



#### **PERSONAL DETAILS**

Name	:	Norhisham bin Bakhary	
Gender	:	Male	
Date of Birth/Age	:	12 September 1974	
Nationality	:	Malaysia	
Marital Status	:	Married	
E-mail	:	norhisham@utm.my	
Website	:	https://people.utm.my/norhisham/	
ID Staff	:	7695	
Expertise	:	Structural dynamic, structural health monitoring, noise and vibration	
H-Index (WOS)	:	16	
H-Index (SCOPUS)	:	17	
H-Index (G. Scholar)	:	18	
H-Index (Researchgate)	:	17	

#### **ACADEMIC QUALIFICATIONS**

NO	LEVEL OF EDUCATION	COURSE	UNIVERSITY	STARTING DATE	ENDING DATE
1	Doctor of Philosophy	Structural Dynamic	The University of Western Australia	2004	2008
2	Master of Philosophy	Structure	Universiti Teknologi Malaysia	1999	2001
3	Bachelor of Engineering	Civil Eng.	Universiti Teknologi Malaysia	1995	1998
4	Diploma of Engineering	Civil Eng.	Universiti Teknologi Malaysia	1992	1995

#### **AWARD AND HONORS RECEIVED**

Summary			
International Awards/Honors	5		
National Awards/Honors	0		

UTM Awards/Honors	6
Faculty Awards/Honors	2

NO	AWARD	LEVEL (FACULTY /UTM /NATIONAL	YEAR
1	Quality Award	/INTERNATIONAL)	2013
'	Quality Award - Faculty of Civil Engineering	Faculty	2013
2	Award of Excellence Service	UTM	2015
3	Publication Award in Indexed Journal	UTM	2010
4	Award of Certificate of Quake-Resistant	International	2010
4	- International Build and Test Structure	international	2012
	competition. Taipei, Taiwan		
	- (Project supervisor and team member)		
5	Award of Best Poster	International	2013
	- International Build and Test Structure	meridional	2010
	competition. Taipei, Taiwan		
	- (Project supervisor and team member)		
4	Award of Second prize	International	2013
	- International Build and Test Structure		
	competition. Taipei, Taiwan		
	- (Project supervisor and team member).		
5	Award of Certificate of Quake-Resistant	International	2013
	- International Build and Test Structure		
	competition. Taipei, Taiwan		
	- (Project supervisor and team member)		
6	The 2013 Award of Commendation of J.M.	International	2014
	Ko Medal.		
	- Advances in Structural Engineering: An		
	International Journal, Hong Kong		
7	Publication Award in Indexed Journal	UTM	2018
	- Centre of Excellence Category		20/2
8	Award of Excellence	UTM	2018
<u> </u>	Blended active learning		20.10
9	Excellence Service Award	Faculty	2019
10	- Faculty of Engineering	11784	2040
10	Publication Award in Indexed Journal	UTM	2019
11	- Centre of Excellence Category  Publication Award in Indexed Journal	11784	2020
111		UTM	2020
12	- Centre of Excellence Category  Publication Award in Indexed Journal	UTM	2022
12		UTIVI	2022
	- Centre of Excellence Category		

# WORKING EXPERIENCE

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT/ORGANISATION
1	Site Supervisor	January 1994	November 1994	Geahin Engineering, Air Keroh, Melaka
2	Site Engineer	January 1998	April 1998	WH Engineering, Port Dickson, N.S.
3	Tutor	April 1998	October 2001	Universiti Teknologi Malaysia
4	Senior Lecturer	October 2001	May 2017	Universiti Teknologi Malaysia
5	Associate Professor	May 2017	present	Universiti Teknologi Malaysia

# PROFESSIONAL MEMBERSHIP / QUALIFICATIONS / RECOGNITION

Summary	
International Professional Membership / Qualifications / Recognition	3
National Professional Membership / Qualifications / Recognition	3

NO	NAME OF PROFESIONAL MEMBERSHIP	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	ROLE	YEAR
1	American Society of Civil Engineering (ASCE)	International	Associate Member	2020
2	Structural Engineering Institute (ASCE)	International	Member	2020
3	International Society of Structural Health Monitoring of Intelligent Infrastructure	International	Member	2013
4	Board of Engineer Malaysia (BEM)	National	Graduate member	2008
5	Malaysia Society of Engineering and Technology (MySET)	National	Ordinary member	2010
6	Association of Material, Vibration & Insulation Practitioners Malaysia	National	Exco member & Vice president	2022

#### ADMINISTRATIVE EXPERIENCE

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT
1	Webmaster	January 2010	April 2013	Faculty of Civil Engineering, UTM
2	Coordinator of subject UAPA 0010 (Research Methodology)	19 February 2018	present	School of Civil Engineering, UTM
2	Academic Manager (Research)	April 2015	July 2017	Faculty of Civil Engineering, UTM
3	Director	July 2017	July 2022	School of Civil Engineering, UTM
	(Department of Structural & Material)			

# CONSULTATION WORKS

Summary	
Consultation Project-UTM	RM1,746,500

NO	NAME OF CONSULTANCY	AMOUNT	STARTING DATE	ENDING DATE
1	Noise and vibration monitoring of piling process at SMK Pulai Jaya	RM6,000	April 2018	July 2018
	Client: Setia Sepakat Sdn Bhd			
	UTM-IKG (Vot: 07028)			
2	Analysis of earthquake to bridges from Sandakan to Bum Bum Island Sabah, Malaysia.	RM300,000	Nov 2013	October 2014
	Client: JKR Sabah			
	UTM-UTSB (Vot: 07128)			
3	Structural integrity assessment for Melaka CCPP GT Power Plant project (MMCC), Kuala Sungai Baru, Melaka	RM178,000	March 2019	April 2019
	Client: Prasarana			
	UTM-IKG (Vot: 07028)			
4	Noise barrier design for ECRL project Section A and Section B	RM66,000	September 2021	September 2022
	Client: China Construction and Communication Company (CCCC)			
	UTM-IKG (Vot: 07028)			
5	Structural integrity assessment of U girder of LRT3 project	RM340,000	October 2022	December 2022
	Client: Prasarana			
	UTM-IKG (Vot: 07028)			
6	Structural Integrity assessment of factory structure for PCCS group	RM65,500	November 2022	December 2022
	Client: Prasarana			
	UTM-IKG (Vot: 07028)			
7	Structural Integrity Reassessment of U- girder P17-7273 LHS before load test for LRT3 project	RM35,000	April 2023	April 2023
	Client: Prasarana			

	UTM-IKG (Vot: 07028)			
8	Structural Integrity Reassessment of 3 units of U-girder for LRT3 project	RM75,000	June 2023	June 2023
	Client: Prasarana			
	UTM-IKG (Vot: 07028)			
9	Investigation and Redesign of antenna bracket due to the effect of vibration for MRT	RM260,000	September 2023	On-going
	Client: MMC-Gamuda			
	UTM-IKG (Vot: 07028)			
10	Design of Shaker Machine foundation	RM32,000	September 2023	On-going
	Client: Dyson International			
	UTM-IKG (Vot: 07028)			
11	Visual inspection of apartment structures due to explosion at Bandar Tun Razak aparment	RM5,000	October 2023	January 2024
	Client: Persatuan Penduduk Apartment Bandar Tun Razak			
	UTM-IKG (Vot: 07028)			
12	Periodical structural health monitoring of eleveted highway at Sungai Besi- Ulu Kelang Elevated Expressway (SUKE)	RM219,000	February 2024	On-going
	Client: Prolintas			
	UTM-IKG (Vot: 07028)			
13	Signalling post and WRA box failure investigation for MRT	RM165,000	February 2024	On-going
	Client: Alstom			
	UTM-IKG (Vot: 07028)			

# INTERNATIONAL/NATIONAL/UNIVERSITY COMMITTEE

Summary	
International Commitee	9

National Commitee	7
University Commitee	18
Faculty Commitee	30
Community Commitee	2

# **International**

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	Australian Structural Engineering Conference (ACEC 2012)	Scientific Committee	13 May 2011	01 July 2012
2	24 <sup>th</sup> Australian Conference on the Mechanics of Structures and Materials (ACEC 2012)	Scientific Committee	1 January 2016	17 September 2016
3	International Graduate Conference of Engineering, Science and Humanity (IGCESH 2016)	Scientific Committee	15 August 2016	17 December 2016
4	Asia Pacific Structural Engineering and Construction Conference 2020 (APSEC2020)	Chairman	1 September 2019	present
5	Lembaga Pengembangan Jasa Konstruksi Provinsi Sumatera Selatan, Indonesia	Committee Member	1 January 2020	31 December 2023
6	National Centre of Science and Technology Evaluation, Ministry of Education and Science, Republic of Kazakhstan	Peer reviewer of technical and scientific project	5 May 2020	present
7	29 <sup>th</sup> World Conference on Applied Science, Engineering, and Technology	International Advisory Board	21 Jan 2020	28 May 2020
	Shanghai, China			
8	6 <sup>th</sup> International Conference on Civil, Architectural and Structural Engineering 2022	Committee Member	1 April 2022	28 May 2022
	Guangzhou, China			
9	Qatar Research, Developement and Innovation Council	Evaluation Panel	11 June 2023	13 January 2024

# <u>National</u>

NO	NAME OF	ROLE	STARTING DATE	ENDING DATE
	COMMITTEE			

1	Malaysia Earthquake Technical Committee	Committee Member	April 2012	May 2014
2	Institute of Noise and Vibration	Research Fellow	April 2013	present
4	Fundamental Research Grant, Malaysia. Evaluation panel (Cluster:	Evaluation panel	21 March 2020	present
	Technology and Engineering (Civil & Structure)			
5	Working group for development of Malaysia Railway Industrial Standard (MRIS) for SIRIM	Chairman	February 2022	present
6	Association of Materials, Vibration & Insulation Practitioner, Malaysia (AMVIP)	Exco member	February 2022	December 2023
7	Association of Materials, Vibration & Insulation Practitioner, Malaysia (AMVIP)	Vice president	January 2024	present

# <u>University</u>

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	1st Graduate Research Exhibition	Evaluator	18 September 2017	19 September 2017
2	Task force Envision 2025	Member	1 March 2020	1 March 2021
3	Teaching Excellent System (TES)	Evaluator	12 December 2019	31 December 2019
4	Proposal UTMHR 2019/1	Evaluator	17 December 2019	31 December 2019
5	Increase of the visibility of UTM expertise	Committee member	10 April 2017	9 April 2017
6	Science Fund Grant	Evaluator	1 April 2015	31 April 2015
7	Original book manuscript award	Evaluator	23 January 2011	14 March 2011
8	Award of best paper for 6th International Graduate Conference on Engineering, Science and Humanity 2016	Evaluator	15 August 2016	17 August 2016
9	UTM offshore program	Committee member	6 September 2019	30 September 2020
10	Task force University 4.0	Committee member	23 July 2018	23 July 2019

11	Research methodology (ULAP0010) for remote research student	Referee	14 July 2019	17 July 2019
12	UTM Micro-credential committee	Committee member	1 July 2020	30 June 2022
13	UTMHR grant	Evaluation panel	2 April 2019	21 March 2020
14	UTM MOOC task force	Committee member	16 Jan 2019	30 January 2020
15	UTM Micro credential task force	Committee member	1 July 2020	1 December 2022
16	RACE GE 2020	Committee member	19 May 2020	18 May 2020
17	Jawatankuasa Projek Pembangunan dan Perlaksanaan Microcredential bagi Kursus MYCREST	Chairman	1 May 2021	31 April 2022
18	Undergraduate research Conference 2022	Chairman	18 December 2022	August 2023

# **Faculty**

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	Faculty Internationalisation committee	Committee member	03 February 2009	02 February 2013
2	E-portfolio and E-learning	Committee member	01 September	31 August 2011
3	Information management committee	Committee member	01 September 2009	31 October 2010
4	Marketing Committee	Committee member	01 September 2009	01 September 2011
5	SEPKA committee	Committee member	01 September 2009	01 September 2011
7	Faculty Website committee	Webmaster	1 January 2010	31 December 2012
8	Publication Task force	Committee member	1 January 2010	31 December 2012
9	Culture integration task force	Committee member	1 January 2010	31 December 2012
10	International competition taskforce	Committee member	1 January 2013	31 December 2015
11	Academic advisor	Academic advisor	1 December 2008	present
12	Task force for faculty strategic planning	Committee member	24 June 2015	24 June 2017
13	Task force of Short course in bridge engineering	Committee member	24 April 2015	24 Dec 2015
14	1st Proceeding of Civil Engineering task force	Head of Task force	1 June 2016	present
15	Innovation and commercialisation committee	Committee member	1 January 2016	31 December 2016

16	2nd Civil Engineering proceeding	Head of task force	1 January 2017	31 December 2017
	Task force			
16	Student holistic value committee	Committee Member	10 April 2017	31 December 2017
17	Income generation task force	Committee Member	10 April 2017	31 December 2017
18	Financial strategic task force	Committee member	10 April 2017	31 December 2017
19	Global reputation task force	Head of task force	10 April 2017	31 December 2017
20	Building Information Modelling (BIM) task force	Head of task force	1 March 2017	31 December 2017
22	3rd Civil Engineering proceeding Task force	Head of task force	1 January 2018	31 December 2018
23	Post-graduate academic task force	Committee member	1 March 2018	31 December 2018
24	Myra FKA	Coordinator	1 February 2018	31 December 2018
25	4th Civil Engineering proceeding Task force	Head of task force	31 October 2019	31 December 2019
26	SKA Key Amal Indicator 6	Head of task force	1 January 2019	31 December 2019
27	SKA Key Amal Indicator 5	Head of task force	1 January 2019	31 December 2019
28	SKA Key Amal Indicator 4	Head of task force	1 January 2019	31 December 2019
29	Faculty of Engineering Academic	Committee member	1 September	31 August 2021
	Guidebook		2019	
30	Asia Pacific Structural Engineering Conference 2025	Chairman	November 2023	present

# Community

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	Persatuan penduduk Park Home, Taman Seri Pulai Perdana	Chairman	Jun 2012	Jun 2014
2	Persatuan penduduk Park Home, Taman Seri Pulai Perdana	Vice Treasurer	February 2023	present

# SELECTED ACTIVITIES / WORKSHOPS / SEMINARS / COURSES

NO	NAME OF ACTIVITIES	PLACE OF	STARTING DATE	ENDING DATE
		ACTIVITIES		
1	Facilitator at the 2nd Round Table	Kuala Lumpur	24 June 2012	26 June 2012
	Conference ACLRI-MPN 2012.			
2	Facilitator in Journal Writing	Faculty of Civil	29 April 2015	29 April 2015
	Workshop	Engineering, UTM		
3	Speaker in Workshop on	Faculty of Civil	16 April 2017	16 April 2017
	publication	Engineering, UTM		
4	Visiting Associate Professor	Curtin University,	24 December 2017	28 February 2018
		Western Australia		
5	Speaker in Structured course for	SKA,UTM	2 December 2018	2 December 2018
	SKA First year student			
6	Speaker in Supervisory	UTM	11 March 2019	11 March 2019
	Development Program (AS102)			
7	Speaker in Structured course for	SKA,UTM	23 February 2020	23 February 2020
	SKA Third year student			

8	Speaker in	SKA,UTM	22 July 2020	22 July 2020
	' Effective supervision course for			
	new staff '			
9	Speaker for Postgraduate Student	SKA,UTM	10 January 2021	10 January 2021
	Society (PGSS)		-	-
	'How to identify research gap'			

#### **EDITORIAL BOARD MEMBER**

NO	PUBLICATION	ROLE	STARTING DATE	ENDING DATE
1	Jurnal Teknologi	Section Editor	June 2010	December 2015
2	Malaysian Journal of Civil Engineering	Assistant Editor-in- Chief		
3	The Asian Review Journal of Civil Engineering	Advisory board 3 Dec 2018 3		3 December 2019
4	International Journal of Lifecycle Performance Engineering	Editorial board member	present 1 January 2018	
5	Journal of Civil, Construction and Environmental Engineering	Editorial board member	present 8 August 2020	
6	Proceeding of Civil Engineering (1st edition to 4th edition)	Editor	1 January 2016 31 December	
7	International Journal of Applied Science	Special issue editor	or January 2023 Presen	

#### **REVIEWER**

#### JOURNAL MANUSCRIPT

- 1. Advances in Structural Engineering, an International Journal (SCOPUS & SCI)
- 2. Jurnal Teknologi (SCOPUS)
- 3. Journal of Engineering Structure, An International Journal.( SCOPUS & SCI))
- 4. Journal of Smart Structures and Systems, An International Journal. (SCOPUS & SCI))
- 5. Journal of Sound and Vibration, An International Journal. (SCOPUS & SCI))
- 6. Mechanical Systems and Signal Processing. (SCOPUS & SCI)
- 7. Construction and Building Materials. (SCOPUS & SCI)
- 8. Journal of Theoretical and Applied Mechanics. (SCOPUS & SCI)
- 9. International Journal of Mechanical Engineering and Applications
- 10. International Journal of Non-linear Mechanics (SCOPUS & SCI)
- 11. Canadian Journal of Civil Engineering. (SCOPUS & SCI)
- 12. Sensors. (SCOPUS & SCI)
- 13. International Journal of Lifecycle Performance Engineering (SCOPUS & SCI)
- 14. International Journal of Building Engineering (SCOPUS & SCI)
- 15. International Journal of Advances in Structural Engineering (SCOPUS & SCI)
- 16. International Journal of Engineering Structures (SCOPUS & SCI)

#### BOOK

- 1. Concise Handbook of Civil Engineering. UTP Press (28 January 2020)
- 2. Advanced Structural Damage Detection: From Theory to Engineering Application. Wiley (2013)

3. Structured Programming. UTM Press (January 2010)

#### **CONFERENCE MANUSCRIPT**

- 1. International Graduate Conference of Engineering, Science and Humanity (IGCESH 2016)
- 2. 24<sup>th</sup> Australian Conference on the Mechanics of Structures and Materials (ACMSM24)
- 3. Australian Structural Engineering Conference (ACEC 2012)
- 4. Asia Pacific Structural Engineering and Construction 2018 (APSEC 2020)

#### **VISITING SCHOLAR**

NO	ROLE	PLACE	STARTING DATE	ENDING DATE
1	Visiting Associate	Curtin University,	24 December 2017	28 February 2018
	Professor	Western Australia		-
2	Visiting Associate	Curtin University,	01 Nov 2022	30 November 2022
	Professor	Western Australia		

#### **RESEARCH ACTIVITIES**

Summary					
Principal Investigator- International Grants	1 projects (RM40,000)				
Principal Investigator- National Grants	7 projects (RM765,000)				
Principal Investigator- UTM Grants	6 projects (RM393,000)				
Member- International Grants	2 projects (RM80,000)				
Member- National Grants	7 projects (RM765,000)				
Member- UTM Grants	6 projects (RM393,000)				

#### As a principal investigator

BIL	NAME OF	CATEGORY	TYPE OF	AMOUNT	START	END	VOTE
	GRANT		GRANT	(RM)	DATE	DATE	NUMBER
1	Structural Damage Identification Using Vibration Data	UTM	New Academic Staff Grant	RM10,000	16 Mar 2009	15 Mar 2010	3P015
2	Optimal Sensor Placement for Vibration Based Damage Detection in Civil Structure	UTM	Research University Grant (TIER 2)	RM40,000	1 Apr 2011	31 Jul 2017	01J99
3	Subspace and Envelope Subtraction Algorithm to Minimize False Alarms in Vibration- based	UTM	Research University Grant (TIER 1)	RM100,000	1 Jan 2012	31 Dec 2014	05H21

	Damage Detection						
4	Petrochemical Plant Structural Integrity Assessment	UTM	Trans- disciplinary Research Grant (UTM-TDR)	RM80,000	1 Dec 2018	31 May 2022	07G48
5	Network-level in-fleet (NLIF) for structural health monitoring of highway bridge	UTM	Professional Development Research University Grant (PDRU)	RM123,000	1 Sept 2022	31 Aug 2023	03498
6	Coal Ash utilization for environment friendlu road material	UTM	Matching grant	RM40,000	1 Dec 2019	31 Nov 2021	02M46
6	A Study on Uncertainties in Vibration Based Damage Detection for Reinforced Concrete Bridge	NATIONAL	Fundamental Research Grant (FRGS)	RM50,000	14 Aug 2009	13 Aug 2011	3F354
7	A Study on A New Algorithm of Sensor Placement for Enhancing the Sensitivity in Vibration Based Damage Detection for Reinforced Concrete Bridge	NATIONAL	Fundamental Research Grant (FRGS)	RM50,000	1 Jan 2011	31 Dec 2012	4F051
8	Statistical coordinate- based simulated annealing to consider uncertainties for sensor placement	NATIONAL	Exploratory Research Grant (FRGS)	RM105,000	1 June 2013	31 May 2015	4L101
9	Uncertainties Handling in Vibration- based Damage Detection using hybrid subspace Algorithm and Envelope	NATIONAL	Fundamental Research Grant (FRGS)	RM79,000	1 Dec 2013	15 Dec 2015	4F308

	Subtraction Method						
10	Non- probabilistic Artificial Neural Network to Consider Uncertainties in Vibration- based damage detection	NATIONAL	Fundamental Research Grant (FRGS)	RM84,000	2 Nov 2015	1 Nov 2017	4F800
11	Structural Integrity Assessment	NATIONAL	HICOE Grant	RM332,302	1 Jan 2016	31 Dec 2020	4J224
12	Structural Integrity Assessment (Cont.)	NATIONAL	HICOE Grant	RM65,000	1 Sep 2019	31 Aug 2020	04E97
13	Sustainable Utilization of coal ash for quality pavement	INTER NATIONAL	Non- government grant	RM40,000	1 Dec 2019	31 Nov 2023	4B596

#### As a scientific member

BIL	NAME OF	CATEGORY	TYPE OF	AMOUNT	START	END	VOTE
	GRANT		GRANT	(RM)	DATE	DATE	NUMBER
1	Earthquake	UTM	Research	RM170,000	11 Apr	30 June	02H09
	Hazard		University		2011	2013	
	Reduction		Grant (TIER 1)				
	Product: Base		(IIEK I)				
	Isolator						
	Application to						
	Precast						
	Concrete Wall						
	Panel						
	Buildings						
2	Study on the	UTM	Research	RM34,000	1 Dec	31 Dec	90J22
	Effect on the		University		2012	2013	
	Ground		Grant (TIER 2)				
	Vibration to		(TILIX Z)				
	Surrounding						
	Ground and						
	Multi-story						
	Building in						
	Malaysia						
	Asset Integrity	UTM	Trans-	RM240,000	1 Dec	30 Nov	05G98
	Management		disciplinary Research		2018	2022	
	System for		Grant				
	Ageing		(UTM-TDR)				
	Petrochemical		(2:				

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and Construction Cost Implication for Buildings and Bridges						
Exploration of Woodpacker's Head Mechanics for Developement of A New Structural Impact Resistance	NATIONAL	Exploratory Research Grant (ERGS)	RM112,000	1 June 2013	31 May 2015	4L098
Elementary anisotropic curved beam formulation for fracture toughness of triaxial weave fabric composite	NATIONAL	Fundamental Research Grant (FRGS)	RM90,000	1 Jul 2014	31 Dec 2016	4F518
Structural Health Monitoring for Earthquakes	NATIONAL	HICOE Grant	RM424,551	1 Jan 2016	31 Dec 2024	4J223
Fire and explotion structural and Geophysical Investigation for Subsurface Integrity Assessment	NATIONAL	HICOE Grant	RM236,737. 53	1 Jan 2016	31 Dec 2024	4J222
Penyelidikan dan Pembangunan Video Serta Bahan E- Pembelajaran Bagi Kursus Fasilitator MyCrest	NATIONAL	Non Government Agency Grant	RM100,000	30 Mar 2021	31 Dec 2021	4B693
A New Algorithm in Real Time Structural Health Monitoring on Road Tunnel Structural System using Vibration Based Damage Detection Technique	NATIONAL	Fundamental Research Grant (FRGS)	RM161,597	1 Oct 2023	30 Sep 2026	5F600

Potential usof Fly Ash a Bottom Ash Green Stryctyural Lightweight Concrete	nd NATIONAL	Non Government Agency Grant	RM40,000	1 Dec 2019	30 June 2022	4B469
Cellulosic Aerogel- Carbon Bas Nanocompo es for Reinforceme of Cementitiou matrix	sit	Non Government Agency Grant	RM40,000	1 Dec 2019	30 June 2022	4B525

#### **COLLABORATION / MOU**

NO	NAME OF MOU	LEVEL OF MOU (NATIONAL/INTERNATIONAL)	STARTING DATE	ENDING DATE
1	ERCAD Software between UTM, K- Perak and CIDB	National	31 May 2015	30 April 2016
2	MOU between UTM and Revron Consulting Sdn Bhd	National	23 October 2018	23 October 2020
3	MOA between UTM and Universitas Sriwijaya Indonesia	International	19 October 2019	19 October 2021
4	MOA between FKA and CIDB for MYCREST Microcredential Programme	National	May 2021	May 2022

# **TEACHING ACTIVITIES**

	Summary
Total Credit Hours	137

#### **UNDERGRADUATES**

Semester	Sem	Subject Code	Subject	Credit Hour
2002/2003	2	SAM2413	Computer Programming	3
2003/2004	1	SAM2413	Computer Programming	3
2003/2004	2	SAM2413	Computer Programming	3
2008/2009	2	SAM3413	Computer Programming	3
2009/2010	1	SAM3413	Computer Programming	3
2009/2010	2	SAM3413	Computer Programming	3
2010/2011	1	SAM3413	Computer Programming	3
2010/2011	2	SAM3413	Computer Programming	3
2011/2012	1	SAM3413	Computer Programming	3
2011/2012	2	SAM3413	Computer Programming	3
2011/2012	1	SAB4412	Civil Engineering Information System	2
2011/2012	2	SAB4412	Civil Engineering Information System	2
2012/2013	1	SAM3413	Computer Programming	3
2012/2013	2	SAM3413	Computer Programming	3
2014/2015	1	SKAA3413	Computer Programming	3
2014/2015	2	SKAA3413	Computer Programming	3
2015/2016	1	SKAA3413	Computer Programming	3
2015/2016	2	SKAA3413	Computer Programming	3
2016/2017	1	SKAA3413	Computer Programming	3
2016/2017	1	SKAA3413	Computer Programming	3
2016/2017	1	SKAA3012	Civil Engineering Laboratory	2
2016/2017	2	SKAA3413	Computer Programming	3
2017/2018	1	SKAB3413	Computer Programming	3
2017/2018	2	SKAA1213	Engineering Mechanic	3
2018/2019	1	SEAA1213	Engineering Mechanic	3
2018/2019	2	SEAA1213	Engineering Mechanic	3
2019/2020	1	SEAA1213	Engineering Mechanic	3
2019/2020	2	SEAA1213	Engineering Mechanic	3
2017/2018	2	SKAA3012	Civil Engineering Laboratory 2	2
2018/2019	1	SKAA3012	Civil Engineering Laboratory 2	2
2018/2019	2	SKAB1213	Engineering Mechanic	3
2019/2020	1	SEAA1213	Engineering Mechanic	3
2019/2020	2	SEAA1213	Engineering Mechanic	3
2020/2021	1	SEAA1213	Engineering Mechanic	3
2020/2021	2	SEAA1213	Engineering Mechanic	3
2020/2021	2	SKAA3012	Civil Engineering Laboratory 2	2
2021/2022	1	SEAA1213	Engineering Mechanic	3
2021/2022	1	SKAA3012	Civil Engineering Laboratory 2	2
2021/2022	2	SEAA1213	Engineering Mechanic	3
2021/2022	2	SKAA3012	Civil Engineering Laboratory 2	2
2022/2023	1	SEAA1213	Engineering Mechanic	3
2022/2023	1	SKAA3012	Civil Engineering Laboratory 2	2
2022/2023	2	SEAA1213	Engineering Mechanic	3
2022/2023	2	SKAA3012	Civil Engineering Laboratory 2	2
2023/2024	1	SEAA1213	Engineering Mechanic	3
2023/2024	1	SKAA3012	Civil Engineering Laboratory 2	2
2020/2024	ı		credits	137

#### **POSTGRADUATES**

Semester	Sem	Subject Code	Subject	Credit Hour
2017/2018	1	UAPA 0013	Research methodology	3
2017/2018	2	UAPA 0013	Research methodology	3
2017/2018	3	UAPA 0013	Research methodology	3
2017/2018	2	UAPA 0010	Research methodology	0
2018/2019	1	UAPA 0010	Research methodology	0
2018/2019	2	UAPA 0013	Research methodology	3
2018/2019	3	UAPA 0013	Research methodology	3
2019/2020	2	MKAB 2313	Quantitative analysis for management	3
2019/2020	1	UAPA 0010	Research methodology	0
2019/2020	2	UAPA 0010	Research methodology	0
2019/2020	1	MKAE 1033	Structural assessment and repair	3
2019/2020	1	MKAB 2313	Quantitative analysis for management	3
2019/2020	2	MKAB 2313	Quantitative analysis for management	3
2019/2020	2	UAPA 0013	Research methodology	3
2020/2021	1	MKAB 2313	Quantitative analysis for management	3
2020/2021	1	UAPA 0013	Research methodology	3
2020/2021	2	MKAB 2313	Quantitative analysis for management	3
2020/2021	2	UAPA 0013	Research methodology	3
2021/2022	1	UAPA 0013	Research methodology	3
2021/2022	1	UAPA 0013	Research methodology	3
2021/2022	2	UAPA 0013	Research methodology	3
2021/2022	2	UAPA 0013	Research methodology	3
2022/2023	1	UAPA 0013	Research methodology	3
2022/2023	1	UAPA 0013	Research methodology	3
2022/2023	2	UAPA 0013	Research methodology	3
2022/2023	2	UAPA 0013	Research methodology	3
2023/2024	1	UAPA 0013	Research methodology	3
2023/2024	1	UAPA 0013	Research methodology	3
		Tota	al credits	72

# **SUPERVISION**

Sur	nmary	
Main Supervisor – PhD (Graduated)	6	
Co-Supervisor – PhD (Graduated)	8	
Main Supervisor – PhD (Ongoing)	5	

Co-Supervisor – PhD (Ongoing)	3
Main Supervisor- Master by Research (Graduated)	3
Co-Supervisor- Master by Research (Graduated)	2
Main Supervisor- Master by Taught Course (Graduated)	5
Main Supervisor- Master by Taught Course (On-Going)	0

# Main Supervisor – Phd (Graduated)

No	Name	Title	Graduated Date
1	Abdulkareem Muyideen Oladimeji	Vibration-based damage detection using wavelet transform method	15 August 2018
2	Hoofar Shokravi	Structural vibration-based damage detection with stochastic subspace method	17 April 2019
3	Khairul Hazman Padil	Non-probabilistic method to consider uncertainties in frequency response function for vibration-based damage detection using Artificial Neural Network	20 February 2020
4	Edo Oga Ojoko	Critical success factors influencing industrialised building systems performance in Nigerian mass housing projects	24 June 2020
5	Iman Kiani	A model of retrofit energy efficiency for sustainable building by using energy performance contract method in Malaysia	26 June 2019
6	Yon Kong Chen	Petrochemical pipeline structural health monitoring	15 Jan 2023

# Co- Supervisor – Phd (Graduated)

No	Name	Title	Graduated Date
1	Goh Lyn Dee	Vibration-based damage detection with Multi-stage Artificial Neural Network	5 August 2015
2	Mehdi Moharrami Meynagh	Collaborative procurement strategy in private sector housing project using Industrialised Building System	1 March 2017
3	Ali Ashgar Bavafa	Generic safety performance evaluation prototype for construction project	5 April 2017
4	Nuria S. Mohammed	Behaviour and performance of non- cement polymer grouted spiral connection	2 June 2019
5	Ernest Egba Ituma	The effect of corrosion to model properties of structures	17 April 2019
6	Tahereh Nasrollahzadeh	Guideline of lean critical success factors implementation in construction project.	19 November 2019
7	Mohd Zamri Ramli	Performance of hollow seismic isolators for bridges in low moderate seismicity region	29 July 2020

# Main Supervisor - Phd (On-going)

No	Name	Title	Enrolment Date
1	Leona Ng Sok Han	Organisation Readiness To Implement Building Information Modeling For Transmission Project In Malaysia	15 August 2018
2	Ahmad Hassan Abdelsalam Ammar	Structural Damage Detection For Underground Tunnel Using The Vibration-Based Method.	28 March 2022
3	Shahin Nazim	The Collaboration Of BIM And ERP To Improve Sustainable Facility Management	11 October 2015
4	Muhammad Haziq Taqiuddin Bin Rezuwan	Vibration Based Structural Health Monitoring: Automatic Operational Modal Analysis (Oma) On Tunnels	26 September 2023

# Co-Supervisor - Phd (On-going)

No	Name	Title	Enrolment Date
1	Lee Kah Hong	Structural Health Monitoring considering missing vibration data	29 September 2022
2	Alhamza Yassin Flaih Maeni	Different Factors Impacting Construction Industry Of Iraq A Moderating Role Of Organizational Culture	18 October 2020
3	Aminuddin Jameran	Deep Learning Convolutional Neural Network For Vibration-Based Damaged Detection Using Frequency Response Function	23 January 2019

#### Main Supervisor- Master by Research (Graduated)

No	Name	Title	Enrolment Date
1	Tong Khoon Hong	Optimal sensor placement using improved Simulated Annealing	6 November 2013
2	Sarehati Umar	Structural damage detection using autoagressive with exogenous input neural network	15 February 2016
3	Khairul Hazman Padil	Non-probabilistic artificial neural network to consider uncertainties in modal data for damage detection	15 February 2016

# Co-Supervisor- Master by Research (Graduated)

No	Name	Title	Graduated Date
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#### Main Supervisor- Master by Taught Course (Graduated)

1	N	lohd Zhafri Jamil	Finite element formulation of two phase	10 September
Ν̈́ο		Name	turbulance flow with moving boundary of	10 September Graduated Date
1		Nadia Hajihasani	ଅଞ୍ଚଳେ ଅନ୍ତର୍ଗ ଓଡ଼ିଶା ପ୍ରଥମ	July 2011
2	N	ohd Zulariffin Md Maarof	Advaticed information theory method in	10 September
2		Noor Sabrina Zaharudin	Accompany model scale flexible for the cost	₹91y³2012
			structural damage detection	
3		Low Tian Hock	Vibration-based damage detection using neural network	July 2012
4		Danish T. Khorajia	Experimental testing scaled bridge model subjected to bi-directional seismic excitation	July 2019
5		Muhammad Nazrif Zamani	Deep learning Neural Network for damagage detection	Oct 2021

# **UTM POSTGRADUATE EXAMINATION/ VIVA**

Summary		
Phd	2	
Msc	4	

#### Phd

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Internal examiner	Nabila Huda Aizon	Development of Intelligent Bridge damage assessment considering earthquake effect	2019
2	Internal examiner	Muhammad Zubair Bin Tajol Anuar	Framework For Building Condition Assessment and Performance Evaluation	2021

#### Master

NO	ROLE	NAME OF STUDENT	TITLE	YEAR
1	Chairman	Salimi Md Saleh	The audit, assessment and maintenance of telecommunication towers	2020
2	Chairman	Nazirah Ahmad Shukri	High performance concrete utilizing metakaolin and spent garnet	2020
3	Chairman	Sazlly Nazreen Mah Nor	Flexural behaviour of lightweight reinforced concrete beam containing palm oil clinker as aggregates	2020

4	Chairman	Ali Mohammed Ahmed	Effect Of Nano Glass Powder	2022
		Saghir Onaizi	On Performance	
			OfHigh-Volume Fly Ash	
			Concrete Incorporating	
			Effective Microorganisms	

# **EXTERNAL EXAMINATION/ VIVA**

S	ımmary
Phd	7

#### Phd

NO	ROLE	NAME OF STUDENT	TITLE	YEAR	
1	Foreign Examiner Yonsei University, South Korea	Jang-Ho Jay Kim	Optimum design and economical construction of curved PSC bridge	2018	
2	External Examiner Universiti Kebangsaan Malaysia	Maryam Vafa	Optimisation of profiled steel sheeting dry board (PSSDB) system employing genetic algorithm	2018	
3	Foreign examiner Dr. M.G.R. Educational and Research Institute, Chennai, India	Depaa RA B	Experimental Investigation on mechanical and durability properties of self-healing concrete using mineral admixture	2019	
4	Foreign examiner Vellore Institute of Technology, Chennai, India	Chennur Jithendra Reddy	Experimental Investigations on Aluminosilicate Based Self Compacting Geopolymer Concrete Under Ambient Curing	2020	
5	Foreign examiner Vellore Institute of Technology, Chennai, India	Warudkar Abhijit Ambadasrao	Experimental Investigation on Abrasion Resistence for Horizontal Concrete Surface	2023	
6	Foreign examiner Dr. M.G.R. Educational and Research Institute, Chennai, India	E. Rani	Investigation on Behaviour of Basalt Fibre Reinforced Concrete made with GGBS Concrete Debris	2023	
7	External Examiner Universiti Kebangsaan Malaysia	Mohammed Chyad Liejy	Structural Behavior Of A Novel Composite Cold- Formed Beam-Slab System Filled With Recycled Aggregate Concrete Materials.	2024	

#### **PUBLICATIONS**

	Summary	
SCI Article/Journal	23	
Scopus Article/Journal	11	
Non-Indexed Article/Journal	1	

Indexed Conference Proceedings	
Non- Indexed Conference Proceedings	
Book Chapters	
Original Book	
Classified/Technical /Expert Report	
Policy Paper	

#### **Journal Article**

NO	ARTICLE TITLE	JOURNAL TITLE	VOL	ISSUE	PAGE	YEAR	IF	TYPE	QUARTILE
1	Bakhary, N., Hao, H., and Deeks, A.  Damage detection using artificial neural network with consideration of uncertainties  DOI: 10.1016/j.engstru	Engineering Structures ISSN: 0141-0296	29	11	2806- 2815	2007	5.5	WoS (SCI)	Q1
2	ct.2007.01.013  Bakhary, N., Hao, H., and Deeks, A.  Structure Damage Detection Using Neural Network with Multi-stage Sub structuring  DOI: 10.1260/1369-4332.13.1.95	Advances in Structural Engineering ISSN: 1369-4332	13	1	95 - 110	2010	2.6	WoS (SCI)	Q2
3	Bakhary, N., Hao, H., and Deeks, A.  Substructuring Technique for Damage Detection Using Statistical Multi-Stage Artificial Neural Network  DOI: 10.1260/1369- 4332.13.4.619	Advances in Structural Engineering ISSN: 1369-4332	13	4	95-110	2010	2.6	WoS (SCI)	Q2
4	Goh, L.D., <b>Bakhary, N</b> ., Rahman, A.A., Ahmad, B.H.  Application of neural network for prediction of unmeasured mode shape in damage detection	Advances in Structural Engineering ISSN: 1369-4332	16	1	99-113	2013	2.6	WoS (SCI)	Q2

	<b>DOI:</b> 10.1260/1369-								
	4332.16.1.99								
5	Tong, K.H.,	Smart	13	3	389-	2014	3.5	WoS	Q2
3	Bakhary, N., Kueh,	Structures and	13	٦	406	2014	5.5		QZ
	A.B.H., Mohd Yassin,	Systems			100			(SCI)	
	A.Y.	ISSN:							
		1738-1584							
	Optimal sensor								
	placement for mode								
	shapes using								
	improved simulated								
	annealing								
	DOI: 10.12989/sss.201								
6	4.13.3.389 Padil, K.H., <b>Bakhary,</b>	Moohaniaal	83		194-	2017	8.4	WoS	Q1
U	N. and Hao, H.	Mechanical Systems and	၀၁	-	206	2017	0.4		ŲΙ
		Signal			200			(SCI)	
	The use of a non-	Processing							
	probabilistic artificial neural network to	ISSN:							
	consider	0888-3270							
	uncertainties in								
	vibration-based-								
	damage detection.								
	<b>DOI</b> : 10.1016/j.ymssp.2 016.06.007								
7	Umar, S., <b>Bakhary</b> ,	Measurement	115	-	258-	2018	5.6	WoS	Q1
	<b>N</b> , and Abidin, A.R.Z.	ISSN:			268			(SCI)	
	Response surface	1873-412X							
	methodology for								
	damage detection using frequency and								
	mode shape								
	<b>DOI:</b> 10.1016/j.measur ement.2017.10.047								
8	Ojoko, E.O., Osman,	Advanced	24	6	3999-	2018	1.2	WoS	Q2
	M.H., Rahman, A.B., Omaw, W.S. and	Science Letter			4005			(SCI)	
	Bakhary, N.	ISSN:							
	Outsing I Occupa	1936-6612X							
	Critical Success Factors Influencing								
	Industrilised Building								
	System Performance								
	in the Nigerian Mass Housing								
	Development								
	<b>DOI:</b> 10.1166/asl.2018. 11529								
L	11048		l		l			l	

9	Muyideen, A., Bakhary, N, Vafaei, M., Noor, N.M. and Padil, K.H.  Non-probabilistic Wavelet method to consider uncertainties in structural damage detection. Journal of Sound and Vibration  DOI: 10.1016/j.jsv.2018 .07.011	Journal of Sound and Vibration ISSN: 0022-160X	433	-	77-98	2018	4.7	WoS (SCI)	Q1
10	Muyideen, A.,  Bakhary, N, Vafaei, M., Noor, N.M. and Abd Samat, R.  Experimental Damage Assessment of Support Condition for Plate Structures Using Wavelet Transform  DOI: 10.15632/jtam- pl/105470	Journal of Theoretical and Applied Mechanic ISSN: 1492-2955	57	2	501- 508	2019	0.7	WoS (SCI)	Q4
11	Muyideen, A.,  Bakhary, N, Vafaei, M., Noor, N.M. and Mohamed, R.N.  Application of two dimensional wavelet transform to detect damage in steel plate structures  DOI: 10.1016/j.measurement .2019.07.027	Measurement ISSN: 1873-412X	146	-	912- 923	2019	5.6	WoS (SCI)	Q1
12	Mohamed, R.N., Zamri, N.F., Elliot, K.S., Rahman, A.B.A., <b>Bakhary, N</b> .  Steel Fibre Self- compacting Concrete Under Biaxial Loading. <b>DOI:</b> 10.1016/j.conbu ildmat.2019.07.076	Construction and Building Materials ISSN: 0950-0618	224	-	255- 265	2019	7.4	WoS (SCI)	Q1
13	K.H. Padil, <b>Bakhary, N</b> ., Muyideen, A., Li, J. and Hao, H.  Non-probabilistic Method to Consider	Journal of Sound and Vibration ISSN: 0022-160X	467	-	-	2020	4.7	WoS (SCI)	Q1

	Uncertainties in Frequency Response Function for Vibration-based Damage Detection Using Artificial Neural Network  DOI: 10.1016/j.jsv.2019 .115069								
14	Shokravi, H., Shokravi, H., Bakhary, N., Kaloor, S.S.R. and Petru, M.  Health Monitoring of Civil Infrastructures by Subspace System Indentification Method: An Overview  DOI: 10.3390/app1008 2786	Applied Science-Basel EISSN: 2076-3417	10	8	-	2020	2.7	WoS (SCI)	Q3
15	Shokravi, H., Shokravi, H., Bakhary, N., Kaloor, S.S.R. and Petru, M.  A Comparative Study of the Data-Driven Stochastic Subspace Methods for Health Monitoring of Structures: A Bridge Case Study  DOI: 10.3390/app1009 3132	Applied Science-Basel EISSN: 2076-3417	10	9	-	2020	2.7	WoS (SCI)	Q3
16	Shokravi, H., Shokravi, H., Bakhary, N., Haidarezaei, M., Kaloor, S.S.R. and Petru, M  Application of the Subspace-based Method in Health Monitoring of Civil Structures: A Systematic Review and Meta Analysis  DOI: 10.3390/app10 103607	Applied Science-Basel EISSN: 2076-3417	10	10	-	2020	2.7	WoS (SCI)	Q3

17	Shokravi, H., Shokravi, H., Bakhary, N., Haidarezaei, M., Kaloor, S.S.R. and Petru, M.  A Review on Vehicle Classification and Potential Use of Smart Vehicle- assisted technique  DOI: 10.3390/s201234 60	Sensors	20	11	-	2020	3.9	WoS (SCI)	Q2
18	Shokravi, H., Shokravi, H., Bakhary, N., Haidarezaei, M., Kaloor, S.S.R. and Petru, M. (2020)  Vehichle-assisted techniques for health monitoring of bridges  DOI: 10.3390/s201132 74	Sensors	20	12	-	2020	3.9	WoS (SCI)	Q2
19	Yon, K.C., <b>Bakhary</b> , <b>N</b> ., Padil, K.H., Shamsudin, M.F., Ahmad, A., Noh, N.H. and Norazhar, N  Efficient residual reliability criterion index in a permanent guided wave monitoring system <b>DOI</b> :0.1016/j.measure ment.2022.111292	Measurement ISSN: 1873-412X	197	-	1	2022	5.6	WoS (SCI)	Q2
20	Hassan, N.B Hashim, N.H., Padil, K.H., <b>Bakhary, N</b> .  Uncertainties: An investigation of aleatory and epistemic errors in market segmentation analysis  DOI:10.1080/15470148 .2022.2089796	Journal of Convention and Event Tourism ISSN: 1547-0156	24	4	1-31	2023	2.2	WoS (SCI)	Q3

21	Ng,S.F., Shokravi,H., Padil, K.H., Bakhary, N., Zainal Abidin, A.R. (2022).  Distance insensitive concrete crack detection with controlled blurriness using a Convolutional Neural Network  DOI:10.22059/CEIJ.20 22.334291.1802	Civil Engineering Infrastructure Journal ISSN: 2322-2093	56	1	117- 136	2023	1.0	WoS (SCI)	Q4
22	Yon, K.C., <b>Bakhary</b> , <b>N</b> ., Padil, K.H., Shamsudin, M.F.  Unsupervised environmental operating condition compensation strategies in a guided ultrasonic wave monitoring system: evaluation and comparison.	Journal Civil Structural Health Monitoring ISSN: 2190-5452X	14	3	-	2024	4.4	WoS (SCI)	Q1
23	Abdulkareem, M., Bakhary, N., Ganiyu, A.,Jassam, T.M., Al-Mansob, R.A.  Consideration of uncertainty in damage detection using interval analysis wavelet without baseline data  DOI: 10.1080/24705314.202 0.1862969	Journal of Structural Integrity and Maintenence	6	2	99-109	2021	0.4	WoS (SCI)	Q3
24	Muyideen, A.,  Bakhary, N, Vafaei, M., Noor, N.M. and Mohamed, R.N.  Mode shape and mode shape difference evaluation to damage location in plate structures	International Journal of Applied Engineering Research	17	24	14620- 14627	2019	-	Scopus	-

			I		1	1			
24	Goh, L.D., <b>Bakhary</b> , <b>N</b> ., Rahman, F.N.A.  Comparison of Different Model Updating Algorithms to Detect Damage in a structural Slab using Mode Shape data <b>DOI</b> :  0.13189/cea.2022.1001 32	Civil Engineering and Architecture	10	1	376- 387	2022	-	Scopus	-
25	Padil, K.H., Bakhary, N., Hassan, W.N.F.W., Darus, N. Uncertainties Consideration in Empirical Frequency Response Function Data for Damage Identification Based On Artificial Neural Network  DOI:10.30880/ijie.2021. 13.03.025	International Journal of Integrated Engineering ISSN: 2229-838X	13	3	207- 214	2021	-	Scopus	-
26	Goh, L.D., Bakhary, N., Rahman, A.A., and Ahmad, B.H  Prediction of unmeasured mode shape using artificial neural network  DOI: 10.11113/jt.v69.31	Jurnal Teknologi ISSN: 0127-9696	61	1	57-56	2013	-	Scopus	-
27	Hong, T.K., <b>Bakhary</b> , <b>N</b> ., Mutalib, A. and Anang, R.  Vibration-based Damage detection using modal data: An Experimental Verification	Jurnal Teknologi ISSN: 0127-9696	56		31-44	2011	-	Scopus	-

28	Hajihasani, N. And Bakhary, N.  Detection of Concrete Spalling Using Changes in Modal Flexibility  DOI: 10.4028/www.scientific.net/AMR.163-167.2598	Advanced Materials Research ISSN: 1022-6680	163	-	2598- 2602	2011	-	Scopus	
29	Bakhary, N.  Statistical vibration based damage detection using ANN	Jurnal Teknologi ISSN: 0127-9696	52	-	49-60	2010	-	Scopus	-
30	Mutalib, A. and Bakhary, N.  Emperical Formulae to Predict Pressure and Impulsive Asymptotes for P-I diagrams of RC Columns Strengthened with FRP  DOI: 10.11113/jt.v55.7	Jurnal Teknologi ISSN: 0127-9696	55	-	27-38	2011	-	Scopus	-
31	Abdulkarem, M., <b>Bakhary</b> , N., Vafaei, M., Noor, N.  Mode shape and mode shape difference evaluation to damage location in plate structures	International Journal of Applied Engineering Research ISSN: 0973-4562	12	24	14620- 14627	2017	-	Scopus	-
32	Egba, E.I.,Ismail, M. and <b>Bakhary</b> , <b>N</b> Influence of Natural Climate Curing Treatment on Corrosion Activity of Reinforced Concrete <b>DOI:</b> 10.17485/ijst/2016 /v9i46/107140	Indian Journal of Science and Technology	9	46	-	2016	-	Scopus	-

33	Abdulkareem, M., Bakhary, N.  Free-end damage detection in cantilever steel plate using wavelet transform method  DOI: 10.1007/978-981-15-5753-8_57	Lecture Notes In Mechanical Engineering ISSN: 2195-4356	17	-	623- 630	2020	-	Scopus	-
35	Yon, K.C., Bakhary, N  Vibration-based damage detecion in infrastructure: Current Practices and Future Implications	IEM Buletin	Feb 202 4		20-23	2024	-	Non- indexed	-

NO.	TYPE a. INDEXED     PROCEEDINGS/CONFERENCE b. NON-INDEXED     PROCEEDINGS/CONFERENCE c. SEMINARS/WORKSHOPS d. THESIS e. ORIGINAL BOOK f. EDITED BOOK g. BOOK CHAPTER h. CLASSIFIED/TECHNICAL/ i. EXPERT REPORT j. POLICY PAPER	TITLE	YEAR	AUTHOR
1	Book Chapter	XXX	2020	XXX

# PLENARY/CHAIRPERSON/ORAL POSTER PRESENTER/KEYNOTE ADDRESS / INVITED GUEST SPEAKER

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION
1	Plenary Speaker Title: The Likely Effect of Earthquake on Malaysian Buildings and Structures	International Surveyors Congress	June 2010	Kuala Lumpur, Malaysia

2	Keynote Speaker  Title: Handling Uncertainties in vibration Data for damage Detection	International Conference on Water Conservancy, Hydropower and Building Engineering (WCHBE 2019)	September 2019	Dalian, China.
3	Session Chairperson	24 <sup>th</sup> Australian Conference on the Mechanics of Structures and Materials (ACMSM24)	December 2016	Perth, Australia
4	Facilitator	2 <sup>nd</sup> Round Table Conference ACLRI- MPN 2012: Sustainable Transformation Agenda for High Income Nation and Competitive Human Capital Through Academic Research,	June 2012	Kuala Lumpur, Malaysia
5	Chairperson	Asia Pacific Structural Engineering and Construction Conference 2020 (APSEC2020)	August 2020	Kuala Lumpur, Malaysia
6	Invited speaker	2 <sup>nd</sup> Annual General meeting of Association of Material, Vibration, and Insulation Practitioner Malaysia	November 2021	Kuala Lumpur Malaysia
7	Invited speaker	Global Summit on Civil, Architectural and Environmental Engineering-2021	July 2021	Barcelona, Spain (Virtual)
8	Invited Speaker	Hari Profesion Teknikal Negara	December 2021	Virtual
9	Invited speaker	Virtual Regional Conference of Civil Engineering and Sustainable Development Goals 2021	January 2022	Johor Bahru, Malaysia (Virtual)

10	Invited speaker	1st AMVIP Conference 2022	July 2022	Kuala Lumpur, Malaysia
11	Invited speaker	International Seminar on Bridge Engineering (BRIS 2022).	July 2022	Melaka, Malaysia
12	Invited speaker	AMVIP Sustainability Conference 2023	August 2023	Kuala Lumpur, Malaysia

#### **PROFESSIONAL SERVICES**

**Consultation and Training** 

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION	TOTAL INCOME GENERATED (RM)

Entreprenuership

NO	SPIN OFF COMPANY (UTM)	TOTAL INCOME GENERATED (RM) (individual equity value based on audited company account in 3 years)

NO	1.HICOE management/agency 2. Board of Director or 3. Management for Corporation Entity	Average acquisition in 3 years.
1	Board of Directors	1
2	HICOE Fellow	1

**Community Project** 

NO	ROLE	NAME OF PROJECT	DATE	TOTAL VALUE OF PROJECT (RM)

Community and University Services							
NO	ROLE	TITLE OF PROGRAMME	DATE	LEVEL	LOCATION		

NO	KOLE	PROGRAMME	DATE	LEVEL	LOCATION

Endowment and Wakaf to University
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NO	NAME OF ENDOWMENT AND WAKAF	TOTAL CONTRIBUTION (RM)

# Commercialisation

NO	ROLE	NAME OF PRODUCT COMMERCIALISATION	DATE	TOTAL INCOME GENERATED (RM)

#### **Grant based on innovation and University Commercialisation Product**

BIL	NAME OF GRANT	ROLE	CATEGORY OF GRANT(UTM/OTHERS )	TYPE OF GRAN T	AMOUN T (RM)	STARTIN G DATE	ENDIN G DATE	VOTE NO

# Patent Granted and Filing

NO	NAME OF PATENT	STATUS OF PATENT	

# Copyright

NO	NAME OF COPYRIGHT	STATUS OF COPYRIGHT	