## HALAL SCIENCE AND MANAGEMENT RESEARCH CLUSTER

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<thead>
<tr>
<th>RESEARCH CLUSTER CODE</th>
<th>HSM</th>
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<tr>
<td>NO. OF PROGRAMME</td>
<td>4</td>
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<td>NO. OF GROUP</td>
<td>15</td>
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<td>NO. OF RES. CENTRE</td>
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### SYNOPSIS

The Third Industrial Master Plan 2006-2020 (IMP-3) and Third National Agricultural Policy (NAP-3) have the stated objective of establishing Malaysia as a global halal hub. One of the success factors identified is R&D in her bid to consolidate this national agenda. Halal research is a new and emerging field. Therefore, the academic output such as publications cannot be well-captured by existing systems such as sciVerse. It cannot be denied that even the non-Muslim countries like Thailand and Singapore are aggressively making efforts wanting to be the halal reference center. The total global halal markets for foods, goods and services stand at around RM 3.1 trillion. However, there are issues relating to halal industry such as halal ingredients procurement, logistic, animal slaughter issues and database that need to be urgently addressed. The recent 19th IMT-GT meeting held on the 25th of September 2012 in Negeri Sembilan further re-emphasized the need to carry out the proposed innovative program. This halal agenda has been deliberated in various forums such as National Professors Council (KPT), Bumiputra Development Master Plan (MITI), World Halal Research Summit (HDC), MIHAS (MITI), World Halal Forum and National Fatwa Council (JAKIM). The cluster encompasses programs that require multidisciplinary inputs from the field of agriculture, biotechnology, food science and technology, biomedical sciences, engineering, economics and management, and the basic science disciplines like chemistry, microbiology and biochemistry.

### DESCRIPTION  
(with NABC elements)

**Need**
- Transformation of halal science and management research area as a recognized field of research globally  
- Addresses recurrent and emerging issues in halal supply chain  
- Championing R&D&C in research area of halal supply chain in line with national agenda to make Malaysia as a one-stop Halal Hub  
- To support positioning of Malaysia as the regional referral center in R&D&C for halal  
- Need for better understanding and systematic approach to address halal related issues

**Approach**
- Multi and transdisciplinary research programmes  
- Build on existing expertise  
- Higher visibility (build critical mass)  
- Mentoring next generation of scholars  
- Integrated, coordinated research groups  
- Multi centers (university wide research groups)  
- International linkages

**Benefit to UPM**
- Cost savings – avoid duplication of research  
- Efficient use of resources  
- More focused programmatic research and activities  
- Build research team culture  
- Transparency – every scholar in the cluster is aware of who is doing what

**Benefit to Society**
- Track record of research (knowledge bank, repository in the area of research)
- Efficient allocation and use of resources for societal development
- Improve quality of service delivery
- Improve quality of life through the assurance of wholesomeness and Toyyiban of the supply chain for food, non-food and services

**Competitor**
- UM is strong in humanities (anthropology, sociology, political science, language), economics and public admin/development studies
- UKM is strong in civilization studies, language and syariah
- USM is strong in archeology and social work
- UIA (INHAD) is strong in training and management
- USIM (IKRAM) is strong in research
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<tr>
<th>Code</th>
<th>Research Programme</th>
<th>Synopsis</th>
<th>Leader of Research Programme</th>
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<tr>
<td>HSM01</td>
<td>Halal Business and Management</td>
<td>This research program focuses on the current needs of business and management of halal products and services. The development of halal assurance system and halal branding are the main focuses, while the program is also working on other areas such as strategic and operational management, quality management, logistic management, international trade and marketing, promotion and branding, service quality and consumer behavior of halal products and services, hospitality and tourism management, and halal slaughtering. Program strength is the key researchers’ with varied background and experiences covering areas such as foodservice, engineering, economics and management, sociology and agriculture, employing both quantitative and qualitative research approaches. The research program aims to be a leading proponent of halal management research which will benefit the halal industry in Malaysia and abroad.</td>
<td>Dr. Suhaimi Ab Rahman (IPPH) <a href="mailto:suhaimi@econ.upm.edu.my">suhaimi@econ.upm.edu.my</a>,</td>
<td>1. Halal Management and Marketing – Dr. Raja Nerina Raja Yusuf (FEP)  2. Halal Slaughtering Management – Prof. Dr. Awis Qurni Saizli (FP)  3. Islamic Banking and Finance - Dr. Suhaimi Ab. Rahman (FEP)  4. Halal Tourism and Hospitality - Assoc. Prof. Dr. Muhammad Shahrim Abd Karim (IPPH)</td>
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<td>HSM02</td>
<td>Halal Products Innovation</td>
<td>The Third Industrial Master Plan 2006-2020 (IMP-3) has the stated objective of establishing Malaysia as a global halal hub with R&amp;D as one of the success factors identified. This will enable her to participate in the global halal markets amounting to around RM 3.1 trillion. Therefore, the research program aims to develop halal products throughout the halal chain for ingredients, processing methods, processing aids and halal raw material as alternative to non-halal products. The research program is the pioneer program conducted in the country. It is supported by expertise available in the University and the existence of strong collaboration with other institutions locally and internationally. The R&amp;D will take into account the commercial viability of the developed products and technology.</td>
<td>Prof. Dr. Jamilah Bakar (IPPH) <a href="mailto:jamilah@upm.edu.my">jamilah@upm.edu.my</a></td>
<td>1. Halal Ingredients and Products for Food - Prof Dr. Jamilah Bakar (IPPH)  2. Halal Cosmetics and Personal Care – Prof. Dr. Mahiran Basri (FS)  3. Halal Pharmaceutical And Medical Aids – Prof. Dr. Muhammad Nazrul Hakim Bin Abdullah (FPSK)  4. Halal Animal Feed – Prof. Dr. Mohd Salleh Kamaruddin (FP)</td>
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<td>HSM03</td>
<td>Halal Products Traceability, Authenticity and Quality</td>
<td>The research program focuses on the development of reliable, rapid and precise detection methods of non-halal substances in food and non-food products. The development of analytical technique in the research program is to serve the Toyyiban aspect so as to ensure the safety and quality of halal products. Various analytical techniques or methods will be developed for these purposes are based on chromatography, spectroscopy, molecular biology, electrophoresis, calorimetry, nanotechnology, morphology, theology and physical measurement. These techniques/methods will be validated according to MS ISO 17025 accreditation. The development of reliable methods to detect and authenticate halal products will play a very significant role in determining and ensuring the integrity of halal of products for Muslim consumption.</td>
<td>Prof. Dr. Shuhaimi Mustafa (FSB) <a href="mailto:shuhaimi@biotech.upm.edu.my">shuhaimi@biotech.upm.edu.my</a></td>
<td>1. Rapid Methods and Sensor Development – Dr. Fakhru Zaman Rokhani (FK)  2. Development of Analytical Methods for Halal and Toyyiban Verification – Prof. Dr. Shuhaimi Mustafa (IPPH)  3. Software and Tools Development for Halal Traceability System – Assoc. Prof. Dr. Rodziah Atan (FSKTM)  4. Database Halal Products and Services – Assoc. Prof. Dr. Alyani Ismail (FK)</td>
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<td>HSM04</td>
<td>Shariah and Halal Laws</td>
<td>Shariah and Halal Laws is a research group dedicated to contribute to national halal policy and management by focusing research on Maqasid al-Shariah (Objective of Islamic Laws), halal administration policies and laws, the development of halal products laws, halal fatwa management, Islamic legal principles and their application to modern life, halal international trade laws, halal consumer protection laws, and halal product liability and safety laws.</td>
<td>Assoc. Prof. Dr. Nurdeng Duraseh (IPPH) <a href="mailto:nurdeng@putra.upm.edu.my">nurdeng@putra.upm.edu.my</a></td>
<td>1. ASEAN Halal Products - Assoc. Prof. Dr. Mohhidin Othman (FSTM)  2. Shariah and Law for Social Well-Being - Assoc. Prof. Dr. Nurdeng Deuraes (IPPH)  3. Halal Standard, Policy, Governance - Dr. Elistina Abu Bakar (FEM)</td>
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