

# European Proceedings of Multidisciplinary Sciences

Volume 2


## Series Editors

### Editor-in-Chief

**Larissa Aronin**   (PhD), Associate Professor  
Oranim Academic College of Education, Israel

### Associate Editors

**Hanim Kamaruddin**   (PhD), Associate Professor  
The Hague University, The Netherlands

**Nur Azlina Mohamed Mokmin**   (PhD)  
Universiti Sains Malaysia, Malaysia

**European Proceedings of Multidisciplinary Sciences (EpMS)** is an open access, peer-reviewed series. EpMS dedicated to offer a platform to encourage academics to publish original articles on the current developments in Multidisciplinary Sciences.

The EpMS publishes theoretical, experimental or application-based works with the objective of contributing to a greater understanding and development of multidisciplinary sciences. EpMS publishes edited volumes based on the outcomes of conferences.

Once published, all proceedings are submitted for evaluation and possible coverage in **Web of Science Core Collection™ Conference Proceedings Citation Index - Social Sciences & Humanities (CPCI-SSH)**.

More information about this series at: <https://www.europeanproceedings.com/proceedings/EpMS>

# CARVING THE FUTURE BUILT ENVIRONMENT: ENVIRONMENTAL, ECONOMIC AND SOCIAL RESILIENCE

Selected, peer-reviewed papers from  
4<sup>th</sup> International Conference on Rebuilding Place (ICRP 2019), 06-07 November 2019,  
Universiti Sains Malaysia

Edited by:

Julaihi Wahid, Abdul Aziz Abdul Samad, Sabarinah Sheikh Ahmad, Panit Pujinda

Editor(s) Affiliation(s):

**Julaihi Wahid**, Professor Ar.   
Faculty of Built Environment, University Malaysia Sarawak, Malaysia

**Abdul Aziz Abdul Samad**, Professor Ir. Dr.  
Faculty of Civil and Environmental Engineering, UTHM Malaysia

**Sabarinah Sheikh Ahmad**, Professor Dr.  
Faculty of Architecture, Planning & Surveying, UITM, Malaysia

**Panit Pujinda**, Associate Prof. Dr.  
Faculty of Architecture, Chulalongkorn University, Thailand



ISSN: 2421-826X (online)

European Proceedings of Multidisciplinary Sciences

ISBN: 978-1-80296-950-4 (e-book)

CARVING THE FUTURE BUILT ENVIRONMENT: ENVIRONMENTAL, ECONOMIC AND SOCIAL RESILIENCE

[https://doi.org/10.15405/epms\(2421-826X\).2019.12.1](https://doi.org/10.15405/epms(2421-826X).2019.12.1)



© The Editor(s) and The Author(s) 2020. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

This book is published by the registered company Future Academy which is registered under the ISO London Limited.

The registered company address is:

293 Green Lanes, Palmers Green, London,

United Kingdom, N13 4XS

Reg. Number: 9219513

# Preface

This is a significant event to be held in the exotic island of Penang, Malaysia, on the 6-7th November 2019, as an international platform bringing together innovative minds of academicians, researchers, architects, engineers, planners, economists, social scientist, policy makers, industrial experts, and budding students around the globe to a common forum to share and disseminate their latest research on topics linked to rebuilding places and current interrelated issues.

The theme entitled ‘Carving the Future Built Environment: Environmental, Economic and Social Resilience’ focuses on the core pillars of sustainability to be safeguarded in the onslaught of global warming and climate change threats causing rampant hazards of floods, storms, droughts and typhoons over the recent decade. This phenomenon is predicted to escalate in the future, where the increasing severity of these disasters will subsequently result in large number of displaced people and refugees. As the world population is estimated to reach 9 billion by 2050, the increase of urban inhabitants struggling for shelter and amenities, the aftermath of disasters on the environment, social and economic stability and growth are urgent issues to be tackled to reduce losses especially in the poorest, most vulnerable communities within developing countries. In carving a better future built environment, the key issue is to offer more resilient solutions for communities and cities to encounter and surpass a colossal disaster with holistic revival approach and regeneration strategies from all dimensions from the physical, social, scientific and political aspects.

The key objective of ICRP 2019 is to offer opportunity for the international participants to share their experiences, ideas, and expertise with the counterparts in other parts of the world as well as offer opportunity for international networking and linkages for future collaborations in research and state-of-the-art solutions that will lead to massive results for the benefit and survival of mother earth. Our intention is that the ICRP outcome will lead to significant contributions to the body of knowledge towards a better built environment.

This Conference is co-organised by the Universiti Teknologi Mara (Malaysia), Universitas Syiah Kuala (Indonesia), and Chulalongkorn University (Thailand). The Best Paper Awards will be given for the papers judged to make the most significant contribution to the conference.

See you soon in the Pearl of the Orient!

14 November, 2019

**Associate Prof. Dr Muna Hanim Abdul Samad,**  
Chair, ICRP 2019  
Universiti Sains Malaysia, Malaysia

## Chair

Muna Hanim Abdul Samad, Associate Prof. Dr.,  
*Universiti Sains Malaysia, Malaysia*

### International Scientific/Editorial Committee Members

- Prof Dr Abdul Aziz Abdul Samad
- Prof Sr Dr Azlan Shah Ali
- Prof Dr Sabarinah Sheikh Ahmad
- Prof Dr Julaihi Wahid
- Prof Dato' Ir Dr Mahyuddin Ramli
- Prof Dr Abu Hassan Abu Bakar
- Prof Dr Ahmad Sanusi Hassan
- Prof Dr A. Ghafar Ahmad
- Prof Dr Azizi Bahauddin
- Prof Dr Nor'Aini Yusof
- Prof Sr Dr Mastura Jaafar
- Assoc Prof Ir Dr Abdul Naser Abdul Ghani
- Assoc Prof Dr Panit Pujinda
- Assoc Prof Sr Dr Syahrul Nizam Kamaruzzaman
- Assoc Prof Dr Noridah Mohamed
- Assoc Prof Dr Amin Akhavan Tabassi
- Assoc Prof Dr Azizhan Marzuki
- Assoc Prof Dr Hanizam Awang
- Assoc Prof Dr Muna Hanim Abdul Samad
- Assoc Prof Sr Dr Md Yusof Hamid
- Assoc Prof Sr Dr Mohd Nasrun Mohd Nawi
- Assoc Prof Dr Nurwati Badarulzaman
- Assoc Prof Dr Sharifah Fairuz Syed Fadzil
- Assoc Prof Sr Dr Mohd Zailan Sulieman
- Assoc Prof Tr Dr Noor Faisal Abas
- Assoc Prof Dr Kausar Hj Ali
- Assoc Prof Dr Nazirah Zainul Abidin
- Assoc Prof Sr Dr Lim Yoke Moi
- Assoc Prof Ts Dr Mohd Rodzi Ismail
- Sr Dr Md Azree Othuman Mydin
- Sr Dr Nur Azfahani Ahmad
- Sr Dr Asmalia Che Ahmad
- Sr Dr Mohd Fadzil Mat Yasin
- Ir Dr Muhammad Arkam Bin Che Munaaim
- Dr Hairul Nizam Mansor
- Dr Izwan Johari
- Dr Ida Nianti Mohd Zain
- Dr Safial Aqbar Zakaria

### Keynote Speakers

#### **The Impact of Raising Temperature on Urban Environment and The Mitigation Measures**

Prof. Wong Nyuk Hien  
National University of Singapore

#### **Healthcare architecture: The Knowledge Management**

Prof. Commander Traiwat Viryasiri (RTN)  
Chulalongkorn University, Thailand

#### **The Biomorphic and Biophilic Design Approaches in Rebuilding Place of Heritage Shophouses**

Prof. Dr. Azizi Bahauddin  
Director the Creative Design House of USM, and a lecturer at Universiti Sains Malaysia

#### **Post-disaster Architectural Heritage: Case Study Banda Aceh After the 2004 Tsunami Disaster**

Dr. Cut Dewi  
University of Syiah Kuala, Indonesia

## Sponsors



Universiti Sains Malaysia



University of Syiah Kuala, Indonesia



اَوْبِدُوْا رَسِيْقِيْنَ تَنْكَلُوْا لَوِيْنَ مَارَا  
UNIVERSITI  
TEKNOLOGI  
MARA

Universiti Teknologi MARA



CU CHULALONGKOR  
UNIVERSITY

Chulalongkorn University



**PAM** Northern Chapter

Pertubuhan Akitek Malaysia (PAM) Northern Chapter

# Table of Contents

## **No: 1**

Title: Modern Building Services Impact on Heritage Shophouse Façade in George Town, Penang

Pages: 1-11

Author(s): Muna Hanim Abdul Samad, Omar Adil Sabah

## **No: 2**

Title: Performance Measurement Dimensions for Sri Lankan Hotel Industry: An Expert Review

Pages: 12-25

Author(s): P. C. Kaluthanthri, A. Osmadi

## **No: 3**

Title: Improvising Industrialised Building System Through the Adoption of Building Information Modeling

Pages: 26-33

Author(s): Mariati Taib, Teo Yu Shan, Sabreena Shukri

## **No: 4**

Title: The Key Characteristics of Condominium's Operating Expenses (Opex) in Bangkok

Pages: 34-47

Author(s): Sittiporn Issarasak, Bundit Chulasai, Veerason Lertariyanum

## **No: 5**

Title: An Investigation of Green Building Outlook in Malaysia

Pages: 48-53

Author(s): Mohammad Tahir Ghafari, Atasya Osmadi

## **No: 6**

Title: Complexity Factors in Mega Projects: A Literature Review

Pages: 54-67

Author(s): Mohammad Mohseni, Amin Akhavan Tabassi, Ernowati Mustafa Kamal, David James Bryde, Roula Michaelides

## **No: 7**

Title: Measuring the Determinants for Differentiation in Village Economic Performance in Rural Malaysia

Pages: 68-76

Author(s): Mohamad Fadhli Rashid, Siti Hajar Misnan, Noor Aimran Samsudin

## **No: 8**

Title: High Performance Work Practices and Construction Project Performance Nigeria

Pages: 77-85

Author(s): J. Lawalson Temitope, Richard Olayiwola Alonge

## **No: 9**

Title: Traditional Courtyard "Late-Straits" Shop-Houses as Rebuilding Place Based on Cultural Space

Pages: 86-96

Author(s): Akram Zwain, Azizi Bahauddin

## **No: 10**

Title: Rebuilding Place With The Siamese Cultural And Architectural Values: Wat Machimmaram, Kelantan

Pages: 97-105

Author(s): Pathamawadee a/p Eh Tat, Azizi Bahauddin

## **No: 11**

Title: Inconspicuousness of Planning and Implementation of Dongdok: Vientiane's Sub-Centre From Maps (1991-2030)

Pages: 106-115

Author(s): Daohieng Inthavong, Prin Jhearmaneechotechai

## **No: 12**

Title: Developing A Design Framework For Disaster Resilience Flood Evacuation Centre In Malaysia

Pages: 116-122

Author(s): Aainaa binti Suhardi

**No: 13**

Title: Flood Disaster Risk Assessment In Urban Morphology Framework To Enhance Resilience Factor

Pages: 123-131

Author(s): Sherly Maulana, Muna Hanim Abdul Samad, Jestin Nordin

**No: 14**

Title: Evaluating the Affordances of Transitional Space As Social Learning Space At Polytechnic

Pages: 132-143

Author(s): V. Ramu, Nooriati Taib, Nor Fadzila Aziz

**No: 15**

Title: Spatial Planning of Muslim Cemeteries: A Focus On Sustainable Design Practice

Pages: 144-159

Author(s): Mohamad Reza Mohamed Afla

**No: 16**

Title: Inclusion of Urban Sustainability Pillars in 11<sup>th</sup> Malaysian Plan Using CPI Framework

Pages: 160-166

Author(s): Mohsen Behrang, S. Mostafa Rasoolimanesh, Nurwati Badarulzaman, Aldrin Abdullah

**No: 17**

Title: Multi-Layer Balcony Planting: A Biomimetic Concept Of Tropical Rainforest

Pages: 167-178

Author(s): Rani Prihatmanti, Nooriati Taib, Foong Swee Yeok

**No: 18**

Title: Mosque Architectural Timeline In Malaysia: From Vernacular To Contemporary

Pages: 179-188

Author(s): Siti Dalila Mohd Sojak, Raja Nafida Raja Shahminan, Fadhlina Ahmad @ Taufik

**No: 19**

Title: Expecting the Unexpected: Climate Resilience in Malaysian Local Government Land Use Planning

Pages: 189-199

Author(s): Vishanthini Kanasan, Sayuti Hassan

**No: 20**

Title: Monitoring Land Use Pattern And Built-Up Expansion In Kuala Lumpur City Centre

Pages: 200-214

Author(s): Izuandi Yin, Mou Leong Tan, Tew Yi Lin, Diana Mohamad, Abdul Ghapar Othman

**No: 21**

Title: A Review On The Construction Method In Minimising Construction Waste In Malaysia

Pages: 215-223

Author(s): Farhah Amani Abd Rahaman, Muna Hanim Abdul Samad, Nooriati Taib

**No: 22**

Title: Building Resilience In Early Childhood Education: Preschool Built Environment Quality In Malaysia

Pages: 224-236

Author(s): Pearly Pei Li Lim, Azizi Bahauddin, Nor Fadzila Aziz

**No: 23**

Title: Colonial Architectural Style's Influence On Buildings Façade Design In Aden City, Yemen

Pages: 237-244

Author(s): Majed Ahmed Khan, Ahmad Sanusi Hassan

**No: 24**

Title: Developing Effective Resilient Architecture Based On Psychological Environment and Local Behaviour

Pages: 245-256

Author(s): Incik G Ramadhan, Dini Hardilla, Agung Cahyo Nugroho, Ahmad Zaenudin

**No: 25**

Title: Dutch Dwelling Design In Adapting The Warm-Humid Climate In Indonesia

Pages: 257-267

Author(s): Laina Hilma Sari, Zahriah



**No: 26**

Title: Illuminance Level And Arabic Handwriting Performance At Lower Working Plane Height

Pages: 268-279

Author(s): Raja Nur Syaheeza Raja Mohd Yazit, Elina Mohd Husini, Ahmad Faiz Hassan Naziri, Izzat Anuar, Mohd Khedzir Khamis

**No: 27**

Title: The Biomorphic and Biophilic Design Approaches in Rebuilding Place of Heritage Shophouses

Pages: 280-290

Author(s): Azizi Bahauddin, Josephine Ong, Rani Prihatmanti

**No: 28**

Title: Indoor Environmental Quality For Rebuilding Place In Colonial Commercial Buildings In Penang

Pages: 291-300

Author(s): Rani Prihatmanti, Azizi Bahauddin

**No: 29**

Title: Students' Daylight Condition Perception In 'Tasmi' Classroom

Pages: 301-307

Author(s): Fadli Arabi, Elina Mohd Husini, Raja Nur Syaheeza Raja Mohd Yazit

**No: 30**

Title: The Effects Of Night-Time Simulation Using Vertical Greenery System In High-Rise Building

Pages: 308-316

Author(s): Hazril Sherney Basher, Sabarinah Sh. Ahmad

**No: 31**

Title: Vulnerability Analysis In The Northern Coast Region Of Banda Aceh City, Indonesia

Pages: 317-327

Author(s): Mirza Irwansyah, Cut Nursaniah, Laila Qadri, Mariana

**No: 32**

Title: The Housing Design For Disaster Relief In The Lao People's Democratic Republic

Pages: 328-336

Author(s): Thepphavong Xaykosy, Bundit Chulasai

**No: 33**

Title: Post-Disaster Shelters: A Review Of Strategies And Design Framework

Pages: 337-350

Author(s): Muna Hanim Abdul Samad, Mazran Ismail, Jestin Nordin, Asniza Hamimi Abdul Tharim

**No: 34**

Title: Preschool Provider's Notion Of Quality Preschool Built Environment In Malaysia

Pages: 351-361

Author(s): Pearly Pei Li Lim, Azizi Bahauddin, Nor Fadzila Aziz

**No: 35**

Title: Added Value To Security Building Design Case Study: Police Station In Malaysia

Pages: 362-373

Author(s): Zahardi Zaharin, Jestin Nordin, Sharyzee Mohmad Shukri

**No: 36**

Title: Development Of Luminaire Design Prototype For The Landscape Of Chudhadhuj Royal Residence

Pages: 374-384

Author(s): Phanchalath Suriyothin

**No: 37**

Title: Properties Of Blended Metakaolin And Glass Sludge Waste As Binder In Concrete

Pages: 385-392

Author(s): Alonge Olayiwola Richard, Hanizam Awang, Kwek Ying, Oladipo Seyi Kolapo

**No: 38**

Title: A Matrix Analysis On Building Maintenance Budget Determination In Malaysia

Pages: 393-403

Author(s): Norehan Mohd Noor, Thuraiya Mohd, Norazura Mizzal Azmi, Siti Zubaidah Hashim

**No: 39**

Title: Adaptive Behavior Of Residents For Thermal Comfort In High-Rise Residential Building, Malaysia

Pages: 404-414

Author(s): Zeyad Amin Al-Absi, Noor Faisal Abas

**No: 40**

Title: Development Of Sustainable Building Material By Incorporating Plastic Waste In Concrete Block

Pages: 415-424

Author(s): Nur Fasiha Abdul Halim, Zalena Abdul Azis, Nooriati Taib, Hazimi Ismail

**No: 41**

Title: Architectural Design Strategies Of Sensory Integration Through Spaces For Autistic Children

Pages: 425-435

Author(s): Lim Heng Yi, Azhar Ghazali, Mohd. Hafizal Mohd. Isa

**No: 42**

Title: The Integration Moveable Kinetic Roof To Sun Orientation On Velodrome Building

Pages: 436-446

Author(s): Wan Mahdzir Yason, Azhar Ghazali, Hazril Sherney Basher, Mohd. Hafizal Mohd. Isa

**No: 43**

Title: Finite Element Analysis On Beam To Column Connection In IBS Panel

Pages: 447-458

Author(s): Sabreena Shukri, Mariati Taib, Nooriati Taib, Nadiah Md Husain

**No: 44**

Title: Pros And Cons Of Incomplete Contract In Private Finance Initiative (PFI) Project

Pages: 459-465

Author(s): M. Nur Syaimasyaza, A.R. Khairuddin, A. Mohd Fairullazi, H. Sharina Farihah

**No: 45**

Title: Sign Planning By Smart Device Installed With Image Integrated Application

Pages: 466-471

Author(s): Toshifumi Mae, Yuji Matsumoto, Ryusuke Naka

**No: 46**

Title: A Doll-Based Closing Chime System For Workstyle Improvement In Japanese Workplace

Pages: 472-480

Author(s): Yuji Matsumoto, Ami Masuda, Ryusuke Naka

**No: 47**

Title: Assessment Of Mrt Feeder Bus Routes' Catchment Area Using Geographical Information System

Pages: 481-489

Author(s): Yakin Nur Sunoto, Zakiah Ponrahono

**No: 48**

Title: Customers' Acceptance Level Of Smart Restaurant Services In Penang

Pages: 490-501

Author(s): Sara Abhari, Alireza Jalali, Mastura Jaafar, Lim Chia Yean

**No: 49**

Title: Performance Of Kenaf Fibrous Pulverised Fuel Ash Concrete In Acidic Environment

Pages: 502-510

Author(s): Norazura Mizal Azzmi, Jamaludin Mohamad Yatim, Norehan Mohd Noor, Norhidayah Md Ulang, Adole Michael Adole

**No: 50**

Title: Perceptions Of Young Professional In Malaysia: Homeownership Or Renting?

Pages: 511-519

Author(s): M.R. Faraziera, T.A. Hamizah Liyana, O. Nurhayati

**No: 51**

Title: Raising Energy-Saving Awareness With The Home Energy Report

Pages: 520-526

Author(s): Zahirah Mokhtar Azizi, Nurul Sakina Mokhtar Azizi, Siti Aida Samikon, Nasyairi Mat Nasir

**No: 52**

Title: Co<sub>2</sub> Field Evaluation Of Natural Ventilation Classroom In Refurbished Preschool

Pages: 527-535

Author(s): Anisah Ahmad Nahar, Naziah Mohamad Salleh

**No: 53**

Title: Pavement Roughness Modeling Using Regression And Ann Methods For Ltpw Western Region

Pages: 536-548

Author(s): Zul Fahmi Mohamed Jaafar, Waheed Uddin, Yacoub M. Najjar

**No: 54**

Title: The Preferences Of Employees On Surrogate Window And View In Windowless Office

Pages: 549-554

Author(s): Tan Hui Ping, Roshida Binti Abdul Majid

**No: 55**

Title: Effect Of LSMC On National Road-Contractor Performance In Aceh, Indonesia

Pages: 555-560

Author(s): Alfa Taras Bulba, Abu Hassan Abu Bakar

**No: 56**

Title: Effects Of Laboratory Short-Term Ageing On Bitumen Properties

Pages: 561-575

Author(s): Noor Halizah Abdullah, Meor Othman Hamzah, Nur Izzi Md. Yusoff, Ahmad Shukri Yahaya

**No: 57**

Title: Impact Of Architectural Design Studio Provision On Students' Creativity: An Initial Findings

Pages: 576-586

Author(s): Nik Syamsul Baharum Nik Bahari Shah, Jestin Nordin, Muna Hanim Abdul Samad, Ku Azhar Ku Hassan

**No: 58**

Title: Historic Building Information Modelling (HBIM): A Review

Pages: 587-594

Author(s): Nik Umar Solihin Nik Kamaruzaman

**No: 59**

Title: The Growth Of Urban Centre In Kuala Lumpur: Growth Centre Development Control

Pages: 595-607

Author(s): Izuandi Yin, Jamalunlaili Abdullah

**No: 60**

Title: Corporate Real Estate Strategy: A Review

Pages: 608-614

Author(s): P. C. Kaluthanthri, A. Osmadi

**No: 61**

Title: Mechanical Properties Of Steel Fibres Reinforced Concrete

Pages: 615-622

Author(s): Noor Faisal Abas, Wan Nur Hasanah bt Mior Zulpatah, Zakariah Abd. Ghani, Julian Frederick

**No: 62**

Title: Analysis Of Strength Characteristics Of Concrete With Silica Fumes And Calcium Nitrate

Pages: 623-630

Author(s): Noor Faisal Abas, Kevin Teng Cheng Hui, Julian Frederick

**No: 63**

Title: Challenges For Project Management In The 21<sup>st</sup> Century

Pages: 631-641

Author(s): Amin Akhavan Tabassi, David James Bryde, Ernawati Mustafa Kamal, Jane Dowson, Roula Michaelides

**No: 64**

Title: Biophilic Design And Plants Application In Rebuilding Kaki Lima Of Heritage Shophouses

Pages: 642-650

Author(s): Josephine Ong Ming Hui, Azizi Bahauddin

**No: 65**

Title: Rebuilding Space In Peranakan House In Lasem, Indonesia: Perceived Space Concept

Pages: 651-661

Author(s): Tessa Eka Darmayanti, Azizi Bahauddin

**No: 66**

Title: Building Social Resilience With Youth Through Urban Projects: City Of Nan, Thailand

Pages: 662-672

Author(s): Prin Jhearmaneechotechai

**No: 67**

Title: The Role Of Museum And Sensory Design Of Rebuilding Place In Museology

Pages: 673-680

Author(s): Fairuzzana Ahmad Padzi, Azizi Bahauddin

**No: 68**

Title: Colour Usage Regulations For The Cityscape Of Old Mosul City/ Iraq

Pages: 681-690

Author(s): Omar Adil Sabah, Ayad Waleed Jalal

**No: 69**

Title: The Effect Of Color Temperature And Background Color On Handwoven Fabric Exhibition

Pages: 691-698

Author(s): Arsira Janyawisutt, Phanchalath Suriyothin

**No: 70**

Title: The Potentials Of Dark Tourism In Banda Aceh, Indonesia

Pages: 699-707

Author(s): Hannis Izzatti Ridzuan, Maroof Khani Hamed, Shida Irwana Omar, Irin Caesarina

**No: 71**

Title: Children And Youth: Inclusive-Factors In The Provision Of Recreational Facilities In Nigeria

Pages: 708-718

Author(s): Peter Musa Wash, Shida Irwana Omar, Badaruddin Mohamed, Mohd Ismail Isa

**No: 72**

Title: Elderly Needs Of Garden In Retirement Homes: A Systematic Review

Pages: 719-725

Author(s): Wan Noor Anira Hj Wan Ali at Yaacob, Nur Huzeima Mohd Hussain, Marina Abdullah

**No: 73**

Title: Influencing Factors On Place Attachment In Riverbanks: A Case Study Of Malaysia

Pages: 726-732

Author(s): Mohd Ismail bin Isa, Massoomah Hedayati Marzbali

**No: 74**

Title: Health And Safety Issues In The Nigerian Construction Industries: Prevention And Mitigation

Pages: 733-739

Author(s): Hamzat Isah

**No: 75**

Title: The Sense Of Place: Sade Shopping Corridor

Pages: 740-749

Author(s): Melania Rahadiyanti, Astrid Kusumowidagdo, Dyah Kusuma Wardhani, Thomas Stefanus Kaihatu, Ida Ayu Indira Swari

**No: 76**

Title: Social Interaction In Malaysian Affordable Vertical Housing: Pr1ma Precinct 11, Putrajaya

Pages: 750-758

Author(s): Ng Kar King, Roshida binti Abdul Majid, Mohammad Ezzad bin Abu Bakar

**No: 77**

Title: The Effect Of Traffic Congestion On Quality Of Community Life

Pages: 759-766

Author(s): Wan Noratikah Wahidah Binti Wan Ghazali, Che Nurhamizah 'Atikah Binti Zulkifli, Zakiah Ponrahono

**No: 78**

Title: Principles Of Vernacular House Design For The Sustainability Of Coastal Settlements

Pages: 767-776

Author(s): Cut Nursaniah, Izarul Machdar, Azmeri, Abdul Munir, Husnus Sawab, Laila Qadri

**No: 79**

Title: Residential Satisfaction On Neighbourhood: Residential Mobility In Malaysia

Pages: 777-785

Author(s): Hamizah binti Abdul Fattah, Nurwati Badarulzaman, Kausar Hj. Ali

**No: 80**

Title: Gender Differences: Factors Influencing Men And Women's Participation In Gender Research

Pages: 786-796

Author(s): Leila Mohajer, Jariah Binti Mohd Jan

**No: 81**

Title: Construction And Validation Of The 'Children's Connectedness To Nature' Instrument

Pages: 797-805

Author(s): Nor Diyana Mustapa, Nor Zarifah Maliki, Nor Fadzila Aziz, Aswati Hamzah

**No: 82**

Title: Transformation Strategies Towards Facilities and Innovation at Pondok Learning Institution in Kelantan

Pages: 806-813

Author(s): Siti Nuratirah bt Che Mohd Nasir, Lar Khalilah bt Hassan, Mohd Azri b Mohd Jain Noordin, Dr Nor Hafizah bt Anuar, Yasmin bt Mohd Faudzi, Dr Wan Saiful Nizam b Wan Mohd Mohamad

**No: 83**

Title: Children's Adaptive Behaviour in Performing Outdoor Play and Learning in School Grounds

Pages: 814-824

Author(s): Nor Fadzila Aziz, Nor Diyana Mustapa, Janatun Naim Yusof

**No: 84**

Title: Conceptualising the Free Bus Service Quality Performance Assessment

Pages: 825-833

Author(s): Nur Shazreena Mat Shukri, Zakiah Ponrahono

**No: 85**

Title: Behind Construction Fence: What Should We Do To Practice Zero Building Defects?

Pages: 834-845

Author(s): Roslan bin Talib, Mohd Zailan bin Sulieman

**No: 86**

Title: The Effects Of Daylight Fluctuation And Illuminance Level In Office Building

Pages: 846-855

Author(s): Elina Mohd Husini, Mohd Zin Kandar, Fadli Arabi, Raja Nur Syaheez Raja Mohd Yazit

**No: 87**

Title: Archipreneurship: Responses From Architects In Malaysia

Pages: 856-864

Author(s): Sharifah Fairuz Syed Fadzil, Nur Alia Mohamad Omar, Wong, Teik Aun

**No: 88**

Title: The Understanding Among Contractors In Additive Manufacturing Technology In Local Construction Industry

Pages: 865-875

Author(s): Muhammad Zamir Ismail, Zul Zakiyuddin Ahmad Rashid

**No: 89**

Title: Assessing The Impact Of Building Parameters On Energy Performance In Residential Settings

*Pages: 876-882*

Author(s): Komail Noorani, Massomeh Hedayati Marzbali, Mohammad Javad Maghsoodi Tilaki, Aldrin Abdullah