhibits Wound Healing Properties for Halal Pharmaceutical Industry	231
HP#82	Essential Oils as an Alternative to Inhibit the Growth of Lung Cancer A549 Cell Lines	236
HP#111	Perception of Halal Pharmaceuticals among State Hospital Outpatients in Perlis, Malaysia	240
HP#130	Halalopathy: A Holistic Approach to Personalized Medicine for Prevention and Cure	245
HP#137	Application of Artificial Intelligence to Toxicological Assessment of Plant: A Bibliometric Analysis and Future Research Plans	250
HP#141	Vampire Treatment Between Medically Right and <i>Shari'ah</i> Wrong	255
HP#176	Halal Alternative Formulation to Enhance Sertraline/Fluconazole Antifungal Activity and Minimize Drug Side Effect in <i>Cryptococcus meningitis</i> – Halal Pharmaceutical	259



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

About International Halal Science Conference 2023

The International Halal Science Conference 2023 is jointly organised by the International Institute for Halal Research and Training (INHART), International Islamic University Malaysia (IIUM) and Halalan Thayyiban Research Centre, University Islam Sultan Sharif (UNISSA) with the theme – 'Halal Industry Sustainability Through Science'. Halal science could be defined as halal knowledge that is attained systematically through observation and experimentation study and practice to describe and explain the natural phenomena that relate to halal practice. Halal science is an important aspect that will support the integrity of what we called halal products or halal services. Halal itself is holistic and comprehensive such that the sciences of halal can sit anywhere in the spectrum of social science, humanities, applied science, and technology. With the increasing global interest in halal products and services, this conference which is jointly organised by INHART and UNISSA is timely.



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

About Conference Organiser

The International Institute for Halal Research and Training (INHART) is a centre of excellence at the university level and is expected to be recognised as one of the Higher Institutions' Centres of Excellence (HICoE) at the national level in the near future. INHART history begins with the establishment of a special centre dedicated to the halal industry – 'IIUM Halal Industry Research Centre' in July 2006. Prior to the birth of this centre, there were already pockets of activities related to the halal and halal industry by academic staff from various Kulliyahs. But with HIRCen, Halal activities at IIUM become more focused and better coordinated with the Research Management Centre becoming the monitoring body.

On 29th April 2017, the Halalan Thayyiban Research Centre was officially set up in an effort to materialise the titah of His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah Ibni Al-Marhum Sultan Haji Omar 'Ali Saifuddien Sa'adul Khairi Waddien, Sultan Dan Yang Di-Pertuan Negara Brunei Darussalam during the 6th Hafl al-Takharruj 2016 Ceremony, UNISSA. Halalan Thayyiban Research Centre was inaugurated on the 7th Mahrajan Hafl al-Takharruj 2017 at the International Convention Centre, Berakas, Brunei Darussalam by His Royal Highness, Crown Prince (Dr) Haji Al-Muhtadee Billah Ibni His Majesty Sultan Haji Hassanal Bolkiah, Senior Minister at the Prime Minister's Office and Pro-Chancellor of UNISSA. The establishment of this centre has become a place for research, teaching and providing professional services to uphold the sanctity of the *Sunnah* of the Prophet Muhammad *Sallallahu 'alaihi wasallam*.



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

Organising Committee

Special Advisor

Prof. Datuk Dr Asma Ismail

Internal Advisor

Prof. Dr. Hamzah Mohd Salleh

Chairperson

Prof. Ts. Dr. Azura Amid

Co-chairperson

Pg. Dr. Hajah Norkhairiah bt Pg. Haji Hashim

Deputy Chairperson

Assoc. Prof. Dr. Zaleha Kassim

Deputy Co-Chairperson

Dr. Zeiad Amjad Abdulrazzak

Treasurer

Mdm. Norhaslina bt Mohd Sharif

Secretariat Promotion & Advertisement

Assoc. Prof. Ts. Dr. Noor Faizul Hadry Nordin (Head)

Dr. Muhamad Shirwan Abdullah Sani

Dr. Wan Syibrah Hanisah Wan Sulaiman

Sr. Nor Surilawana Binti Haji Sulaiman

Datin Hajah Norliza Bt. Dato Seri Setia Haji Mahalle

Dr. Siti Nur Idayu Binti Hj Metusan

Communication & Invitation

Dr. Nurhusna Samsudin (Head)

Dr. Noor Yuslida Hazahari

Programmes & Programme Book

Dr. Norazilawati Md Dahlal (Head)

Dr. Nur Azira Tukiran

Registration & Participation

Dr. Mohd Hafidz Muhammad Maifiah (Head)

Dr. Nur Hanie Mohd Latiff

PGSS Members

Sponsorship

Assoc. Prof Dr. Mohammad Aizat Jamaluddin (Head)

Assoc. Prof. Dr. Nurulhidayah Ahmad Fadzilah

Sr. Raihana bt Mohd Raffi

Logistic & Support Services

Br. Muhammad Haziq Mohd Zambri (Head)

Br. Aiman Azzim Mohd Ikhsan

Sr. Azizah Md. Zaidan

Sr. Ely Shuhadah Tajuddin

Post Conference Publication

Dr. Haruna Babatunde Jaiyeoba (Head)

Dr. Nor Asila Nazmi

Assoc. Prof. Dr Betania Kartika

Dr. Nur Syuhadah Mohd

Prof. Dr. Ahmed Jalal Khan Chowdhury

Prof. Madya Nurdeng Deuraseh

IT & Technical

Dr. Amal Elgharbawy (Head)

Br. Mohd Nizam Abdullah



HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

Remarks From Chairperson

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ
السَّلَامُ عَلَيْكُمْ وَرَحْمَةُ اللَّهِ وَبَرَكَاتُهُ

As the Chairman and on behalf of the International Institute for Halal Research & Training (INHART), International Islamic University Malaysia (IIUM), it is my pleasure to welcome all speakers and delegates to the International Halal Science Conference 2023. This is the first conference jointly organized by the International Islamic University Malaysia (IIUM), and University Islam Sultan Sharif (UNISSA). The goal of this conference is to advocate conscious decision-making and facilitate Muslims in navigating the evolving scientific landscape while adhering to halal practices.

With the theme 'Halal Industry Sustainability Through Science', we hope that the International Halal Science Conference 2023 will provide a platform for researchers and relevant agencies from diverse backgrounds, perspectives, and interests to meet, exchange ideas, and strengthen their collaboration in halal research.

Finally, I would like to express my sincere gratitude to all the sponsors, committee members, and volunteers who have tirelessly made this conference possible. Let us harness the power of collaboration to drive positive change in our communities and the world at large. This conference would not be possible without the coordination and cooperation of many people.

Once again, I extend my warmest welcome to each and every participant of the International Halal Science Conference 2023. Let's make the most of this conference, and create lasting memories and valuable insights that propel us toward a brighter future in the halal industry.

Thank you.

PROFESSOR TS. DR. AZURA BT AMID

Dean

International Institute for Halal Research & Training (INHART),
International Islamic University Malaysia (IIUM)
& Chairman of the Organizing Committee
International Halal Science Conference (IHASC23)





HALAL INDUSTRY SUSTAINABILITY THROUGH SCIENCE

Programme Schedule

22nd AUGUST 2023



08:00 – 08:50

Registration and Breakfast



09:00 – 09:40

Keynote Speaker #1

Dr. Nur Rahman, Brunei Halal Foods

'Building a Halal National Ecosystem: Brunei's Experience'



09:40 – 10:20

Keynote Speaker #2

Prof. Dr. Rohman, Universiti Gajah Madha

'The Current Updates and Trends in Halal Authentication'



10:20 – 10:40

Tea Break



10:40 – 12:45

Opening Ceremony



12:45 – 14:00

Break and Sponsor Slot

Lunch Break and Zuhur Prayer



12.00 – 16.00

Halal Awareness Training



14:00 – 14:40

Keynote Speaker #3

Ms. Zalina Idris, Halal Development Corporation Berhad (HDC)

'Strengthening the Halal Medical Devices Sector'



14:40 – 17.00

Parallel Sessions 1

23rd AUGUST 2023



09.30 – 12.00

Navigating Halal Science Research: Insights into Molecular and Statistical Tools



10:45 – 11:00

Tea Break



11:00 – 11:40

Keynote Speaker #4

Mr. Norakmal Bin Mohamad, Department of Halal Management,
Jabatan Agama Islam Selangor (JAIS)

"Navigating Challenges in Halal Certification from an Authority Perspective"



11:40 – 12:20

Keynote Speaker #5

Ms. Rozi Osman, Rozi Osman International PLT

'Halal Pharmaceuticals: A Journey of Leadership Excellence'



12:20 – 13:00

Closing ceremony



13:00 – 14:00

Break

Lunch Break and Zuhur Prayer



14:00

End of Day 2



جامعة السلطان الشريف علي الإسلامية
UNIVERSITI ISLAM SULTAN SHARIF ALI

Abstracts of the International Halal Science Conference 2023

INTERNATIONAL INSTITUTE FOR HALAL RESEARCH AND TRAINING
(INHART),
IIUM, MALAYSIA



HALALAN THAYYIBAN RESEARCH CENTRE,
UNISSA, BRUNEI DARUSSALAM



SPONSORSHIP



COMPLEVI
YOUR FULL PROTECTION PARTNERS

Haco swiss



To learn more about AIJR Publisher
Please visit us at: www.aijr.org



ISBN 978-81-961472-9-7

