

CURRICULUM VITAE



PERSONAL DETAIL

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FIELD OF SPECIALISATION

Structural Fire Engineering, Earthquake Engineering, Engineering Seismology, Fire Safety Engineering, Construction Materials, Finite Element Method, Structural Integrity

ACADEMIC QUALIFICATION

2013 : PhD (Structure-Fire and Earthquake Engineering)
BRE Centre for Fire Safety Engineering,
University of Edinburgh, Scotland, United Kingdom.

2007 : Master of Science in Earthquake Eng. and Eng. Seismology
University of Pavia, Italy (EU Center) and University of Joseph
Fourier Grenoble, France.

2005 : Bachelor of Engineering (Civil Engineering) First Class Honours
Faculty of Civil Engineering, Universiti Teknologi Malaysia.

1999 : Sijil Pelajaran Malaysia (SPM), MRSM K.Berang, Malaysia.

ACADEMIC EXPERIENCE

- 2015 to 2017 : Program Coordinator, Master in Civil Engineering, Universiti Teknologi Malaysia.
- 2013 to Present : Senior Lecturer, Department of Structure and Materials, Faculty of Civil Engineering, Universiti Teknologi Malaysia.
- 2007 to 2012 : Lecturer, Department of Structure and Materials, Faculty of Civil Engineering, Universiti Teknologi Malaysia.
- 2005 to 2007 : Tutor, Department of Structure and Materials, Faculty of Civil Engineering, Universiti Teknologi Malaysia.

PROFESSIONAL MEMBERSHIP

1. Members, Earthquake Engineering Research Institute (EERI)
2. Graduate Member of BEM (GE 52858 A)
3. Research Member of Institute Noise and Vibration, UTM 2015-2018
4. Associate Researcher of Institute Noise and Vibration, UTM 2010-2015
5. Committee Offshore Structure PETRONAS, Malaysia (2013 to Present)
6. Technical Committee of House hold and Building Accessories, SIRIM Malaysia (2015 to Present)

AWARDS

Research Awards

1. **ITEX Silver Medal** for "SEER-Surfcrete" at the 27th *International Invention, Innovation & Technology Exhibition 2016*, ITEX, 12-14 May 2016, Kuala Lumpur, Malaysia.
2. **Silver Medal** in Innovative Practices at Education and Industry Exhibition (I-PIENX 2016), Johor Malaysia
3. **INATEX Bronze Medal** at the 17th *Industrial Arts and Technology Exhibition*, INATEX, 3-5 November 2015, Johor Bahru, Malaysia.

Research Grants

1. Research University Grant Scheme (RM50 000) (2015-2017)
2. Fundamental Research Grant Scheme (RM 99 999) (2014-2017)
3. Potential Academic Research (PAS) Grant (RM20 000) (2013-2014)

Research Grants

1. Ministry of Higher Education Malaysia Scholarship Post-Graduate Study (2001-2013)
2. Erasmus Mundus Scholarship for Master of Science Degree (2005-2007)
3. Chancellor's Award, UTM (2005)
4. Dean Award, UTM (2005)

Year	Name of Award/Recognition	Level	Medal
2016	ITEX Silver Medal, 27th International Invention, Innovation & Technology Exhibition 2016 (ITEX 2016)	National	Research Product
2016	Innovative Practices at Education and Industry Exhibition (I-PIENX 2016)	National	Research Product
2015	<i>INATEX, 17th Industrial Arts and Technology Exhibition (INATEX 2016)</i>	University	Research Product
2015-2017	Research University Grant Vot 05194	University	Research Grant
2014-2017	Fundamental Research Grant Scheme Vot 03141	Malaysia	Research Grant
2013-2014	Potential University Scheme Grant Vot 00758	University	Research Grant
2009-2012	Ministry of Higher Education of Malaysia and Universiti Teknologi Malaysia Scholarship 2009-2012, PhD	University	Scholarship
2007	ERASMUS MUNDUS Scholarship	International	Scholarship
2005	Chancellor's Award, 35 th UTM Convocation	University	Excellent in Academics and Student Activities and Leadership
2005	Dean Award's, 35 th UTM Convocation	University	Excellent Award
2001	JPA Scholarship, Malaysia	University	Scholarship

PAST ADMINISTRATIVE POSTS / EXTENDED RESPONSIBILITIES

1. Secretary of *UTMBridge 2017 Competition*, Faculty of Civil Engineering, UTM, 2016-2017
2. Committee Members for Undergraduate Program, Faculty of Civil Engineering, UTM
3. Coordinator Book Chapter, Faculty of Civil Engineering, UTM (2015- Present)
4. Post Graduate Program Coordinator Master in Engineering (Civil) (2015)
5. Head of Task Force- Global Player, Faculty of Civil Engineering (2015)
6. Head of Task Force- Postgraduate Activities, Faculty of Civil Engineering (2015)
7. Head of Task Force- Postgraduate Seminar, Faculty of Civil Engineering (2015)
8. Program Coordinator for Master in Civil Engineering (2015)
9. Secretary of *UTMBridge 2016 Competition*, Faculty of Civil Engineering, UTM, 2014-2015
10. Committee Members of *Task-Force "Hari Kualiti Fakulti"*, Faculty of Civil Engineering, UTM, 2014
11. Committee Members of *Task-Force Global Player Faculty*, Faculty of Civil Engineering, UTM, 2014
12. Reviewer Technical Paper. *RISK FACTOR IDENTIFICATION IN THE MANUFACTURING PROCESS OF HOLLOW CORE SLAB (MJCE 0213-4)*. *Malaysian Journal of Civil Engineering (MJCE)*
13. Committee Members of *UTMOST Imagination*, Faculty of Civil Engineering, UTM, 2013
14. Committee Members of *Program Pelajar Islam Cemerlang*, Faculty of Civil Engineering, UTM, 2013
15. Committee Members of Task Force New Programme, Faculty of Civil Engineering, UTM, 2013
16. Committee Members of *Task-Force Hari Kualiti Fakulti*, Faculty of Civil Engineering, UTM, 2013
17. Committee Members of *Program Pembangunan Pelajar Cemerlang*, Faculty of Civil Engineering, UTM, 2007-2009
18. Facilitator of Program Pembangunan Pelajar Tahun 1, Faculty of Civil Engineering, UTM, 2008
19. Committee Members of National Seminar on Civil Engineering Research, Faculty of Civil Engineering, UTM, 2007
20. Committee Members of *Task-Force Anugerah Penerbitan Naib Canselor UTM*, Faculty of Civil Engineering, UTM, 2007
21. Team Manager of Concrete Canoe Competition, Organized by Department of Drainage and Irrigation Malaysia, 2007

RESEARCH PROJECT

Head of Research

- 1) INV-HiCOE Grant Scheme. "Fire and Explosion Structural and Geophysical Investigation for Subsurface Integrity Assessment" (2016-2018).
- 2) Research University Grant Scheme (GUP). "Performance of Cement Concrete Prepared With Garnet Aggregates at High Temperatures" (2015 - 2017).
- 3) Fundamental Research Grant Scheme (FRGS) "Performance of Treated Rubberized Fibre Concrete under Earthquake and Fire Loadings". Phase 1 2014 (2014 - 2017).
- 4) Research University Grant Scheme-Potential Academic Staff Research. "Fire Resistance of Earthquake Damaged Reinforced Concrete Columns" (2013 - 2014).
- 5) Fire Resistance of Earthquake Damaged Reinforced Concrete Frames (2011- 2013).
- 6) A Comparison Between Linear Static Model Response Spectrum and Nonlinear Static Pushover Analysis on Seismic Loading to Buildings (2006-2007).

Research Member

- 1) Fundamental Research Grant Scheme (FRGS). "Derivation of damping factors of a mass within rubber compound to reduce seismic response of pendulum type structures using seismograph concept" Phase II 2015 (2015-2017).
- 2) Research University Grant Scheme (GUP) "A Study on The Use of Various OF VARIOUS Water Absorbent Materials For Self Curing Concrete in Tropical Climate" (2015-2017)
- 3) Research University Grant Scheme (GUP). "GEOPOLYMER SELF COMPACTING CONCRETE" (2015-2017)

TEACHING

a) Subjects taught for Bachelor Degree in Civil Engineering Programme:

1. Reinforced Concrete Design (EC2)
2. Civil Engineering Materials
3. Analysis Structure and Materials
4. Research Methodology and Pre-Project (Undergraduate)
5. Concrete Laboratory
6. Structure Laboratory

INVITED SPEAKER

a) **National**

1. Structural Fire Engineering, IEM (Southern Branch), March, 2016

COURSES/WORKSHOP/CONFERENCE/SEMINAR AND TRAINING ATTENDED

1. EERI 68th Annual Meeting on Earthquake Engineering, San Francisco 5-8 April 2016.
2. One Day Consultancy Training, UTM Kuala Lumpur, 19 Feb 2016.
3. Workshop Capacity Building to Reduce Risk in the UK and Malaysia, British Fund, UTM Kuala Lumpur 9-12 Feb 2015
4. e-SEER Workshop on “Disaster Management and Mitigation On Earthquake Risk For Buildings In Malaysia” and Field Visit, UTM Kuala Lumpur 2-6 Feb 2015
5. The 9th International Conference of Geotechnical Engineering (Geotropika) and The 1st International Conference on Construction and Building Engineering (ICONbuild), Johor Bharu, Malaysia 28-30 October 2013
6. 2013 e-SEER Strategic Planning Workshop for Research and Commercialization of Earthquake Instrumentation Products, A Famosa Resort, Melaka, August 2013
7. Blossoms Workshop 2nd Phase, A Famosa Resort, Melaka, April 2013
8. Mandatory Course BEM - Code of Ethics, UTM, September 2013
9. Mandatory Course BEM-Safety and Health at Work, UTM, April 2013
10. Mandatory Course BEM-Engineering and Management Practise, UTM, April 2013
11. Writing Technical Paper, Prof. Roger Plank, UTM, 2013
12. 7th International Conference on Structures in Fire, Zurich, Switzerland, June 2012
13. 8th Asia Pacific Structural Engineering and Construction Conference (APSEC) and 1st International Conference on Civil Engineering Research (ICCER), Surabaya, Indonesia, October 2012
14. Applications of Structural Fire Engineering, Prague, April 2011
15. National Seminar on Civil Engineering Research, 2007
16. Introduction of Qualitative and Quantitative Research Method Course, 2007
17. Structural Assessment of Heritage Building, Prof Giorgio Macchi, University of Pavia, Italy, 2006
18. Post-Earthquake Building Safety and Damage Assessment, Dr. A Goretti, University of Pavia Italy, 2006
19. Dynamic Soil-Structure Interaction and The Computer Programme SASSI2000, Dr.Farhang Ostadan, University of Pavia, Italy,2006
20. Seminar of Civil Engineer, UTM, 2000

SUPERVISION

Postgraduate Research Project

Main Supervisor

1. Nur Nadhira Abdul Rashid, Performance of Concrete Containing Garnet Subjected to Fire (PhD) (2016)
2. Mohammad Iqbal Khiyon, Travelling Fires (Master by Research, 2016)
3. Siti Nurul Nureda Binti Mohamad Zukri, Performance of Rubberized Fibre Concrete at High Temperatures. Master of Engineering (Master by Research, 2015)

Co-Supervisor

1. Norizati Mohd. Nordin (PhD, 2016)
2. Muhammad Sazlly Nazreen Mahmood (Master by Research, 2015)

Undergraduate Final Year Project

Main Supervisor

1. Nuremy Baiduri, Mechanical Properties Concrete with Crumb Rubber and Steel Fibre Using Different Water Cement Ratios Subjected to High Temperatures (2016)
2. Alif Fizri Ayub, The Performance of Coconut Fiber in Concrete at Elevated Temperatures (2016)
3. Siti Nurul Nureda Binti Mohamad Zukri, Performance of Concrete Containing Crumb Rubber and Steel Fiber at High Temperatures. Undergraduate Final Project (2015)
4. Nur Aqilah Syakirah Binti Abd Rahman. Utilization of higher Percentage Treated Crumb Rubber and Fiber in Concrete Mixtures. Undergraduate Final Project (2015)
5. Siti Julaila Binti Mohd Kasim. Mechanical Properties of Concrete Containing Crumb Rubber and Steel Fiber in Concrete Mixtures. Undergraduate Final Project (2015)
6. Muhamad Hatta Bin Mohd Satar. Kesan Termal Terhadap Tiang Konkrit Bertetulang yang Dikenakan Beban Lateral. Undergraduate Final Project (2014)

CONSULTANCIES WORK

1. Structural Integrity of Mechanical Laboratory, Faculty of Mechanical Engineering, UTM, 2016

2. Projek Membina Jambatan Dari Semporna Ke Pulau Bum-Bum, Sabah Malaysia, 2013
3. Fixed Offshore Structure Design, PETRONAS,2013

PUBLICATIONS

1. Awal, A.S.M.A., **Ab-Kadir, M.A.** and Hossain, M.Z., Some Aspects of Physical and Mechanical Properties of Sawdust Concrete, Proceedings of the 5th International Journal of GEOMATE , 2016.
2. Awal, A.S.M.A., **Ab-Kadir, M.A.** and Hossain, M.Z., Influence Of Polypropylene Waste Carpet Fiber On Deformation Characteristic of Concrete, Advance Material, Structural and Mechanical Engineering Journal , 2016.
3. Norhidayah, A.H., Hanif, M., Norzurairahetty, Y.,**Ab-Kadir, M.A.**, An Overview On Natural Rubber Application For Asphalt Modification, Kuala Lumpur International Journal of Agriculture, Forestry& Plantation, 2016
4. Awal, A.S.M.A., **Ab-Kadir, M.A.** and Hossain, M.Z., Some Aspects of Physical and Mechanical Properties of Sawdust Concrete, Proceedings of the 5th International Conference on Geotechnique, Construction Materials and Environment (GEOMATE), Osaka, Japan, pp.621-626, 16-18 November, 2015.
5. Mohammad Hosseini, H., Awal, A.S.M.A., **Ab-Kadir, M.A.**, Influence of polypropylene waste carpet fiber on deformation characteristics of concrete, Proceedings of the International Conference on Advanced Materials, Structures and Mechanical Engineering (ICAMSME) Incheon, South Korea, 29-31 May, 2015.
6. **Mariyana Aida Ab Kadir, A.S.M Abdul Awal, Mohd Warid Hussin, Nur Farhayu Ariffin, Siti Nurul NMZ, Nur Aqilah SAR, Siti Julaila MK1, Eeydzah A Behaviour of Treated Rubberised Fiber Concretes at Higher Temperatures, The 2nd International Conference on Construction and building Engineering (ICONBUILT 2015), Padang Indonesia October 2015**
7. Nor Zurairahetty Mohd Yunus, Yong Chin Yung, Ng Teck Wei, Norliana Abdullah, Noordiana Mashros, **Mariyana Aida Abdul Kadir**, Shear Strength Behaviour of Canlite-Treated Laterite Soil , Journal Teknologi Universiti Teknologi Malaysia Jan 2015
8. Nordiana Mashros, Mohd Rosli Hainin, Norhidayah Abdul Hassan, Nor Zurairahetty Mohd Yunus, **Mariyana Aida Ab. Kadir**, Exploring the Pattern of Platoon Dispersion Caused by Traffic Signal, Journal Teknologi Universiti Teknologi Malaysia Dec 2014
9. **Mariyana Aida Ab Kadir**, A.S.M. Abdul Awal: Finite Element Modelling of Reinforced Concrete Slab at Elevated Temperature using ABAQUS. International Conference on Advanced Engineering and Technology (ICAET), 21-22 December 2014. Incheon Korea (Accepted and Published in the Applied Mechanics and Materials (ISSN: 1662-7482))
10. A.S.M. Abdul Awal, **Mariyana Aida Ab Kadir**, Lim Lion Yee and Neelam Memon: Strength and Deformation Behaviour of Concrete Incorporating Steel Fibre from Recycled Tyre. 2014 International Civil and Infrastructure Engineering Conference. Kota Kinabalu, Sabah,

Malaysia.28th September - 1st October 2014 (Accepted and Published in the Applied Mechanics and Materials (ISSN: 1662-7482))

11. Behrouz Gordan, Azlan Adnan, **Mariyana Aida A.K**: Soil Saturated Simulation in Embankment During Strong Earthquake by Effect of Elasticity Modulus. Modelling and Simulation in Engineering. Volume 2014, Article ID 191460
12. **Mariyana A. Ab-Kadir**, J.Zhang, etl: Experimental and Numerical Study on Softening and Pinching Effects of Reinforced Concrete Frame. IOSR Journal of Engineering (IOSRJEN), Vol. 04, Issue 5 May 2014
13. **Mariyana A. Ab-Kadir**, Asif S. Usmani; Modelling of Heat Transfer Analysis of The Roorkee Frame; The 9th International Conference of Geotechnical Engineering (Geotropika) and The 1st International Conference on Construction and Building Engineering (Iconbuild), Johor Bharu, Malaysia 28-30 October 2013 (UTM)
14. **Mariyana A. Ab-Kadir**, J.Zhang, Asif S. Usmani; Experimental and Numerical Study on softening and Pinching Effects of Reinforced Concrete; 8th Asia Pacific Structural Engineering and Construction Conference (APSEC) and 1st International Conference on Civil Engineering Research (ICCER), Surabaya, Indonesia, October 2012 (UTM)
15. **Mariyana A. Ab-Kadir**, Jian Zhang, Jian Jiang, Asif S. Usmani, Martin Gillie, Umesh K. Sharma, Pradeep Bhargava; Modelling of an Earthquake Damaged RC Frame Subjected to Fire;7th International Conference on Structures in Fire, Zurich, Switzerland, June 2012
16. **Ab.Kadir M A**, A.S Usmani, M. Gillie; Modelling of Reinforced Concrete Frames in Fire Following an Earthquake; Applications of Structural Fire Engineering, Prague, April 2011
17. **Mariyana Aida A.K**, Adnan A., A Comparison Between Linear Static Model Response Spectrum and Nonlinear Static Pushover Analysis on Seismic Loading to Buildings Using SAP2000, National Seminar on Civil Engineering, 2007