

## MOHAMAD NIDZAM RAHMAT (Dr)

PROFESSOR

### Centre of Studies for Construction Management

Faculty of Architecture, Planning and Surveying  
Universiti Teknologi MARA,  
40450 Shah Alam,  
Selangor, Malaysia.



I am a Professor of Construction Management at the Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA (UiTM) Shah Alam. My journey of undergraduate education began with a Certificate in Civil Engineering (Construction) from Polytechnic Sultan Haji Ahmad Shah, Diploma in Building (ITM), BSc (Hons) Construction Management from University of Manchester, Institute of Science and Technology (UMIST), UK in 1994. I have working experience with Construction Developer and Property Management Consultant before joining Universiti Teknologi MARA in 1995. Working experience has been an added advantage to teach the Undergraduate courses.

I attained Master of Environment from Universiti Putra Malaysia in 1999 and PhD from University of Glamorgan, Wales, UK in 2004 on Soil Stabilisation utilising Wastepaper Sludge Ash in the field of Built Environment (Advanced Material) where later I went on to pursue a Sabbatical Research and a Post-Doctoral Research from the years 2008 to 2011. Over the years in Glamorgan, I actively participated in various university and community services. Besides undertaking teaching and supervising within the the Civil Engineering Scheme, notable contributions include being a visiting researcher and consultant in knowledge transfer for International Development under University of Glamorgan and UNESCO-Wales., Project in supporting innovation in Africa, collaboration in the use of sustainable construction materials and practices in Kenya and Cameroon. Consultant for Constructing Excellent Wales on the evaluation of Demonstration Project Programme, and researcher for collaboration with University of Navarra, Pamplona Spain for the research on the utilisation of cereal ash from straw into low cost-low energy construction material.

Along with 25 years of teaching experience as a lecturer for UiTM, I had also held various important university posts including Head of Research Monitoring Unit, Research Management Institute, UiTM from 2012 to 2014, Co-ordinator for Science, Technology, Engineering and Mathematics Programme (STEM) for UiTM and Head of Building Department, Faculty of Architecture, Planning and Surveying, UiTM year 2005 to 2007.

Currently I am involved in both undergraduate and post-graduate teaching and research supervision. Until now I have supervised and co-supervised a total of 6 PhD students, 13 Master of Science (research and taught) and 16 Bachelor Degree Dissertations. Between the years 2010 to 2019, I have produced a total

of 22 articles including 9 Q1 journals along with 5 chapters in book, 1 monograph and 21 conferences and proceedings have been successfully published internationally. Securing a total of RM1.05 million in research grant funding for 17 different projects and has received multiple accolades for research innovation along with academic awards. I have been called for consultancy and expertise in Built Environmental field as an examiner and a reviewer for international journals.

The experience of working as visiting researcher and consultant in University of Glamorgan has strengthened my research supervision and development of collaborative linkages for training and research, where I have researched on various materials locally, including industrial and agricultural waste from coffee, sugar cane, pineapple and from palm oil processing, waste-water sludges, filter cakes, fuel and bottom ashes among other waste materials. This is with a view to empowering local communities in the achievement of sustainable infrastructure development, for example by way of roads and low-cost housing.

+603-5544 4244 / +6016-3151747  
mnidzam676@uitm.edu.my

## Areas of Expertise

Built Environment – Sustainable Development and Waste Management – Development of Advanced Construction Materials utilising Natural, Industrial and Agricultural Waste for Infrastructure Development

<https://expert.uitm.edu.my/profile>

<https://prisma.uitm.edu.my/prisma/>

<https://publons.com/researcher>

<https://www.scopus.com/xxxxx>

<https://www.researchgate.net/xxx>

<https://scholar.google.xxx>

## Personal Information

**MOHAMAD NIDZAM BIN RAHMAT**

133676

Centre of Studies for Construction Management  
Faculty of Architecture, Planning and Surveying  
Universiti Teknologi MARA,  
40450 Shah Alam,  
Selangor, Malaysia.

## Academic Qualifications

Post-Doctoral Research, University of Glamorgan, Wales. UK

Sabbatical Research, University of Glamorgan, Wales. UK

PhD Built Environment (Environmental Engineering) University of Glamorgan, Wales. UK  
 Master of Environment, University Putra Malaysia.  
 BSc (Hons) Construction Management, UMIST, Manchester UK  
 Diploma in Building, Institute Technology MARA, Malaysia  
 Certificate in Civil Engineering (Construction) Polytechnic Sultan Haji Ahmad Shah

## Professional Members

1. Member of The Malaysian Association of Facility Management (MAFM)
2. Incorporate Member of Chartered Institute Of Building (CIOB)

## Teaching and Learning

- CMA412 Structure Mechanics for BSc (Hons) Construction Management
- CMA422 Structural Design for BSc (Hons) Construction Management
- BCM514 Soil Laboratory for BSc (Hons) Construction Management
- BCM422 Structure 1 for BSc (Hons) Construction Management
- BCM422 Structure 2 for BSc (Hons) Construction Management
- BCM673 Project Evaluation Development for BSc (Hons) Construction Management
- BSB712 Sustainable Facilities Management for MSc Facilities Management
- ICP863 Management of Properties and Environment for MSc ICPM

## Student Supervision

### POST GRADUATE RESEARCH SUPERVISION DOCTOR OF PHILOSOPHY (PHD)

| No | Candidate/Title  | Year<br>Enrolled  |
|----|--|-------------------|
| 4  | <b>Ani Maslina Binti Salleh</b> 2014407078 (PhD Built Environment – AP991) <i>“Development of Low-Cost, Low-Energy Construction Components From Industrial Waste”</i><br>(Main Supervisor)   | 2014<br>Completed |
| 5  | <b>Mohammad Ezad Hafez Bin Mohd Pahroraji</b> 2010989063 (PhD Civil Engineering – EC990)<br><i>“Unfired Foam Brick Made of Stabilised Coal Ash With Lime-Activated GGBS”</i><br>(Co-Supervisor)  | 2011<br>Completed |
| 6  | <b>Shazwan Mohamed Shaari</b> 2006654277 (PhD Built Environment – AP991) <i>“Leadership style Influence on Adoption Intentions and Actual Adaption of an Improved Process Innovation by Malaysian Construction Companies”</i><br>(Co-Supervisor) | Completed<br>2017 |

### MASTER OF SCIENCE (MSC BY RESEARCH)

| No | Candidate/Title   | Year Enrolled     |
|----|---|-------------------|
| 1  | <b>Umul Masikin Binti Othman</b> 2013338971 (MSc Built Environment- AP781) <i>“Development of Sustainable Construction Components Using Industrial Scheduled Waste”</i><br>(Main Supervisor)            | 2013<br>Completed |
| 2  | <b>Rahayu Binti Rajali</b> 2013123061 (MSc Built Environment-AP781) <i>“Sustainable Construction Component From Paint Sludge”</i><br>(Main Supervisor)  | 2013<br>Completed |
| 3  | <b>Muhammad Redzwan Bin Mohamed Raffae</b> 2013230978 (MSc Built Environment-AP781) <i>“Utilisation of Non-Metallic Minerals for Low-Cost, Low-Energy Construction Components”</i><br>(Main Supervisor) | 2013<br>Completed |
| 4  | <b>Fazeera Binti Ujin</b> 2014744279 (MSc Built Environment-AP781) <i>“Technical Viability of Using Eggshells Powder in Concrete Mix”</i><br>(Main Supervisor)  | 2014<br>Completed |

### MASTER OF SCIENCE (BY TAUGHT)

| No | Candidate/Title  | Year Enrolled     |
|----|--|-------------------|
| 1  | <b>Nurhazwani Binti Mohd Nawi</b> 2018838136 (Dissertation - BSB710) <i>“An Assessment of best Sustainable Maintenance Practice of Public Park in Kuala Lumpur”</i><br>(Main Supervisor) | 2020<br>Completed |
| 2  | <b>Ismail Bin Ali</b> 2017264384 (Dissertation - BSB710) <i>“Standard Operating Procedure for Flood Disaster management in Kuala Krai, Kelantan”</i><br>(Main Supervisor)                | 2019<br>Completed |
| 3  | <b>Muhammad Nour Hayat Bin Zulkifli</b> 2016872074 (Dissertation - BSB710) <i>“Pest Management in Food Processing Facilities”</i><br>(Main Supervisor)                                   | 2018<br>Completed |
| 4  | <b>Noor Aznina Yasmin Binti Zulkifli</b> 2014236184 (Dissertation - ICP853) <i>“Green Technology Financing Scheme: A Review On Challenges In Malaysian”</i><br>(Main Supervisor)         | 2017<br>Completed |
| 5  | <b>Saedah Johnny Noakes</b> 2013773101 (Dissertation - ICP853) <i>“A Comparative Study of Env Performance Assessment of Educational Institution Projects”</i><br>(Main Supervisor)       | 2016<br>Completed |
| 6  | <b>Hetty Nurdilaila Binti Abdul Halim</b> 2012127449 (Dissertation - ICP853) <i>“The Municipal Solid Waste management of Krubong Landfill and the Neighbouring”</i><br>(Main Supervisor) | 2015<br>Completed |
| 7  | <b>Norazlin Binti Sezali</b> 2011325799 (Dissertation BSB710) <i>“Student Awareness towards Sustainable Initiative Campus”</i><br>(Main Supervisor)                                      | 2014<br>Completed |

|   |   |                   |
|---|---|-------------------|
| 8 | <b>Robiatun Adawiyah Binti Ali</b> 2012532643 (Dissertation BSB710) "The impact of GBI Implementation towards landscape maintenance"<br>(Main Supervisor) | 2014<br>Completed |
| 9 | <b>Muhammad Azizi Bin Azizan</b> 2012900931 (Dissertation - ICP853) "Environmental Impact of Coastal Reclamation in Malaysia"<br>(Main Supervisor)        | 2014<br>Completed |

### BACHELOR DEGREE DISSERTATION (MAIN SUPERVISOR)

| No | Candidate/Title   | Year Enrolled        |
|----|---|----------------------|
| 1  | <b>Christian Lapang Anak Joldan</b> 2019532475 (AP246 – BCM653) "Sustainable Bricks made from Newsprint"  | Mac-Jun 2020         |
| 2  | <b>Rosdah Binti Rosli</b> 2019717249 (AP246 – BCM653) "Wastepaper Bricks: A sustainable substitute for construction materials"  | Mac-Jun 2020         |
| 3  | <b>Muhammad Fakhri Bin Pauzi</b> 2018264144 (AP246 – BCM653) "Strength and Environmental Performance of Wastepaper Bricks"  | Mac-Jun 2020         |
| 4  | <b>Mohamad Azarul Aidin Bin Zakaria</b> 2016687484 (AP246 – BCM653) "Soil Stabilisation using waste materials with microbes"  | Sept 2019 – Jan 2020 |
| 5  | <b>Muhammad Irfan Bin Sabri</b> 2017992995 (AP246 – BCM653) "Soil Stilizingsion using waste material incorporating MICP Technique"  | Sept 2019 – Jan 2020 |
| 6  | <b>Muhammad Azzat Bin Mat Seman</b> 2017675164 (AP246 – BCM653) "Sustainable Production of Clay-WSA-GGBS Adobe Bricks"<br><i>Anugerah Disertasi Terbaik</i>               | Mac-Jun 2019         |
| 7  | <b>Mohamad Syaiful Nizam Mustafa</b> 2017674992 (AP246 – BCM653) "Towards Sustainable Brick Production: The Potential of Using Industrial Waste By-Products WSA and GGBS" | Mac – Jun 2019       |
| 8  | <b>Wahada Yuhanis Binti Ruhisham</b> 2016329487 (AP246 – BCM653) "The Utilisation of Ceramic Dust in Stabilisation of Laterite Soil"<br><i>Anugerah Disertasi Terbaik</i> | Sept 2018 – Jan 2019 |
| 9  | <b>Farina Irdia Binti Draman</b> 2016706423 (AP246 – BCM653) "Engineering Properties of Stabilised Soil Utilising Ceramic Dust"   | Sept 2018 – Jan 2019 |
| 10 | <b>Mohd Umair Faqihuddin Bin Mohd Zulfaqhar</b> 2016630122 (AP246 – BCM653) "Strength and Durability of Stabilised Laterite Soil Using Industrial Waste"                  | Mac – Jun 2018       |
| 11 | <b>Fatin Nur Fazlinda Mat Jaafar</b> 2014523335 (AP246 – BCM653) "Production of Eco-Friendly Bricks using Mushroom waste"   | Mac – Jun 2018       |
| 12 | <b>Ahmad Aznan Afief Bin Bawawi</b> 2016630158 (AP246 – BCM653) "Assessment of Engineering Properties of Soil Stabilised with Industrial Waste (Ceramic Dust)"            | Mac – Jun 2018       |

- |    |  |                      |
|----|--|----------------------|
| 13 | <b>Jacklyn Anak Dian</b> 2016630122 (AP246 – BCM653) “Utilisation of Mushroom Waste/Mycelium for compressed earth brick”   | Mac – Jun 2018       |
| 14 | <b>Nicholas Nanag Anak Jarau</b> 2014824146 (AP246 – BCM653) “A Study of Engineering Properties of CD-GGBS Stabilised Soil for Low Flood Plain”<br><i>Anugerah Disertasi Terbaik</i> | Sept 2017 – Jan 2018 |
| 15 | <b>Mohd Firdaus Bin Tajudin</b> 2014876848 (AP246 – BCM653) “Soil Utilizing Charcoal”<br><i>Anugerah Disertasi Terbaik</i>   | Mac – Jun 2016       |
| 16 | <b>Muhammad Tasyrif Bin Mohd Rashid</b> 2011467358 (AP246 – BCM653) “Utilisation of Iron Ore Tailing in the development of Green Bricks”<br><i>Anugerah Disertasi Terbaik</i>        | Sept 2014 - Jan 2015 |
- 

## Publications

| No | INTERNATIONAL JOURNALS<br>REFEREED/SCOPUS OR OTHER WEB OF SCIENCE INDEX JOURNALS  |
|----|---|
| 1  | Mohamad Ezad Hafez Mohd Pahroraji, Hamidah Mohd Saman, <b>Mohamad Nidzam Rahmat</b> , Kartini Kamaruddin (2020) “Properties of coal ash foamed brick stabilised with hydrated lime-activated ground granulated blastfurnace slag”. Elsevier Journal of Construction and Building Materials 235.<br><b>Scopus (Q1)</b>   |
| 2  | <b>Mohamad Nidzam Rahmat</b> , Norsalisma Ismail, (2018). “Effect of optimum compaction moisture content formulations on the strength and durability of sustainable stabilised materials”. <i>Applied Clay Science</i> , 157, 257-266. <a href="https://doi.org/10.1016/j.clay.2018.02.036">https://doi.org/10.1016/j.clay.2018.02.036</a><br><b>Scopus (Q1)</b>          |
| 3  | <b>Mohamad Nidzam Rahmat</b> , Norsalisma Ismail, (2018)<br>“Production of Low-Carbon Construction Components from Industrial Scheduled Wastewater Sludge”. International Journal of Advances in Science, Engineering and Technology (IJASEAT) Vol 7, Issue 1 (Special Issue 2) ISSN(p): 2321-8991 ISSN(e): 2321-9009<br>Peer-Reviewed, OAJI Index, ESJ Index Open Access |
| 4  | Norsalisma Ismail, <b>Mohamad Nidzam Rahmat</b> , (2018) “The Effect of Moisture Content on Strength Development of Stabilised Materials for Construction Components”. International Journal of Advances in Mechanical and Civil Engineering (IJAMCE), Vol 6, Issue 2. ISSN(p):2394-2827<br>Peer-Reviewed, Scholarly online, Open Access                                  |
| 5  | <b>Mohamad Nidzam Rahmat</b> , Norsalisma Ismail, (2018), "Clay-Pfa Eco-Bricks: Enhancing the Engineering Properties with Sustainable Blended Binders" International Journal of Advances in Mechanical and Civil Engineering (IJAMCE), Vol 6, Issue 1. ISSN 2394-2827<br>Peer-Reviewed, Scholarly online, Open Access   |

---

- 
- 6 Sharina Ibrahim, **Mohamad Nidzam Rahmat**, Norsalisma Ismail, (2018), “Utilisation of Industrial Wastes to Intensify the Engineering Properties of Low-Flood Plain Soil”. International Journal of Advances in Science, Engineering and Technology (IJASEAT) Vol 7, Issue 1 (Special Issue 2) ISSN(p): 2321-8991 ISSN(e): 2321-9009 Peer-Reviewed, OAJI Index, ESJI Index Open Access
- 
- 7 Ani Maslina Salleh, **Mohamad Nidzam Rahmat**, Norsalisma Ismail, (2018) “Eco-SWPS Bricks: Sustainable Construction Components from Industrial Waste” International Journal of Advances in Mechanical and Civil Engineering (IJAMCE), Vol 6, Issue 1. ISSN 2394-2827 Peer-Reviewed, Scholarly online, Open Access
- 
- 8 **Mohamad Nidzam Rahmat**, Norsalisma Ismail, & John Kinuthia, (2016). “Strength and environmental evaluation of stabilised Clay-PFA eco-friendly bricks”. *Construction and Building Materials*, 125, 964-973. <https://doi.org/10.1016/j.conbuildmat.2016.08.114>  
**Scopus (Q1)**
- 
- 9 Umul Masikin Othman, **Mohamad Nidzam Rahmat**, (2016). “Fabrication of unfired bricks from industrial scheduled waste (WWTs)”. *Jurnal Teknologi*, 78(5-2), 43-48. <https://doi.org/10.11113/jt.v78.8488>  
**Scopus (Q2)**
- 
- 10 Mohamad Ezad Hafez Mohd Pahroraji, Hamidah Mohd Saman, **Mohamad Nidzam Rahmat**, Kartini Kamaruddin (2016), “The effect of using GGBS and foam on the mechanical properties of unfired coal ash from coal fired thermal power plant”. *Malaysian Construction Research Journal* Vol 19(2) pp 85-102  
**Scopus Index**
- 
- 11 Muhamad Redzwan Raffae, **Mohamad Nidzam Rahmat**, Norsalisma Ismail (2015), “Stabilised ceramic dust as potential sustainable construction components”. *Advanced Materials Research* Vol 1113, pp 168-174  
**Scopus Index**
- 
- 12 Farrah Zuhaira Ismail, **Mohamad Nidzam Rahmat**, Norishahaini Ishak (2015), “A study on absorption coefficient of sustainable acoustic panels from rice husk and sugarcane baggas” *Advanced Materials Research* Vol 1113, pp 198-203  
**Scopus Index**
- 
- 13 Rahayu Rajali, **Mohamad Nidzam Rahmat**, (2015), “Development of Sustainable Construction Components using Industrial Schedule Waste (Paint Sludge)” *Jurnal Teknologi UTM* 72:1 (2015) eISSN 2180-3722  
**Scopus (Q2)**
- 
- 14 Mohamad Ezad Hafez Mohd Pahroraji, Hamidah Mohd Saman, **Mohamad Nidzam Rahmat**, Kartini Kamaruddin (2014), “Compressive strength and density of cementless unfired lightweight brick utilising coal ash from coal-fired thermal power plant”. *Key Engineering Materials* Vol 594-595, pp 527-531  
<https://doi.org/>
- 
- 15 Ani Maslina Saleh, **Mohamad Nidzam Rahmat**, (2014), “Potential Use of Municipal Solid Easte Ash (MSWA) as Sustainable Construction Bricks” *Jurnal Teknologi UTM* 72:1 (2015) eISSN 2180-3722  
**Scopus (Q2)**
- 
- 16 Miqueleiz, L., Ramirez, F., Seco, A., **Mohamad Nidzam Rahmat**, Kinuthia, J. M., Tair, A. A., & Garcia, R. (2012). “The use of stabilised Spanish clay soil for sustainable construction materials”. *Engineering Geology*, 133-134, 9-15. <https://doi.org/10.1016/j.enggeo.2012.02.010>  
**Scopus (Q1)**
-

- 17 **Mohamad Nidzam Rahmat**, & John Mungai Kinuthia, (2011). "Compaction of fills involving stabilisation of expansive soils". *Proceedings of the Institution of Civil Engineers: Geotechnical Engineering*, 164(2), 113-126. <https://doi.org/10.1680/geng.2011.164.2.113>  
Scopus (Q1)
- 18 **Mohamad Nidzam Rahmat**, John Mungai Kinuthia, (2011). "Effects of mellowing sulfate-bearing clay soil stabilized with wastepaper sludge ash for road construction". *Engineering Geology*, 117(3-4), 170-179. <https://doi.org/10.1016/j.enggeo.2010.10.015>  
Scopus (Q1)
- 19 **Mohamad Nidzam Rahmat**, Norsalisma Ismail, (2011). "Sustainable stabilisation of the Lower Oxford Clay by non-traditional binder". *Applied Clay Science*, 52(3), 199-208. <https://doi.org/10.1016/j.clay.2011.02.011>  
Scopus (Q1)
- 20 John Mungai Kinuthia, **Mohamad Nidzam Rahmat**, (2011). "Towards zero industrial waste: Utilisation of brick dust waste in sustainable construction". *Waste Management*, 31(8), 1867-1878. <https://doi.org/10.1016/j.wasman.2011.03.020>  
Scopus (Q1)
- 21 **Mohamad Nidzam Rahmat**, John Mungai Kinuthia, (2010). "Soil stabilisation with blastfurnace slag - a review". *Proceedings of Institution of Civil Engineers: Construction Materials*, 163(3), 157-165. <https://doi.org/10.1680/coma.2010.163.3.157>  
Scopus (Q1)

## Research Grants and Contracts

| No | Research Projects Title / Grant Provider/Period  | Funds         |
|----|--|---------------|
| 1  | 2018-2020 <b>Co-Researcher</b> "Bacteria Based Repair Solution For Concrete Cracks" Zacklim Floor Specialist Project code: 600-IRMI/PRI 16/6/2 (008/2018)  | RM 283,815.00 |
| 2  | 2015-2018 <b>Co-Researcher</b> , "Impak Jaringan Universiti Teknikal Malaysia (MTUN) dan Impak Geran Penyelidikan, Pembangunan dan Pengkomersilan (R&D&C) Terhadap MTUN" Malaysian GOV Project code: 100-RMI/GOV 16/6/2 (001/2015) | RM 250,000.00 |
| 3  | 2018-2020 <b>Principal Investigator</b> "Mechanical and Durability Properties of Soil Stabilised Microbial-Induced Calcite Precipitation". UiTM Lestari Project code: 600-IRMI/Dana KCM 5/3/LESTARI (001/2018)                     | RM 15,000.00  |
| 4  | 2018-2020 <b>Co-Researcher</b> "Development of Low-Cost Low-Carbon Eco-Bricks From Municipal Solid Waste Fly Ash". UiTM Lestari Project code: 600-IRMI 5/3/LESTARI (009/2018)  | RM 20,000.00  |
| 5  | 2018-2020 <b>Co-Researcher</b> "IBS Slab Incorporating HDPE Bubble Deck and Quarry Dust Self-Compacting Concrete" UiTM REI Project code: 600-IRMI/MYRA 5/3/REI (001/2018)  | RM 32,000.00  |



|       |   |                |
|-------|---|----------------|
| 6     | 2017-2019 <b>Principal Investigator</b> "Saving Global Resources with Eco-Stabilisation – Extenuation to Flooded Low Bearing Capacity Soil"<br>UiTM Lestari Project code: 600-IRMI/MyRA 5/3/LESTARI(K) (239/2017)                         | RM 20,000.00   |
| 7     | 2017-2019 <b>Co-Researcher</b> "The Effects of moisture Content on Sustainable Stabilised Materials for Building Components"<br>UiTM Lestari Project code: 600-IRMI/MyRA 5/3/LESTARI (K) (240/2017)                                       | RM 20,000.00   |
| 8     | 2013-2016 <b>Principal Investigator</b> "Cellulose Fibre Acoustic Behavioral Theories Part 3 – Sustainable Construction Components from Paint Sludge"<br>UiTM CIFI Grant Project code: 600-IRMI/Dana 5/3/CIFI (138/2013)                  | RM 40,000.00   |
| 9     | 2013-2016 <b>Principal Investigator</b> "Cellulose Fibre Acoustic Behavioral Theories Part 2- Development of Unfired Clay Brick Using Oil Based Treatment Sludge (OBTS)"<br>UiTM PSI Grant Project code: 600-IRMI/Dana 5/3/PSI (297/2013) | RM 60,000.00   |
| 10    | 2013-2015 <b>Co-Researcher</b> "New Sustainable Heritage-Led Urban Regeneration Model"<br>GOV RAGS Project code: 600-IRMI/RAGS 5/3 (175/2013)   | RM 50,000.00   |
| 11    | 2013-2016 <b>Co-Researcher</b> "Contractual Behaviour and Performance of Refurbishment Projects"<br>GOV ERGS Project code: 600-RMI/ERGS 5/3 (44/2013)   | RM 55,000.00   |
| 12    | 2012-2015 <b>Co-Researcher</b> "Cellulose Fibre Acoustic Behavioral Theories"<br>GOV RAGS Project code: 600-IRMI/RAGS 5/3 (32/2012)   | RM 80,000.00   |
| 13    | 2012-2014 <b>Co-Researcher</b> "Development of Sustainable Absorption Panels from Agricultural Waste"<br>UiTM RIF Project code: 600-IRMI/DANA 5/3 RIF (270/2012)  | RM 32,000.00   |
| 14    | 2012-2014 <b>Co-Researcher</b> "Industrial Trial Mix Composition of PFA and Steel Slag in Sun Baked Pressed Bricks"<br>UiTM RIF Project code: 600-IRMI/DANA 5/3 RIF (280/2012)  | RM 32,000.00   |
| 15    | 2012-2014 <b>Principal Investigator</b> "Sustainable Stabilisation of Teluk Kapas Landfill Soil with Agriculture Waste"<br>UiTM RIF Project code: 600-IRMI/DANA 5/3 RIF (209/2012)  | RM 32,000.00   |
| 16    | 2012-2014 <b>Co-Researcher</b> "Critical Success Factor (CSF) of Implementing Green Building in Malaysia"<br>UiTM RIF Project code: 600-IRMI/DANA 5/3 RIF (210/2012)  | RM 20,000.00   |
| 17    | 2011-2013 <b>Co-Researcher</b> "Lightweight Autoclaved Coal Ash Bricks"<br>UiTM DST Project code: 600-IRMI/DANA 5/3 Dst (411/2011)  | RM 10,000.00   |
| <hr/> |   |                |
|       | TOTAL   | RM1,051,815.00 |
| <hr/> |   |                |

## Consultation & Expertise

### CONSULTANCY

1. 2016-2017 Module Presenter/Lecturer. Executive Diploma in Facility Management. Sime Darby Property Bhd. Consultancy Registration no: 100-RMI 31/7/0000070195003. Project Value RM 319,420.40
2. 23-27 April 2012 Module Presenter/Lecturer. Introduction to Structure. Bahagian Kemahiran dan Teknikal MARA. 100-RMI 37/7/2915 Project Value RM 24,000.00
3. Mac-May 2010. Consultant. Demonstration Project Programme in Wales: Criteria for successful Delivery of Construction Project. Supported by Strategic Insight Programme (SIP), Constructing Excellence Wales – University of Glamorgan. Project No 169/170 (3,000 pounds)

### **EXPERTISE (Postgraduate Theses Examiner)**

1. May 2012 **External Examiner** for PhD Thesis. Luis Miqueleiz Jimenez “New Pozzolan Construction Materials: Unfired Pozzolan Bricks For Sustainable Construction Material” Dept of Agricultural, Projects and Engineering. Public University of Navarre, Pamplona. Spain.
2. Nov 2013 **Internal Examiner** for MSc Research. Abdul Wafi Bin Razali. “ The Relationship between Mechanical and Acoustical properties of Concrete Block Mixed with POFA a Replacement to Cement. Universiti Teknologi MARA

### **EXPERTISE (Reviewer/Assessor/Judge/Jury)**

1. Jury Quantity Surveying Research and Innovation Presentation QSRI 2019. Centre of Studies for Quantity Surveying. Faculty of Architecture, Planning and Surveying. UiTM Shah Alam. Nov 2019
2. Chairperson Viva-Voce MSc Built Environment AP781 Nur Fatma Fadilah Yaacob 2016294176. Road Characteristics and Environmental Factors Associated with Accident Pattern in Kedah. Faculty of Architecture, Planning and Surveying. UiTM Shah Alam. Mac 2019
3. Chairperson Viva-Voce MSc Built Environment AP781 Nor Baizura Binti Jamaluddin 2014673916 Faculty of Architecture, Planning and Surveying. UiTM Shah Alam. Mac 2018
4. Panel Assessor Massive Open Online Courses (MOOC) Content. BCM414 Construction Technology 1. Faculty of Architecture, Planning and Surveying. UiTM Shah Alam. July-Aug 2018
5. Scientific Committee IConBEE 2018. International Conference on Built Environment and Engineering. 29-30 Oct 2018 Jen Hotel Johor Bharu. Organised by Faculty of Architecture, Planning and Surveying and Universiti Tun Hussein Onn Malaysia. Feb 2018
6. Judge Program Invention, Innovation and Design Exposition (IIDEX 2017). Faculty of Architecture, Planning and Surveying. UiTM Shah Alam. May 2017
7. Panel Assessor for Defence of Research Proposal and Research Progress Presentation for Master and PhD. Faculty of Architecture, Planning and Surveying. UiTM Shah Alam. May 2015
8. Judge for Invention, Innovation and Design (IIDEX 2015). Faculty of Architecture, Planning and Surveying. UiTM Shah Alam. April 2015
9. Chairperson for Synergised Industry-Experimenter Research Grant (SInERGI). Research Management Institute. Universiti Teknologi MARA. Mac 2014
10. Panel Assessor for Synergised Industry-Experimenter Research Grant (SInERGI) Presentation. Universiti Teknologi MARA. April 2014
11. Judge for World Universities Islamic Philanthropy Conference Poster Competition (i-IPPC) Menara BIMB, Kuala Lumpur. Dec 2013
12. Panel Assessor for Exploration Research Grant Scheme (ERGS) Phase 1/2013 UiTM level. Ballroom, LEXIS Port Dickson. 1-3 Mac 2013

13. Panel Assessor for Fundamental Research Grant Scheme (FRGS) UiTM level. Alson Klana Resort Seremban 13-15 Jan 2013
14. Panel Assessor for Fundamental Research Grant Scheme (FRGS) UiTM level. Thistle Hotel, PD. Feb 2012
15. Panel Assessor for Exploration Research Grant Scheme (ERGS) Panel Assessor UiTM Level. De Palma Hotel Shah Alam. Mac 2012
16. Judge for Invention, Innovation and Design (IID2012). Universiti Teknologi MARA Cawangan Sri Iskandar Perak Jun 2012

### **Reviewer for Academic Journal**

1. Reviewer for Conference of Head of Academics Department (CHAD 2016) Oct 2016. Organised by Universiti Teknologi MARA Kampus Sungai Buluh-Selayang and Akademi Kepimpinan Pengajian Tinggi (AKEPT)
2. Reviewer for Elsevier Journal of Process Safety and Environmental. "Protection Mixing sequence and moisture content for economical and cleaner production". Dec 2019
3. Reviewer for Conference IConBEE 2018 "The Role of Belt Wall in Minimising the Response due to Wind". International Conference on Built Environment and Engineering. 29-30 Oct 2018 Jen Hotel Johor Bharu. Organised by Faculty of Architecture, Planning and Surveying and Universiti Tun Hussein Onn Malaysia. Feb 2018
4. Reviewer for International Conference on Postgraduate (ICPE-7). "Education Design Management Towards Quality Project Performance Among Architects" Organised by Universiti Teknologi MARA Shah Alam

### **Invited Speaker/Lecture**

1. Invited Speaker, Majlis Bandaraya Shah Alam (MBSA) "Kursus Pengurusan Projek Ke Arah Pembangunan yang lebih Efisien" 12 Nov 2019
2. Invited Speaker, UiTM Cawangan Selangor Kampus Puncak Alam. "Taklimat Penulisan Journal "How to write to a Q1 Journal" 28 Jun 2018
3. Keynote Speaker, International Academy of Science, Technology, Engineering and Management IASTEM2018 International Conference. Flamingo Hotel. Kuala Lumpur 18-19 Dec 2018
4. Invited Speaker, UiTM Cawangan Pahang, Kuantan. "Workshop on How to write an article to High Impact Journal" Organised by iLQAM UiTM Pahang. 26 Mei 2014
5. Invited Speaker, Faculty of Administrative Science and Policy Studies "High Impact Journal Article Writing". 13 Sept 2013
6. Invited Speaker, UiTM Cawangan Alor Gajah, Melaka. "Workshop on How to write an article to High Impact Journal" 12 Mac 2013
7. Invited Speaker, UiTM Cawangan Kelantan. "Workshop on How to write an article to High Impact Journal" 6 Jan 2012
8. Invited Speaker, All UiTM Branches Tour on FRGS Research Workshop Dis. 2012.
9. Invited Speaker at ILQAM Pre-PhD Preparation (Pre-POT) Course (2014-2015)

### **Policy Maker/Standards/Guidelines/Procedure/Acts**

1. Industry Standard Dev Committees, SIRIM STS Sdn. Bhd. Standardisation in the Building and Civil Engineering Sector. Mac 2018.
2. Module Moderator, Open Universiti Malaysia. SMSP5103 Sustainable Practice in Facility Management. June 2016.
3. Module Writer, Open Universiti Malaysia. EBIM4203 Maintainability Facilities. Jan 2016
4. Module Writer, Open Universiti Malaysia. EBGB4103 Green Buildings. April 2015

## Innovation, Commercialization & Entrepreneurial

| NO | INVENTION  |
|----|--|
| 1  | 2020 <b>Platinum Award</b> Mohamad Nidzam Rahmat, Norsalisma Ismail, Ani Maslina Saleh "GLAM04: Environmentally Friendly Soil Stabiliser for Infrastructure Use". IIDBEEEX2020. FSPU, UiTM   |
| 2  | 2020 <b>Platinum Award</b> Muhamad Fakhri Pauzi, Mohamad Nidzam Rahmat "Sustainable Utilisation of Paper Mill Sludge Ash for The Manufacture of Building Bricks". IIDBEEEX2020, FSPU, UiTM.  |
| 3  | 2020 <b>Gold Award</b> Siti Nursyuhada Shariff Azri, Mohamad Nidzam Rahmat "Lignocellulose Bricks for Domestic Infrastructure" IIDBEEEX2020, FSPU, UiTM  |
| 4  | 2020 Gold Award Ani Maslina Saleh, Mohamad Nidzam Rahmat "LSP Bricks: An Eco-Complaisant Building Components" IIDBEEEX, FSPU, UiTM.  |
| 5  | 2019 <b>FINALIS</b> : Mohamad Nidzam Rahmat, Norsalisma Ismail, Rugayah Hashim "Utilisation of Local Waste Materials in the Production of Eco-Bricks for Local Communities" Anugerah Inovasi Negeri Selangor Peringkat Kebangsaan.   |
| 6  | 2018 <b>Gold Medal</b> Sharina Ibrahim, Mohamad Nidzam Rahmat, Norsalisma Ismail "Early Strength and Durability of Flood Susceptible Stabilised Clay Soil Using Industrial Waste." Innovation, Invention and Design IID UiTM Seremban  |
| 7  | 2018 <b>Silver Medal</b> Mohamad Nidzam Rahmat, Norsalisma Ismail, Muhammad Fathi Iqbal "Soil Stabilisation with Microbial Induced Calcite Precipitation (MICP)" Innovation, Invention and Design IID UiTM Seremban  |
| 8  | 2017 <b>Gold Medal</b> Nurul Syifaa' Alam Shah, Mohamad Nidzam Rahmat, Norsalisma Ismail, "Strength properties of RHA-PFA bricks for Non-Structural Building Components". 1 <sup>st</sup> International Malaysia – Indonesia – Thailand Symposium on Innovation and Creativity (iMIT SIC2017), UiTM Perlis 26-27 <sup>th</sup> July. |
| 9  | 2017 <b>Silver Medal</b> Mohamad Nidzam Rahmat, Norsalisma Ismail, "CLAY-PFA Bricks: An Eco Solution for Saving Global Resources", 1 <sup>st</sup> International Malaysia – Indonesia – Thailand Symposium on Innovation and Creativity (iMIT SIC2017), UiTM Perlis 26-27 <sup>th</sup> July.  |
| 10 | 2017 <b>Bronze Medal</b> Nurul Ashikin Wahid, Mohamad Nidzam Rahmat, Norsalisma Ismail, "Agro Waste Application as Alternative Sustainable Construction Materials". 1 <sup>st</sup> International Malaysia – Indonesia – Thailand Symposium on Innovation and Creativity (iMIT SIC2017), UiTM Perlis 26-27 <sup>th</sup> July.       |

- 11 2017 **Bronze Medal** Sharina Ibrahim, Mohamad Nidzam Rahmat, Norsalisma Ismail, "A review on ECO stabilisation of clay Soil for Infrastructure Development in Low Flood Plain" 1<sup>st</sup> International Malaysia – Indonesia – Thailand Symposium on Innovation and Creativity (iMIT SIC2017), UiTM Perlis 26-27<sup>th</sup> July.
- 12 2017 **Bronze Medal** Ani Maslina Salleh, Mohamad Nidzam Rahmat, Norsalisma Ismail "Designed non Fired ECO Bricks for sustainable and Low Carbon Building Solid Waste Fly Ash Eco Bricks" 1<sup>st</sup> International Malaysia – Indonesia – Thailand Symposium on Innovation and Creativity (iMIT SIC2017), UiTM Perlis 26-27<sup>th</sup> July.
- 13 2017 **Bronze Award** Ani Maslina Salleh, Mohamad Nidzam Rahmat, "Solid Waste Fly Ash Eco-Bricks". IIDEX 2015, Faculty of Architecture, Planning and Surveying 25 May 2017.
- 14 2015 **Gold Medal and Overall Winner** Muhammad Redzwan Raffe, Mohamad Nidzam Rahmat, Norsalisma Ismail "Non-Metallic Minerals Waste as Alternative Raw Materials for Low Carbon Bricks" IIDEX FSPU Research Management Unit Faculty of Architecture, Planning and Surveying, UiTM
- 15 2015 **Bronze Award** Muhammad Redzwan Raffe, Mohamad Nidzam Rahmat, Norsalisma Ismail "Non-Metallic Minerals Waste as Alternative Raw Materials for Low Carbon Bricks" iidex201527-30 April 2015 Anjuran Research Innovation Business Unit RIBU, UiTM
- 16 2013 **Platinum Award** Muhammad Redzwan Raffe, Mohamad Nidzam Rahmat, Norsalisma Ismail "Stabilisation of Landfill Soil with Agricultural Wastes" IIDEX FSPU Research Management Unit Faculty of Architecture, Planning and Surveying, UiTM
- 17 2013 **Bronze Award** Nabil Rusli, Mohamad Nidzam Rahmat, "Stabilisation of Alluvium Soil Using Cement Kiln Dust (CKD)" IIDEX FSPU Research Management Unit
- 18 2013 **Bronze Award** Mohd Rozaimi Mohd Zahar, Mohamad Nidzam Rahmat, "The Development of Sustainable Bricks: Utilising Cement Kiln Dust and Pulverised Fuel Ash" IIDEX FSPU Research Management Unit
- 19 2013 **Gold Medal** Norsalisma Ismail, Mohamad Nidzam Rahmat "Approaches to Optimum Compaction Moisture Content for the Manufacture of Sustainable Stabilised Materials" iidex2013 Anjuran Research Innovation Business Unit RIBU, UiTM
- 20 2013 **Bronze Award** Mohamad Nidzam Rahmat, Norsalisma Ismail "Soil Stabilisation Utilising Wastepaper Sludge Ash" iidex2013 Anjuran Research Innovation Business Unit RIBU, UiTM
- 21 2012 **First Prize Winner** Mohamad Nidzam Rahmat, Norsalisma Ismail "Soil Stabilisation Utilising Wastepaper Sludge Ash" IIDEX FSPU Research Management Unit Faculty of Architecture, Planning and Surveying, UiTM
- 22 2012 **Overall Winner** "Towards Zero Industrial Waste - Utilisation of Brick Waste in Sustainable Construction" IIDEX FSPU Research Management Unit Faculty of Architecture, Planning and Surveying, UiTM

## Services & Administration

### University Committees

1. Coordinator STEM Faculty of Architecture, Planning and Surveying (Science, Technology, Engineering and Mathematics). 14 Dis 2017-13 Dis 2019
2. Technical and Equipment Committee, Research Management Institute. UiTM. 01 Nov 2012 – 31 Nov 2015.
3. Working Committee, Invention, Innovation, Design Competition & Expo (iidex2014) UiTM. 27-30 April 2014.
4. Chairperson for Synergised Industry-Experimenter Research Grant Initiative (SinERGI) UiTM. 13 Mac 2014
5. Publication Committee for IIDEX2016. UiTM.
6. Head of Research Monitoring Unit, Research Management Institute. UiTM. 01 Sept-2012 – 31 Aug 2014

### **Faculty Committee**

1. Committee Member. Professional Pensyarah (PROPENS) Monitoring. Faculty of Architecture, Planning and Surveying FSPU. UiTM Shah Alam. 01 Jan 2017 – 31 Dis 2020
2. Committee Member. Faculty Academic Mission. Faculty of Architecture, Planning and Surveying FSPU. UiTM Shah Alam. 01 Jan 2017 – 31 Dis 2020
3. Coordinator. Faculty Laboratory. Faculty Academic Mission. Faculty of Architecture, Planning and Surveying FSPU. UiTM Shah Alam. 01 Mac 2017 – 28 Feb 2020
4. Committee Member. Programme Syllabus and Curriculum for MSc Facility Management AP779. 1 Aug 2019 - Julai 2020

### **University Representative**

1. Pasukan Penyelidik Kajian Dasar Pembangunan Pelan Tindakan Hak Asasi Manusia Kebangsaan (National Human Rights Action Plan - NHRAP). Bahagian Hal Ehwal Undang Undang Jabatan Perdana Menteri Malaysia. 12 Nov 2014
2. Invited Participant. Workshop on Effectiveness of Research and Innovation Management at Policy and Institutional Levels. Kementerian Pengajian Tinggi Malaysia, AKEPT dan LH Martin Institute. 27 Feb - 1st Mac 2013.
3. Invited Participant. Invitation to attend The International Higher Education Research Performance Forum. Organised by Liquid Learning Asia. Expanding capacity, accelerating research performance and persuing excellence in a dynamic and competitive operating environment.
4. Invitation to Participate in the workshop: Building The University of the Future. Organised by Higher Education Leadership Academy AKEPT and Universiti Teknikal Malaysia Melaka. 27 - 28 Sept 2012

## Work and Collaboration Experience

| Year           | CAREER SUMMARY   |
|----------------|--|
| 2011 – Present | Associate Professor, Centre of Studies for Construction, Faculty of Architecture, Planning and Surveying, Universiti Teknologi MARA 40450 (UiTM) |
| 2012 – 2014    | Head of Research Monitoring Unit, Research Management Institute, UiTM  |
| 2009 – 2011    | Visiting Researcher, Part-time Lecturer, University of Glamorgan, Wales. UK  |
| 2005 – 2007    | Head of Building Department, Faculty of Architecture, Planning and Surveying UiTM.   |
| 1995 – 2001    | Lecturer, Universiti Teknologi MARA  |
| 1994 – 1995    | Project Executive, Rimas Indah Sdn. Bhd. Melaka.   |
| 1993 – 1994    | Project Executive, MCB Holdings. Kuala Lumpur. (Housing Developer)   |

## Awards & Recognitions

1. Letter of Appreciation, Majlis Bandaraya Shah Alam. Speaker for Project Management Towards Sustainable Development Course. 12 Nov 2019
2. Sijil Khidmat Setia 20 tahun 2018. Universiti Teknologi MARA. 1 Nov 2018
3. Incentive for Index Journal Publication, Q1 Journal. FSPU Quality & Innovation Day Award 2018 (RM5,000.00) 6 Jul 2018
4. Certificate of Appreciation for Supervising & Graduating a PhD Student, Mohamad Ezad Hafez Mohd Pahroraji. 14 Oct 2017.
5. Award – FSPU Quality and Innovation Day 2016. Best Writer’s Award for Producing Q1 Journal
6. Incentive for High Impact Journal Publication for four (4) Q1 Journal Publication. Deputy of Vice Chancellor Academic & International UiTM. (RM4,000.00) 31 Jan 2012
7. Certificate of Appreciation, Research and Innovation Appreciation UiTM Selangor. Graduate on Time. Main Supervisor for Fazeera Binti Ujin 2014744279. 2 Mei 2019
8. Certificate of Appreciation for attendance Module Writing Workshop. Open University Malaysia Kuala Lumpur. 9 May 2015
9. Certificate of Appreciation. Registration Publication Committee for Competition & Exhibition Invention, Innovation & Design Exposition. iiDEX 2014 & Innovateur Wannabe. 27-30 April 2014
10. Certificate of Appreciation. Bengkel Penarafan Journal Ilmiah Malaysia organized by Pusat Sitasi Malaysia, Ministry of Education. 5 Jul 2013

11. Certificate of Appreciation. Penyediaan dan Pemantapan Dasar Penyelidikan UiTM organized by UiTM and AKEPT. 28-29 Jun 2013
12. Award - FSPU Quality & Innovation Day Award 2013. Best Paper Presentation Royal Institute of Surveying Malaysia. Bronze Award 24 Dis 2013
13. The Best Paper Award - Special Mention. The progress of Malaysian Translational Social Science and Humanities Research: from Research to Practice. AicE-Bs2013London 2013.

## **Contribution to Society**

### **Contribution to Student Development**

1. Facilitator. PhD Write-up Camp organised by Postgraduate Office, Faculty of Architecture, Planning and Surveying FSPU. UiTM Shah Alam at Institute of Leadership Development ILD, Bandar Enstek. 15-17 Feb 2019.
2. Student Supervisor. Corporate Social Responsibility-Construction Management (CSR-CM) Recycle Community. 30 Mac 2018
3. Course Developer. JSU Blueprint for iCGPA Exam Question Development for Faculty of Architecture, Planning and Surveying FSPU. 21 April 2016 PTAR 1
4. Student Supervisor. Academic Trip for BSc (Hons) Construction Management to Kuala Terengganu. 21-25 Feb 2016

### **Contribution to the Community/NGO/Other Organisation**

1. University Representative. Program Jom Masuk IPT 2019 organised by Ministry of Higher Education, Malaysia. MAEPS Serdang. 30 - 31 Mac 2019

## **Other Activities**