

**JOURNAL
OF
ARCHITECTURE, PLANNING
AND
CONSTRUCTION MANAGEMENT**

Editor-in Chief
Emeritus Prof. Ar. Dato' Dr. Elias Salleh
Kulliyyah of Architecture and
Environmental Design

VOLUME 8 ISSUE 2

EDITOR-IN-CHIEF AND EDITORIAL BOARD

EDITOR-IN-CHIEF

Emeritus Prof. Ar. Dato' Dr. Elias Salleh (Effective from 1st January 2018)

Kulliyyah of Architecture & Environmental Design

E-mail: elias@iium.edu.my

ADVISOR

Prof. Ar. Dr. Abdul Razak Sopian Dean

Kulliyyah of Architecture & Environmental Design

E-mail: dean_kaed@iium.edu.my

EDITORIAL BOARD

Ibrahim Numan, Professor Dr.

Fatih Sultan Mehmet Vakif University, Istanbul, Turkey

Ismail Said, Assoc. Professor Dr.

University Technology Malaysia

Mohamed Yusoff Abbas, Professor Dr.

Universiti Teknologi MARA

Mohammad Abdul Mohit, Professor Dr.

Nanyang University of Bangladesh

Ahmad Nazri Muhamad Ludin, Professor Dato' Dr.

Universiti Teknologi Malaysia

Mansor Ibrahim, Professor Dato' Dr.

International Islamic University Malaysia

Assoc. Prof. Dr. M. Zainora Asmawi Deputy Dean (PG), KAED

Email: ddp_g_kaed@iium.edu.my

Noor Hanita Abdul Majid, Assoc. Prof. Dr.

International Islamic University Malaysia

Fadzidah Abdullah, Asst. Prof. Dr

International Islamic University Malaysia

Syakir Amir Abdul Rahman, Asst. Prof. Dr.
International Islamic University Malaysia

Aniza Abu Bakar, Asst. Prof. Dr.
International Islamic University Malaysia

SECRETARIAT

Arita Hanim Bt. Awang, Asst. Prof. Dr.
International Islamic University Malaysia

WEBMASTER

Br. Syarel Azill Bin Yaali
International Islamic University Malaysia

**JOURNAL OF ARCHITECTURE, PLANNING AND CONSTRUCTION
MANAGEMENT**

VOLUME 8	ISSUE 2	2018
Preface		vi
Editorial		vii
Towards Malaysian Sustainable Green Deen Msw Management Indicator for Land-Use Practice		1
<i>Khairunnisa Syarafina Samsudin, Sohif Mat, Halim Razali, Noor Ezlin Ahmad Basri, Zulkifli Aini</i>		
A Review of The Built Environment Attributes for Qur’anic Memorization Process		16
<i>Nurlelawati Ab. Jalil, Arita Hanim Awang, Habibah Ab. Jalil, Siti Suria Salim, Nurul Hamiruddin Salleh</i>		
Exploring Methodology to Evaluate A Heritage District from The Architectural Perspectives in Relation to Palaces, Religious Buildings and Mausoleums in Kuala Kangsar District, Perak, Malaysia		28
<i>Nurul Hamiruddin Salleh, Mazlina Mansor, Lokman Hakim Mahamud, Zumahiran Kamarudin & Nurul Syala Ab Latip</i>		
Study on Spa Typologies, Spatial Organisation and Social Interaction in Accordance with Islamic Built Environment Attributes		43
<i>Rashidi Othman, Nur Fadhlina Mohd Noor, Nurliyana Ahmad, Nurwina Aishah Manan, Khairusy Syakirin Has-Yun Hashim, Lukman Hakim Mahamod and Nurulhidayah Ahmad Fadzillah</i>		
Potentials of Campus River Re-Development Towards A Performance Landscape		50
<i>Aniza Abu Bakar and Putri Haryati Ibrahim</i>		
Assessing Plant Selections for Vertical Greenery System on Commercial Buildings in An Urban Setting		58
<i>Jamilah Othman, Izzatie Azhar and Afrina Azlan</i>		
Notes for Contributors		68

Published by

IIUM PRESS, Research Management Centre and

Kulliyah of Architecture and Environmental Design International Islamic University
Malaysia

Copyright©2016 Kulliyah of Architecture and Environmental Design

ISSN 2231-9514

e-ISSN 2462-2222

All rights reserved. The authors are solely responsible for the statement made and opinions expressed in it and its publication does not imply that such statements and/or opinions are/or reflect the views or opinions of the Editors and Publisher. While every effort has been made to trace and acknowledge copyright, however if infringement should have occurred, the Editors and Publisher tender our apologies and upon this being pointed out would take steps to make the necessary correction.

PREFACE

Assalamu'alaikum wrt. wbt. and dear all,

It has been observed that in the specialized fields of architecture, planning, landscaping architecture, quantity surveying, building technology and engineering, applied arts and design, and other fields related to the built environment there is a general lack of scholarly articles and research reports, either collectively or individually, that are closest to Malaysia, Asian and the Islamic perspectives. Consequently, the Kulliyyah (Faculty) of Architecture and Environmental Design at the International Islamic University Malaysia (KAED, IIUM) considers it to be timely and appropriate for a journal i.e. Journal of Architecture, Planning and Construction Management (JAPCM) to be established. The key aim of JAPCM is therefore to provide a platform for mitigating the 'gap' in the body of knowledge to be addressed.

JAPCM offers an opportunity for researchers, research students, practitioners and authors to share their views, theoretical and empirical research findings; and readers, especially academics and students to appreciate and benefit from its contents. Research reports and theoretical papers, short practice notes, book reviews and abstracts from Masters and PhD theses and dissertations are welcome on any aspects of architecture, urban and regional planning, landscape architecture, quantity surveying, building technology and engineering, applied arts and design, and other fields related to the built environment discipline.

Emeritus Prof. Ar. Dato' Dr. Elias Salleh

Editor-In-Chief

EDITORIAL

Assalamu-alaikum Warahmatullahi Wabarakatuh

Welcome to Volume 8 No 2. This issue of JAPCM consists of six articles covering waste management, green and landscape issues, Islamic built environment and heritage study.

Addressing municipal solid waste (MSW) management in Malaysia, Khairunnisa Syarafina Samsudin et al attempt to identify the most important MSW management indicator that should be focused by land use planners by proposing an index, based on green deen principles, to measure the level of land use planning effort by local authorities based on MSW management as a step towards sustainability. The index also indicates the level of MSW management performance indirectly. Three phases of mixed-method are used consisting of content analysis, Delphi process, and Analytic Hierarchy Process (AHP). It concludes that the 3R activities need to be focused in land use planning by providing space area for these activities regardless whether the zone is small or large.

The article by Nurlawati Abd. Jalil et al reviews the multitude of perspectives on Tahfiz ecosystem that has influence over the Tahfiz centre operation, the memorization method, behavior and other requirements in the education of a Hafiz, by investigating activity patterns of Quran memorization and Quranic studies through analysis of 22 major local Tahfiz centres. The article highlights method and findings of a significant parameter in designing a learning environment for the Tahfiz students. The paper concludes with significant key findings based on the reviews and connection to the existing theories from the mainstream educational research for the guidance of further investigation.

Exploring Kuala Kangsar District in Perak, Malaysia, Nurul Hamiruddin Salleh. et al set out to explore and examine a methodology to evaluate Kuala Kangsar as a Heritage District based on some selected architectural attributes. Employing qualitative method, this research documented and examined the palaces, religious buildings and mausoleums in Kuala Kangsar district on its heritage values through field observation, contents analysis and interviews. All the identified attributes were marked within the related grids in the GIS map of Kuala Kangsar district on 1 km x 1 km grid. The study concluded that Kuala Kangsar cannot be declared as a Heritage District from the architectural perspectives in relation to palaces, religious buildings and mausoleums.

Rashidi Othman et al addressed Shari'ah-compliant tourism by studying four different spas in Kuala Lumpur and Selangor to identify the dimensions of a Muslim-friendly spa. This study repositions spa typologies, their spatial organization and social interaction in the context of Islamic built environment. Cluster analysis was then applied to classify spa premises into different groups based on the typologies, services and spatial organization. Based on the findings, a Shari'ah-compliance considers security, privacy, and segregation of genders in its design. This research provides further information on the understanding, practices, features, and requirements of Muslim-friendly spas.

Aniza Abu Bakar and Putri Haryati Ibrahim conducted precedence studies of river development and campus development. This was followed by site analysis and synthesis of the natural environment of the river running through the International Islamic University Malaysia (IIUM) Gombak campus and its surrounding. Potentials of the performance landscape river re-development were analyzed based on the four strands of the eco-infrastructures – green, grey, blue, and red; where they represent the ecological eco-infrastructure, engineering eco-infrastructure, water eco-infrastructure, and human eco-infrastructure respectively. The finding indicates that the IIUM river and its surroundings have positive potentials to become a performance landscape towards sustainable river re-development.

Lastly, Jamilah Othman et al studied the implementation of Vertical Green System (VGS) in commercial buildings in Malaysia, acknowledging that VGS is not new but still in need of more local research. The study involved literature review, and data collection through personal field observation and interview of experts. The findings indicate that the VGS implicates not only environment, but also aesthetics quality. Hence, the result suggests that quality urban scape can be enhanced through landscape solutions, while VGS is one of them.

Happy reading!

Emeritus Professor Dato' Ar. Dr. Elias Bin Salleh

Editor-in-Chief / JAPCM