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## **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.

*Happy reading.*

**Prof. Dr. Mohammad Abdul Mohit Ph.D. (Sheffield University, UK),**

Editor-In-Chief

## EDITORIAL

*Assalamu-alaikum Wraahmatillahi Wabarakatuhu*

Welcome to the sixth volume and second issue of the Journal of Architecture, Planning and Construction Management or in short JAPCM.

This issue (vol.6, no.2) of the Journal of Architecture, Planning and Construction Management (JAPCM), contains five research papers, all of which discuss the various issues and challenges pertaining to the built and natural environments. The content of this issue, although dominated by Malaysian case studies, include one paper from India and another one from Pakistan that endow the journal an international platform. Collectively, the papers cover day lighting in typical rural houses in India, urban revival in Lahore's heritage and modernity, the role of nature form Biomimicry strategy in generating sustainable form in building design, potential of green roofs to reduce climate change effects and the need of knowledge transfer for sustainable development in the construction sector.

The first paper by Shaila and Sanketh analyses the day lighting in three vernacular houses in Mala village located in Karkala District, Karnataka, India. The survey included enlisting or recording building materials used, dimensioning individual rooms, doors and window openings and total number of lighting fixtures used in each room. Ratio of window to floor area (AW/AR) was calculated in each room of the dwellings. Monitoring the daylight and further, illuminance at various levels is measured with the help of Lux meter. Three houses were further simulated using ECOTECT2011- software. The ratios of areas of window to floor of each room in all the houses are less than 10% resulting into poor illuminance. The quality of the light inside the kitchen was very poor. Findings of the study suggest that adopting a few strategies like making wall surfaces more reflective, modifications in the grill patterns are likely to increase the indoor illumination of village houses.

The second paper by Razia Latif, Hassan Wajid, Irum Saleemi and Gulzar Haider discusses about Lahore City that is undergoing tremendous pressure from commercial and industrial development which have little regard for the historic and cultural fabric of the city. Before the partition in 1947, the city had a composition of various communities and religious groups - Hindus, Muslims, Sikhs and the British. After partition in 1947, Lahore's Sikh and the Hindu population migrated to India. As a result, many of the Sikh and Hindu mansions were ignored and not properly maintained, and some have been demolished. There are only a few remaining buildings that are in a good enough condition to be saved. This paper suggests a means to preserve the historic fabric and try to regenerate and add value to these historical sites.

The third paper written by Hussien Salman and Ahmad Sanusi focuses on the role of nature form Biomimicry strategy in generating sustainable form, and its applications in the design of high-rise buildings to make it sustainable. In addition, these characteristic effects on the building efficiency provide comfort to its users. Therefore, the research objective is how the natural form achieve sustainability in high-rise building, The qualitative method of investigation through observation of two organic form projects - Al-Bahar tower of Abu-Dhabi, and the Cactus building of Doha, was used to elicit design

principles that would satisfy the Biomimicry principles in generating sustainable high-rise buildings.

The fourth paper by Wan Zuriea Wan Ismail and Mat Naim Abdullah discusses about the effects resulting from climate change and the potential of green roof to mitigate those effects. Green roof benefits the environment, economy, aesthetics, and recreation and are proven effective through studies conducted from around the world. The paper reviews the existing literature on green roof benefits and performance and specifically focuses on their potential to address climate change issues. A review of significant literature on green roof performance and benefits indicates that green roofs have the potential to reduce problems related to climate change. The depth of a green roof substrate is a key factor that can optimize potential benefits. Thus, intensive types of green roofs provide significant contribution towards reducing storm water runoff; mitigate the urban heat island effect and pollution; increase biodiversity; and carbon sequestration. Local research is highly encouraged in mitigating climate change because the optimal performance of green roofs is subject to local climate and conditions.

The fifth paper by Zarith Fahteha Mohd Khalis, Sulzakimin Hj Mohamed, and Md Asrul Nasid Masrom views that the development demands in Malaysia have been causing various damages and destructions to the environment, inviting social problems and economic imbalances. Rapid development in construction industries observed only for profiting and ignores the well-being of the environment. Hence, initiatives should be taken to overcome the growing crisis and arouse awareness about sustainable development. Therefore, knowledge of sustainable development is important to all relevant parties in the industries. Knowledge transfer is a medium and the best platform to convey the information and knowledge about the sustainable development of individual, department, organization and agencies. Hence, the knowledge transfer practices are needed and more efforts are required to turn them as a culture among the key players of construction sector.

The research papers included in this issue of JAPCM covers a wider geographical scale by including two papers - one from India and the other one from Pakistan. It is hoped that professionals, lecturers, researchers and postgraduate students, in built and natural environments, will find this issue (vol.6, no.2) of JAPCM interesting, useful and knowledge-expanding.

Prof. Dr. Mohammad Abdul Mohit  
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