



## PERSONAL DETAILS

<b>Name</b>	:	Norhisham bin Bakhary
<b>Gender</b>	:	Male
<b>Date of Birth/Age</b>	:	12 September 1974 / 47 Tahun
<b>Nationality</b>	:	Malaysia
<b>Marital Status</b>	:	Married
<b>Permanent Address</b>	:	21 Jalan PP 1/1, Taman Seri Pulai Perdana 81110 Johor Bahru, Johor
<b>Correspondent Address</b>	:	21 Jalan PP 1/1, Taman Seri Pulai Perdana 81110 Johor Bahru, Johor
<b>Tel</b>	:	012-7320973
<b>E-mail</b>	:	norhisham@utm.my
<b>Website</b>	:	<a href="https://people.utm.my/norhisham/">https://people.utm.my/norhisham/</a>
<b>ID Staff</b>	:	7695
<b>Expertise</b>	:	Vibration, structural health monitoring, structural engineering
<b>H-Index (WOS)</b>	:	9
<b>H-Index (SCOPUS)</b>	:	11
<b>H-Index (G. Scholar)</b>	:	12
<b>H-Index (Researchgate)</b>	:	9
<b>Scopus ID</b>	:	22936783800
<b>Orchid ID</b>	:	0000-0003-0439-1611
<b>Web of Science ID</b>	:	D-8175-2019

## ACADEMIC QUALIFICATIONS

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

## AWARD AND HONORS RECEIVED

Summary	
International Awards/Honors	5
National Award/Honors	1
UTM Awards/Honors	4
Faculty Awards/Honors	2

NO	AWARD	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	YEAR
1	Publication Award in Indexed Journal ( <i>Centre of Excellence Category</i> ) - CITRA KARISMA 2020	UTM	2020
2	Excellence Service Award Majlis Anugerah Gemilang Fakulti Kejuruteraan 2019	Faculty	2019
4	Award of Excellence (Active Blended Learning)	UTM	2018
5	Publication Award in Indexed Journal ( <i>Centre of Excellence Category</i> ) - CITRA KARISMA 2019	UTM	2019
6	Best Paper Award Hospitality & Tourism Conference 30 October- 1 <sup>st</sup> November 2019, Melaka, Malaysia	National	2019
7	Award of Excellence Service - CITRA KARISMA 2015	UTM	2015
8	The 2013 Award of Commendation of J.M. Ko Medal. Advances in Structural Engineering: An International Journal, Hong Kong	International	2014
9	Award of Certificate of Quake-Resistant 2013 <i>International Build and Test Structure</i> <i>competition. Taipei, Taiwan</i> (Project supervisor and team member)	International	2013
10	Award of Second prize - 2013 <i>International Build and Test Structure</i> <i>competition. Taipei, Taiwan</i> - ( <i>Project supervisor and team member</i> ).	International	2013
11	Quality Award - Faculty of Civil Engineering	Faculty	2013
12	Award of Best Poster - 2013 <i>International Build and Test Structure</i> <i>competition. Taipei, Taiwan</i> - (Project supervisor and team member)	International	2012
13	Award of Certificate of Quake-Resistant - 2012 <i>International Build and Test Structure</i> <i>competition. Taipei, Taiwan</i> - (Project supervisor and team member)	International	2012
14	First Runner Up Award Engineering Invention 'N' Innovation Competition 2007, Universiti Malaya	National	2007

**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	Pensyarah	October 2001	present	Universiti Teknologi Malaysia

**PROFESSIONAL MEMBERSHIP / QUALIFICATIONS / RECOGNITION**

Summary	
International Professional Membership / Qualifications / Recognition	3
National Professional Membership / Qualifications / Recognition	2

NO	NAME OF PROFESIONAL MEMBERSHIP	LEVEL (FACULTY /UTM /NATIONAL /INTERNATIONAL)	ROLE	YEAR
1	American Society of Civil Engineering (ASCE)	International	Associate Member	2020 - present
2	Structural Engineering Institute (ASCE)	International	Member	2020 - present
3	International Society of Structural Health Monitoring of Intelligent Infrastructure	International	Member	2013 - present
4	Board of Engineer Malaysia (BEM)	National	Graduate member	2008 - present
5	Malaysia Society of Engineering and Technology (MySET)	National	Ordinary member	2010 - present

**ADMINISTRATIVE EXPERIENCE**

NO	POSITION	STARTING DATE	ENDING DATE	DEPARTMENT/ FACULTY/ DIVISION
1	Webmaster	January 2010	April 2013	Faculty of Civil Engineering, UTM
2	Coordinator of subject SAB3413 (Computer programming)	June 2012	July 2014	School of Civil Engineering
3	Coordinator of subject UAPA0010 (Research Methodology)	February 2018	present	School of Civil Engineering
4	Coordinator of subject UAPA0013 (Research Methodology)	February 2018	present	School of Civil Engineering

5	Academic Manager (Research)	April 2015	July 2017	Faculty of Civil Engineering, UTM
6	Director (Department of Structural & Material)	July 2017	present	School of Civil Engineering, UTM

## CONSULTATION WORKS

Summary	
Consultation Project-UTM	<b>4 projects (RM524,400)</b>

No.	Year	Title	Value	Vot
1	2020	Program ODL Ijazah Sarjana Forensik	RM14,400	06096
2	2018	Noise and vibration monitoring of piling process at SMK Pulau Jaya	RM60,000	1000
3	2013	Projek pembinaan jambatan dari Semporna ke Pulau Bum-bum.	RM300,000	07128
4	2019	Structural integrity assessment for Melaka CCPP GT Power Plant project (MMCC), Kuala Sungai Baru, Melaka	RM150,000	07218

## INTERNATIONAL/NATIONAL/UNIVERSITY COMMITTEE

Summary	
International Committee	7
National Committee	4
University Committee	16
Faculty Committee	29
Community Committee	1

### International

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	Australasian Structural Engineering Conference (ASEC 2012)	Scientific Committee	13 May 2011	01 July 2012
2	24th Australian Conference on the Mechanics of Structures and Materials (ACMSM 2016)	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	Scientific committee	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 grant	5 May 2020	present
7	29th World Conference on Applied Science, Engineering, and Technology	International Advisory Board	21 Jan 2020	28 May 2020

### **National**

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	Jawatankuasa tindakan gempabumi Malaysia	Committee Member	April 2012	May 2014
2	Institute of Noise and Vibration	Research Fellow	April 2013	present
3	FRGS Evaluation panel (Cluster: Technology and Engineering (Civil & Structure))	Evaluation panel	March 2020	Feb 2021
4	FRGS Evaluation panel (Cluster: Technology and Engineering (Civil & Structure))	Evaluation panel	March 2021	present

### **University**

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 202
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	present
15	UTM Microcredential task force	Committee member	1 July 2020	present
16	RACE GE 2020	Committee member	19 May 2020	present

### **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	Committee member	01 September 2009	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 Task force	Head of task force	1 January 2017	31 December 2017
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 Guidebook	Committee member	1 September 2019	31 August 2021

### **Community**

NO	NAME OF COMMITTEE	ROLE	STARTING DATE	ENDING DATE
1	Persatuan penduduk Park Home, Taman Seri Pulai Perdana	Chairman	Jun 2012	Jun 2014

### **SELECTED ACTIVITIES / WORKSHOPS / SEMINARS / COURSES**

NO	NAME OF ACTIVITIES	PLACE OF ACTIVITIES	STARTING DATE	ENDING DATE
1	Facilitator at the 2nd Round Table Conference ACLRI-MPN 2012.	Kuala Lumpur	24 June 2012	26 June 2012
2	Facilitator in Journal Writing Workshop	Faculty of Civil Engineering, UTM	29 April 2015	29 April 2015
3	Speaker in Workshop on publication	Faculty of Civil Engineering, UTM	16 April 2017	16 April 2017
4	Visiting Associate Professor	Curtin University, Western Australia	24 December 2017	28 February 2018
5	Speaker in Structured course for SKA First year student	SKA,UTM	2 December 2018	2 December 2018
6	Speaker in Supervisory Development Program (AS102)	UTM	11 March 2019	11 March 2019
7	Speaker in Structured course for SKA Third year student	SKA,UTM	23 February 2020	23 February 2020
8	Speaker in 'Effective supervision course for new staff'	SKA,UTM	22 July 2020	22 July 2020
9	Speaker for Postgraduate Student Society (PGSS) 'How to identify research gap'	SKA,UTM	10 January 2021	10 January 2021

## RESEARCH ACTIVITIES

Summary	
Principal Investigator- International Grants	<b>1 projects (RM40,000)</b>
Principal Investigator- National Grants	<b>7 projects (RM765,305)</b>
Principal Investigator- UTM Grants	<b>1 projects (RM295,800)</b>
Member- International Grants	<b>2 projects (RM80,000)</b>
Member- National Grants	<b>6 projects (RM1,500,638)</b>
Member- UTM Grants	<b>6 projects (RM572,000)</b>

### *As a principal investigator*

BIL	NAME OF GRANT	CATEGORY OF GRANT (UTM/OTHERS)	TYPE OF GRANT	AMOUNT (RM)	STARTING DATE	ENDING DATE	VOTE NO
1	Sustainable utilisation of coal ash for quality pavement material	International	International Grant (Universitas Sriwijaya)	RM40,000	1/12/2019	31/11/2021	4B596
2	Coal ash utilization for environmentally friendly road material	UTM	Matching Grant	RM40,000	1/12/2019	31/11/2021	04555
3	Petrochemical plant structural integrity assessment	UTM	UTM Transdisciplinary Research Grant	RM80,000	1/12/2018	31/5/2022	07G46
4	Structural Integrity Assessment	National	Professional Development Research University	RM65,000	1/9/2019	31/8/2020	04E97
5	Structural Integrity Assessment	National	HICOE Research Grant	RM332,305	1/1/2016	31/3/2022	4J224
6	Non-Probabilistic Artificial Neural Network to Consider Uncertainties in Vibration Based-Damage Detection	National	Fundamental Research Grant (FRGS)	RM84,000	2/1/2015	1/11/2017	4F800
7	Uncertainties handling in vibration-based damage detection using hybrid subspace algorithm and envelope subtraction method	National	Fundamental Research Grant (FRGS)	RM79,000	16/12/2013	15/12/2015	4F308



8	Statistical coordinate-based simulated annealing to consider uncertainties for sensor placement	National	Exploratory Research Grant (ERGS)	RM105,000	1/6/2013	31/5/2015	4L101
9	Subspace and envelope subtraction algorithm to minimize false alarms in vibration based damage detection	UTM	Research University Grant (Tear 1)	RM100,000	1/12/2012	31/12/2014	05H21
10	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	1/1/2011	31/12/2012	4F051
11	Optimal Sensor Placement for Vibration Based Damage Detection in Civil Structure	UTM	Research University Grant (Tear 2)	RM40,000	1/4/2011	31/7/2012	01636
12	A Study Uncertainties in Vibration Based Damage Detection for Reinforced Concrete Bridge	National	Fundamental Research Grant (FRGS)	RM50,000	14/8/2009	13/8/2011	3F354
13	Structural Damage Identification Using Vibration Data	UTM	New academic staff grant	RM35,800	16/3/2009	15/3/2010	3P015

***As a scientific member***

<b>BIL</b>	<b>NAME OF GRANT</b>	<b>CATEGORY OF GRANT (UTM/OTHER S)</b>	<b>TYPE OF GRANT</b>	<b>AMOUNT (RM)</b>	<b>STARTING DATE</b>	<b>ENDING DATE</b>	<b>VOTE NO</b>
1	Enhanced autonomous crack damage detection at various distances using convolutional neural networks	UTM	UTM Fundamental Research Grant	RM48,000	1/1/2020	30/6/2021	21H01
2	Celulosic aerogel-carbon based nanocomposites for reinforcement of cementitious matrix	International	International Grant (Universitas Sriwijaya)	RM40,000	1/12/2019	30/11/2021	4B525
3	Potential use of fly ash and bottom ash for green structural lightweight concrete	International	International Grant (Universitas Sriwijaya)	RM40,000	1/12/2019	30/11/2021	4B469
4	Study on the use of green waste fly ash and bottom ash for lightweight concrete	UTM	Matching grant	RM40,000	1/12/2019	31/5/2022	01M95
5	Reinforcement of cementitious matrix by cellulosic aerogel - carbon based nanocomposite	UTM	Matching grant	RM40,000	1/12/2019	31/5/2022	4B525
6	Asset integrity management system for ageing petrochemical plants in Malaysia	UTM	Transdisciplinary Research Grant	Rm240,000	1/12/2018	31/5/2022	05G98
7	Fire and Explosion Structural and Geophysical Investigation for Subsurface Integrity Assessment	National	HICOE Research Grant	RM236,737	1/1/2016	30/3/2022	4J222

8	Structural Health Monitoring System for Earthquakes	National	HICOE Research Grant	RM424,551	1/1/2016	30/3/2022	4J223
9	Elementary anisotropic curved beam formulation for fracture toughness of triaxial weave fabric composite	National	Fundamental Research Grant (FRGS)	RM90,000	1/7/2014	31/12/2016	4F518
10	Exploration of woodpecker's head mechanics for development of a new structural impact resistance	National	Exploratory Research Grant (ERGS)	RM112,000	1/6/2013	31/8/2015	4L098
11	Study on the effect of ground vibration to surrounding ground and multi-story building in Malaysia	UTM	Research University Grant (Tear 1)	RM34,000	1/12/2012	31/12/2013	09J22
12	Seismic risk assessment and forecasting of klang valley and kundasang regions due to previous and possible local earthquakes	National	Sciencefund	RM388,750	1/4/2012	31/3/2014	4S021
13	New seismic hazard map for malaysian national annex in Eurocode 8 and construction cost implication for buildings and bridges	National	Sciencefund	RM248,600	1/9/2012	28/2/2015	4S043
14	Earthquake hazard reduction product: base isolator application to precast concrete wall panel buildings	UTM	Research University Grant (Tear 1)	RM170,000	1/4/2011	30/6/2013	02H09

## 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	MOU between UTM and Manchester Metropolitan University, UK	International	1 February 2021	31 January 2026

## TEACHING ACTIVITIES

Summary	
Total Credit Hours	159

## 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
<b>Total credits</b>				<b>87</b>

## 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
<b>Total credits</b>				<b>42</b>

## SUPERVISION

Summary	
Main Supervisor – PhD (Graduated)	5
Co-Supervisor – PhD (Graduated)	7
Main Supervisor – PhD (Ongoing)	2
Co-Supervisor – PhD (Ongoing)	3
Main Supervisor- Master by Research (Graduated)	3
Main Supervisor- Master by Research (On-Going)	0
Main Supervisor- Master by Taught Course (Graduated)	5
Main Supervisor- Master by Taught Course (On-Going)	0

### PhD Student

No.	Name	No. Matric	Status (Graduated/ On-Going)	Title	Roles of Supervision
1	Abdulkareem Muyideen Oladimenji	PKA143023	Graduated	Vibration-based damage detection using wavelet transform method	Main Supervisor
2	Hoofar Shokravi	PA113067	Graduated	Structural vibration-based damage detection with stochastic subspace method	Main Supervisor
3	Khairul Hazman Padil	PKA153038	Graduated	Non-probabilistic method to consider uncertainties in frequency response function for vibration-based damage detection using Artificial Neural Network	Main Supervisor
4	Edo Oga Ojoko	PA123091	Graduated	Critical success factors influencing industrialised building systems performance in Nigerian mass housing projects	Main Supervisor
5	Iman Kiani	PKA143009	Graduated	A model of retrofit energy efficiency by using energy performance contract method in Malaysia	Main Supervisor
6	Yong Kong Chen	PKA183022	On-going	Petrochemical pipeline structural health monitoring	Main Supervisor
7	Aminuddin Jameran	PKA183041	On-going	Deeep learning convolution neural network for vibration-based damage detection Using frequency response function	Main Supervisor
8	Saman Mustafapour	PKA143055	On-going	Implementation of Building Information Modellingfor construction industry in Iran	Main Supervisor

9	Goh Lyn Dee	PA093017	Graduated	Vibration-based damage detection with Multi-stage Artificial Neural Network	Co-Supervisor
10	Mahdi Moharrami Meynagh	PA113087	Graduated	Collaborative procurement strategy in private sector housing project using Industrialised Building System	Co-Supervisor
11	Ali Ashgar Bavafa	PA123045	Graduated	Generic safety performance evaluation prototype for construction project	Co-Supervisor
12	Egba, Ernest Ituma	PKA143025	Graduated	The effect of corrosion to model properties of structures	Co-Supervisor
13	Nuria S. Mohammed	PA113045	Graduated	Behaviour and performance of non-cement polymer grouted spiral connection	Co-Supervisor
14	Tahereh Nasrollahzadeh	PA130161	Graduated	Guideline of lean critical success factors implementation in construction project	Co-Supervisor
15	Mohd Zamri Ramli	PA113041	Graduated	Performance of hollow seismic isolators for bridges in low moderate seismicity region	Co-Supervisor
16	Jawa anak Gara	PA193006	On-going	The dashboard development of automated progress measurement via data acquisition for road construction monitoring	Co-Supervisor
17	Wan Ikram Wajdee Wan Ahmad Kamal	PKA193038	On-going	Structural health monitoring for bridges	Co-Supervisor
18	Alhamza Yassin Flaih Mehni	PKA203021	On-going	Building Information Modeling for construction	Co-Supervisor

**MSc. Student**

No.	Name	No. Matric	Status (Graduated/ On-Going)	Title	Mode (Research / Taught- course/ Mixed Mode)	Roles of Supervision
1	Tong Khoon Hong	MA113013	Graduated	Optimal sensor placement using improved Simulated Annealing	Research	Main supervisor
2	Sarehati Umar	MA113008	Graduated	Structural damage detection using autoagressive with exogenous input neural network	Research	Main supervisor
3	Khairul Hazman Padil	MA113027	Graduated	Non-probabilistic artificial neural network to consider uncertainties in modal data for damage detection	Research	Main supervisor
4	Mohd Zulariffin Md Maarof	MS103083	Graduated	Advanced information theory method in combination model selection for forcast tourist arrival to Malaysia	Research	Main supervisor
5	Mohd Zhafri Jamil	MA083052	Graduated	Finite element formulation of two phase turbulence flow with moving boundary of wax deposition	Research	Main supervisor
	Nadia Hajihassani	MA081408	Graduated	Detection of concrete spalling using vibration data	Taught- Course	Main supervisor
	Noor Sabrina Zaharudin	MA081509	Graduated	A comparison of modal flexibility method and modal curvature method in structural damage detection	Taught- Course	Main supervisor
	Low Tian Hock	MA081502	Graduated	Vibration-based damage detection using neural network	Taught- Course	Main supervisor
	Danish T. Khorajia	MKA171117	Graduated	Experimental testing scaled bridge model subjected to bi- directional seismic excitation	Taught- Course	Main supervisor
	Muhammad Nazrif Zamani	MKA191020	Graduated	Deep learning Neural Network for damage detection	Taught- Course	Main supervisor



**UTM POSTGRADUATE EXAMINATION/ VIVA**

Summary	
Phd. Internal Examiner	2
MSc. Session chairman	3

**Phd Internal Examiner**

NO	ROLE	STUDENTS NAME	TITLE	YEAR
1	Examiner	Nabila Huda Aizon	Development of Intelligent Bridge damage assessment considering earthquake effect	2020
2	Examiner	Muhammad Zubair Tajol Anuar	Development of Framework for building condition assessment and performance evaluation	2021

**Msc session chairman**

NO	ROLE	STUDENTS NAME	TITLE	YEAR
1	Chairman	Salimi Md Saleh	The audit, assessment and maintenance of telecommunication towers	2020
2	Chairman	Nazirah Ahmad Syukri	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

**EXTERNAL EXAMINATION/ VIVA**

Summary	
Phd External Examiner	4

**Phd external Examiner**

NO	ROLE	STUDENTS NAME	TITLE	YEAR
1	Foreign Examiner <i>Yonsei University, South Korea</i>	Jang-Ho Jay Kim	Optimum design and economical construction of curved PSC bridge	2018
2	External Examiner <i>Universiti Kebangsaan Malaysia</i>	Maryam Vafa	Optimisation of profiled steel sheeting dry board (PSSDB) system employing genetic algorithm	2018

3	Foreign examiner <i>Dr. M.G.R. Educational and Research Institute, Chennai, India</i>	Depaa RA B	Experimental Investigation on mechanical and durability properties of self-healing concrete using mineral admixture	2019
4	Foreign Examiner <i>Vellore Institute of Technology, Chennai, India</i>	Chennur Jithendra Reddy	Experimental investigation on Aluminosilicate based self compacting Geopolymer concrete under ambient curing	2020

## PUBLICATIONS

Summary	
ISI Article/Journal	20
Scopus Article/Journal	11
Non-Indexed Article/Journal	2
Indexed Conference Proceedings	7
Non- Indexed Conference Proceedings	16
Book Chapters	9
Original Book	0
Classified/Technical /Expert Report	2
Policy Paper	0

## Journal

No	Article	ISSN	YEAR	IMPACT FACTOR	CATEGORY	QUARTILE
1	Abdulkareem M., Bakhary N. Free-End Damage Detection in Cantilever Steel Plate Using Wavelet Transform Method. In: Emamian S., Awang M., Yusof F. (eds) Advances in Manufacturing Engineering. Lecture Notes in Mechanical Engineering.  DOI: 10.1007/978-981-15-5753-8_57	9789811557521	2020	-	Scopus	-
2	Shokravi, H., Shokravi, H., <b>Bakhary, N.</b> , Haidarezaei, M., Kaloer, S.S.R. and Petru, M. Vehichle-assisted techniques for health monitoring of bridges. Sensors, 20 (12), 3460.  DOI: 10.3390/s20113274	14248220	2020	3.275	Web of science	Q2

3	Shokravi, H., Shokravi, H., <b>Bakhary, N.</b> , Haidarezaei, M., Kaloer, S.S.R. and Petru, M. A Review on Vehicle Classification and Potential Use of Smart Vehicle-assisted technique. Sensors, 20 (11), 3274. DOI: 10.3390/s20123460	14248220	2020	3.275	Web of science	Q2
4	Shokravi, H., Shokravi, H., <b>Bakhary, N.</b> , Haidarezaei, M., Kaloer, S.S.R. and Petru, M. Application of the Subspace-based Method in Health Monitoring of Civil Structures: A Systematic Review and Meta Analysis. Applied Sciences-Basel, 10 (10), 3607. DOI: 10.3390/app10103607	20763417	2020	2.474	Web of science	Q2
5	Shokravi, H., Shokravi, H., <b>Bakhary, N.</b> , Kaloer, 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. Applied Sciences-Basel, 10 (9), 3132. DOI: 10.3390/app10093132	20763417	2020	2.474	Web of science	Q2
6	Shokravi, H., Shokravi, H., <b>Bakhary, N.</b> , Kaloer, S.S.R. and Petru, M. Health Monitoring of Civil Infrastructures by Subspace System Identification Method: An Overview. Applied Sciences-Basel, 10 (8), 2786. DOI: 10.3390/app10082786	20763417	2020	2.474	Web of science	Q2
7	K.H. Padil, <b>Bakhary, N.</b> , Muyideen, A., Li, J. and Hao, H. Non-probabilistic Method to Consider Uncertainties in Frequency Response Function for Vibration-based Damage Detection Using Artificial Neural Network. Journal of Sound and Vibration. 467, UNSP115069. DOI: 10.1016/j.jsv.2019.115069	0022460X	2020	3.429	Web of science	Q1

8	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. Construction And Building Materials, 224, 255-265.  DOI: 10.1016/j.conbuildmat.2019.07.076	09500618	2019	4.419	Web of science	Q1
9	Muyideen, A., <b>Bakhary, N.</b> , Vafaei, M., Noor, N.M. and Abd Samat, R. Experimental Damage Assessment of Support Condition for Plate Structures Using Wavelet Transform. Journal of Theoretical and Applied Mechanics, 433, 77-98.  <i>DOI: 10.15632/jtam-pl/105470</i>	02632241	2019	0.831	Web of science	Q4
10	Muyideen, A., <b>Bakhary, N.</b> , Vafaei, M., Noor, N.M. and Mohamed, R.N. Application of two dimensional wavelet transform to detect damage in steel plate structures. Measurement, 146, 912-923.  <b>DOI:</b> 10.1016/j.measurement.2019.07.027	02632241	2019	3.364	Web of science	Q1
11	Ojoko, E.O., Osman, M.H., Rahman, A.B., Omaw, W.S. and Bakhary, N. Critical Success Factors Influencing Industrilised Building System Performance in the Nigerian Mass Hausing Development. Advanced Science Letters, 24(6),3999-4005.  <b>DOI:</b> 10.1166/asl.2018.11529	19366612	2018	1.125	Web of science	Q2
12	Muyideen, A., <b>Bakhary, N.</b> , Vafaei, M., Noor, N.M. and Padil, K.H.(2018). Non-probabilistic Wavelet method to consider uncertainties in structural damage detection. Journal of Sound and Vibration, 433, 77-98.  DOI: 10.1016/j.jsv.2018.07.011	0022460X	2018	3.429	Web of science	Q2

14	Umar, S., <b>Bakhary, N</b> , and Abidin, A.R.Z. Response surface methodology for damage detection using frequency and mode shape. Measurement, 115, 258-268.  <b>DOI:</b> 10.1016/j.measurement.2017.10.047	02632241	2018	3.364	Web of science	Q1
13	Muyideen, A., <b>Bakhary, N</b> , Vafaei, M. and Noor, N.M. Mode Shape and Mode Shape Difference Evaluation to Damage Location in Plate Structures. Int. Journal of Applied Engineering Research. 12(24), 14620-14627.	09734562	2017	-	Scopus	-
14	Ojoko, E.O., Osman, M.H., Rahman, A.B. and <b>Bakhary, N</b> . (2018). Evaluating the Critical Success Factors of Industrialised Building System Implementation in Nigeria: The Stakeholder's Perception. International Journal of Built Environment and Sustainability, 5(2), 127-133.  <b>DOI:</b> 10.11113/ijbes.v5.2.240	15511369	2018	0	Web of science	-
15	Muyideen, A., <b>Bakhary, N</b> , Vafaei, M. and Noor, N.M. Wavelet Damage Detection Via Operational Deflection Shape Decomposition. Indian Journal of Science and Technology, 9(48), 106-112  <b>DOI:</b> 10.17485/ijst/2016/v9i48/109631	09746846	2016	-	Scopus	-

16	Padil, K.H., <b>Bakhary, N.</b> and Hao, H. (2017). The use of a non-probabilistic artificial neural network to consider uncertainties in vibration-based-damage detection. Mechanical Systems and Signal Processing 83, 194-209.  DOI: 10.1016/j.ymssp.2016.06.007	08883270	2017	6.471	Web of science	Q1
17	Egba, E.I., Ismail, M. and <b>Bakhary, N.</b> (2017). Temperature Response in Hardened Concrete Subjected to Tropical Rainforest Environment. Engineering Technology and Applied Science Research, 7(3), 1623-1628.  DOI: 10.48084/etasr.1076	17928036	2017	0	Web of science	-
18	Egba E.I., <b>Bakhary, N.</b> And Ismail, N. Influence of Natural Climate Curing Treatment on Corrosion Activity of Reinforced Concrete. Indian Journal of Science and Technology, 9(46)  DOI: 10.17485/ijst/2016/v9i46/107140	09746846	2016	0	Non-indexed	-
19	Tong, K.H., <b>Bakhary, N.</b> , Kueh, A.B.H. and Mohd Yassin, A.Y. Optimal Sensor Placement for Modeshapes using Improved Simulated Annealing. Smart Structures and Systems, 13(3), 389-406.  DOI: 10.12989/sss.2014.13.3.389	17381584	2014	3.557	Web of science	Q1
20	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, 16(1), 99-113.  <b>DOI:</b> 10.1260/1369-4332.16.1.99	13694332	2013	1.416	Web of science	Q3

21	Goh, L.D., <b>Bakhary, N.</b> , Rahman, A.A. and Ahmad, B.H.. Factor Influencing natural frequencies in a prestressed concrete panel. Jurnal Teknologi, 69(3),51-57. <b>DOI:</b> 10.11113/jt.v69.3143	01279696	2014	-	Scopus	-
22	Goh, L.D., <b>Bakhary, N.</b> , Rahman, A.A. and Ahmad, B.H. Prediction of Unmeasured Mode Shape Using Artificial Neural Network. Jurnal Teknologi, 61(1),57-66. <b>DOI:</b> 10.11113/jt.v61.1624	01279696	2014	-	Scopus	-
23	Mutalib, A.A., <b>Bakhary, N.</b> , Rahman, Empirical Formulae to Predict Pressure and Impulsive Asymptotes for P-I Diagrams of RC Column Strengthened with FRP, 61(1),27-38. <b>DOI:</b> 10.11113/jt.v55.75	01279696	2011	-	Scopus	-
24	Hajihassani, N. And <b>Bakhary, N.</b> (2011). Detection of Concrete Spalling Using Changes in Modal Flexibility, Advanced Materials Research, 163-167, 2598-2602. DOI: 10.4028/www.scientific.net/AMR.163-167.2598	10226680	2011	-	Scopus	-
25	Goh, L.D., <b>Bakhary, N.</b> , Rahman, A.A., and Ahmad, B.H. (2011). A Comparison of Artificial Neural Network Learning Algorithm for Vibration-based damage detection, Advanced Materials Research, 163-167, 2756-2760. DOI: 10.4028/www.scientific.net/AMR.163-167.2756	10226680	2011	-	Scopus	-
26	Tong, K.H., <b>Bakhary, N.</b> , Mutalib, A.A. and Anang, R. Vibration based damage detection using modal data: An Experimental Verification, Jurnal Teknologi, 56, 31-44. <b>DOI:</b> 10.11113/jt.v56.52	10226680	2011	-	Scopus	-

27	<b>Bakhary, N.</b> , Statistical Vibration Based Damage identification using Artificial Neural Network, Jurnal Teknologi, 52, 49-60. <b>DOI:</b> 10.11113/jt.v52.122	10226680	2010	-	Scopus	-
28	<b>Bakhary, N.</b> , Hao, H., and Deeks, A. Substructuring Technique for Damage Detection Using Statistical Multi-Stage Artificial Neural Network. Advances in Structural Engineering, 13(4), 619-639. <b>DOI:</b> 10.1260/1369-4332.13.4.619	13694332	2010	1.416	Web of science	Q3
29	<b>Bakhary, N.</b> , Hao, H., and Deeks, A. (2010). Structure Damage Detection Using Neural Network with Multi-stage Sub structuring. Advances in Structural Engineering, 13(1) 95-110. <b>DOI:</b> 10.1260/1369-4332.13.1.95  <b>Recipient of The 2013 Certificate of Commendation by Advances of Structural Engineering Journal</b>	13694332	2010	1.416	Web of science	Q3
30	<b>Bakhary, N.</b> , Hao, H., and Deeks, A. (2007). Damage detection using artificial neural network with consideration of uncertainties. Engineering Structures. 29 (11), 2816-2815. <b>DOI:</b> 10.1016/j.engstruct.2007.01.013	01410296	2007	3.548	Web of science	Q1
31	<b>Bakhary, N.</b> , Yahya, K. Univariate Artificial Neural Network in Forecasting Demand of Low Cost House in Petaling Jaya, Jurnal Teknologi B,	10226680	2004	-	Non-indexed	-



## Others

NO.	TYPE	TITLE	YEAR	AUTHOR
1	INDEXED PROCEEDINGS/CONFERENCE	Comparative analysis of different weight matrices in subspace system identification for structural health monitoring.  <i>IOP Conference Series: Materials Science and Engineering, Volume 271, Global Congress on Construction, Material and Structural Engineering 2017 (GCoMSE2017) 28–29 August 2017, Johor Bahru, Malaysia</i>	2018	Shokravi, H. and <b>Bakhary, N.</b>
2	INDEXED PROCEEDINGS/CONFERENCE	Comparison of statistical and non-statistical artificial neural network methods for damage detection using modal data  <i>Mechanics of Structures and Materials: Advancements and Challenges - Proceedings of the 24th Australasian Conference on the Mechanics of Structures and Materials, ACMSM24 2016</i> <i>pp. 1375-1380</i>	2017	Padil, K.H., <b>Bakhary, N.</b>
3	INDEXED PROCEEDINGS/CONFERENCE	Numerical study on traffic induced vibration effects under different types of behaviour of moving loads  <i>8th Australasian Congress on Applied Mechanics, ACAM 2014, as Part of Engineers Australia Convention 2014</i> <i>pp. 649-656</i>	2014	Jaafar, M.I.M., <b>Bakhary, N.</b>
4	INDEXED PROCEEDINGS/CONFERENCE	Vibration-based damage detection using mode shape-based response surface methodology.  <i>8th Australasian Congress on Applied Mechanics, ACAM 2014, as Part of Engineers Australia Convention 2014</i> <i>pp. 649-656</i>	2014	<b>Umar, S., Bakhary, N.</b>

6	INDEXED PROCEEDINGS/CONFERENCE	<p>Probabilistic approach in assessing structural damage using multistage artificial neural network using static and dynamic data</p> <p><i>Proceedings of ISMA 2014 - International Conference on Noise and Vibration Engineering and USD 2014 - International Conference on Uncertainty in Structural Dynamics</i> pp. 3777-3788</p>	2014	Goh, L.D., <b>Bakhary, N.</b> , Rahman, A.A., Ahmad, B.H.
7	INDEXED PROCEEDINGS/CONFERENCE	<p>Substructuring technique for damage detection using statistical multi-stage Artificial Neural Network</p> <p><i>Futures in Mechanics of Structures and Materials - Proceedings of the 20th Australasian Conference on the Mechanics of Structures and Materials, ACMSM20</i> pp. 137-144</p>	2008	<b>Bakhary, N.</b> , Hao, H., Deeks, A.J.
8	NON-INDEXED PROCEEDINGS/CONFERENCE	<p>Technographic Segmentation Using Artificial Neural Network At the Reinforest Music festival.</p> <p><i>3rd Hospitality and Tourism Conference, Melaka, Malaysia</i></p>	2019	Hassan, N.B., Padil, K.H., Hashim, N.H. and <b>Bakhary, N</b>
9	NON-INDEXED PROCEEDINGS/CONFERENCE	<p>Comparison between modal domain and frequency domain input data for artificial neural network based damage detection</p> <p><i>International Symposium on Structural Health Monitoring and Nondestructive Testing, Saarbricken, Germany</i></p>	2018	K.H. Padil, <b>Bakhary, N</b>
10	NON-INDEXED PROCEEDINGS/CONFERENCE	<p>Comparison of statistical and non-statistical artificial neural network methods for damage detection using modal data.</p> <p><i>The 24<sup>th</sup> Australian Conference on the</i></p>	2016	K.H. Padil, <b>Bakhary, N</b>

		<i>Mechanics of Structures and Materials (ACMSM24) 2016, Perth Australia</i>		
11	<b>NON-INDEXED PROCEEDINGS/CONFERENCE</b>	Hysteresis Physiognomy of relative humidity in hardened concrete: SEPKA-ICEED 2016, Universiti Teknologi Malaysia Johor Bahru, Malaysia	2016	E.I. Egba, <b>Bakhary, N.</b> And Ismail, M.
12	<b>NON-INDEXED PROCEEDINGS/CONFERENCE</b>	Application of Wavelet Transform to Damage Detection in Plates Using Response-Only Measurement <i>The 16<sup>th</sup> Asia Pacific Vibration Conference, Hanoi, Vietnam</i>	2015	Abdulkareem, M., <b>Bakhary, N.</b> and Vafaei, M
13	<b>NON-INDEXED PROCEEDINGS/CONFERENCE</b>	Modal Parameters and Their Influential Factors in A Prestressed Concrete Panel <i>International Graduate Conference on Engineering Science &amp; Humanity, Johor Bahru, Malaysia</i>	2013	Goh, L.D., Rahman, A.A., <b>Bakhary, N.</b> and Ahmad, B.H.
14	<b>NON-INDEXED PROCEEDINGS/CONFERENCE</b>	Prediction of Unmeasured Modal Data Using Statistical Multi-stage ANN for Damage Detection: An Experimental Verification <i>The 15th Asia Pacific Vibration Conference, Jeju Island, South Korea</i>	2013	Goh, L.D., Rahman, A.A., <b>Bakhary, N.</b> and Ahmad, B.H.
15	<b>NON-INDEXED PROCEEDINGS/CONFERENCE</b>	Optimal sensor placement for structural health monitoring using improved simulated annealing <i>Australasian Structural Engineering Conference, Perth, Australia.</i>	2012	Tong, K.H. <b>Bakhary, N.</b>
16	<b>NON-INDEXED PROCEEDINGS/CONFERENCE</b>	Investigation of quarry blast-induced vibration to structures <i>Australasian Structural Engineering Conference, Perth, Australia.</i>	2012	Saleh, S.F, <b>Bakhary, N.</b>

17	NON-INDEXED PROCEEDINGS/CONFERENCE	Statistical multi-stage artificial neural network for damage detection with consideration of unmeasured mode shape data <i>Australasian Structural Engineering Conference, Perth, Australia.</i>	2012	Goh, L.D., <b>Bakhary, N.</b>
18	NON-INDEXED PROCEEDINGS/CONFERENCE	Improvement of Bridge Rating Prediction by transforming Input Data for Neural Network <i>Asia Pacific Structural Engineering Conference, Johor Bahru, Malaysia.</i>	2003	Adnan, A., <b>Bakhary, N.</b>
19	NON-INDEXED PROCEEDINGS/CONFERENCE	Substructuring technique for vibration-based damage detection using statistical multi-stage Artificial Neural Network: AN Experimental verification. <i>APSEC-EACEF, Langkawi, Malaysia</i>	2009	<b>Bakhary, N.</b> , A.Rahman, A. And Ahmad B.H.
20	NON-INDEXED PROCEEDINGS/CONFERENCE	Application of Artificial Neural Network in Bridge Deck Condition Assessment <i>2nd World Engineering Congress, Kuching, Malaysia</i>	2002	Adnan, A., <b>Bakhary, N.</b>
21	NON-INDEXED PROCEEDINGS/CONFERENCE	Application of Artificial Neural Network in Bridge Abutment Condition Rating. <i>7th International Conference Inspection, Appraisal, Repair and Maintenance of Building Structure, Nottingham, UK</i>	2001	Adnan, A., <b>Bakhary, N.</b> and Tan, J.Y
22	NON-INDEXED PROCEEDINGS/CONFERENCE	Bridge Subjective Rating Considering Earthquake Effect Using Artificial Neural Network <i>6th International Conference Inspection, Appraisal, Repair and Maintenance of Building Structure, Melbourne, Australia</i>	2000	Adnan, A., <b>Bakhary, N.</b> , Ahmad, A. and Ahmad, A.

23	NON-INDEXED PROCEEDINGS/CONFERENCE	Bridge subjective rating and condition assessment using artificial neural network <i>International Seminar on Numerical Analysis in Engineering, Medan, Indonesia</i>	2000	Adnan, A., <b>Bakhary, N.</b> , Ahmad, A. and Ahmad, A.
24	CLASSIFIED/TECHNICAL/EXPERT REPORT	Structural Integrity Assessment for Condenser Foundation TB3 at 2242mw CCGT Power Plant Kuala Sungai Baru, Melaka <i>Institute of Noise and Vibration, UTM.</i>	2019	Norhisham Bakhary
25	CLASSIFIED/TECHNICAL/EXPERT REPORT	Vibration and Noise Monitoring in Using Hydraulic Hammer for Piling at Pulau Jaya New School Construction Site, Kulai, Jaya <i>Forensic Engineering Centre, UTM</i>	2018	Norhisham Bakhary
26	THESIS	Norhisham Bakhary, Vibration-based damage detection using Artificial Neural Network. <i>PhD Thesis, The University of Western Australia, Western Australia, Australia</i>	2008	Norhisham Bakhary
27	THESIS	Bridge Rating and Condition Assessment Using Artificial Neural Network. <i>Masters Thesis, Universiti Teknologi Malaysia, Malaysia.</i>	2002	Norhisham Bakhary
28	BOOK CHAPTER	Bumbung <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 78-81</i>	2005	Norhisham Bakhary
29	BOOK CHAPTER	Gunite <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 130-131</i>	2005	Norhisham Bakhary

30	BOOK CHAPTER	Jambatan <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 161-164</i>	2005	Norhisham Bakhary
31	BOOK CHAPTER	Kemasan Permukaan <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 212-213</i>	2005	Norhisham Bakhary
32	BOOK CHAPTER	Konkrit Boleh Pam <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 243-244</i>	2005	Norhisham Bakhary
33	BOOK CHAPTER	Konkrit Ubahan Polimer <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 245-246</i>	2005	Norhisham Bakhary
34	BOOK CHAPTER	Menara <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 301-302</i>	2005	Norhisham Bakhary
35	BOOK CHAPTER	Pengangkutan konkrit <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 376-377</i>	2005	Norhisham Bakhary
36	BOOK CHAPTER	Trowong <i>Ensiklopedia Sains dan Teknologi (Jilid 9), Dewan Bahasa dan Pustaka, 699-700.</i>	2005	Norhisham Bakhary

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

NO	ROLE	TITLE OF PROGRAMME	DATE	LOCATION
1	<b>Keynote Speaker</b> Title: The Likely Effect of Earthquake on Malaysian Buildings and Structures	International Surveyors Congress	April 2012	Kuala Lumpur, Malaysia
2	<b>Keynote Speaker</b> Title: Handling Uncertainties in vibration	International Conference on Water Conservancy, Hydropower and Building	September 2019	Dalian, China.

	Data for damage Detection	Engineering (WCHBE 2019)		
3	Plenary Speaker (invited)	2nd International Conference on Climate Change 2021	May 2021	Kuala Lumpur, Malaysia (online)

## PROFESSIONAL SERVICES

### Editorial board

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	01 June 2014	present
3	The Asian Review Journal of Civil Engineering	Advisory board	3 Dec 2018	3 December 2019
4	International Journal of Lifecycle Performance Engineering	Editorial board member	1 January 2018	present
5	Journal of Civil, Construction and Environmental Engineering	Editorial board member	8 August 2020	present
6	Proceeding of Civil Engineering (1 <sup>st</sup> edition to 4 <sup>th</sup> edition)	Editor	1 January 2016	31 December 2019

### Reviewer/evaluator

No	Journal/Book/Conference	Type
<u>1</u>	Advances in Structural Engineering, an International Journal ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
<u>2</u>	Jurnal Teknologi ( <b>SCOPUS</b> )	Journal manuscript
<u>3</u>	Journal of Engineering Structure, An International Journal. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
<u>4</u>	Journal of Smart Structures and Systems, An International Journal. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
<u>5</u>	Journal of Sound and Vibration, An International Journal. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
<u>6</u>	Mechanical Systems and Signal Processing. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
<u>7</u>	Construction and Building Materials. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
<u>8</u>	Journal of Theoretical and Applied Mechanics. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
<u>9</u>	International Journal of Mechanical Engineering and Applications	Journal manuscript
10	International Journal of Non-linear Mechanics ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
11	Canadian Journal of Civil Engineering. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
12	Sensors. ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
13	International Journal of Lifecycle Performance Engineering	Journal manuscript

14	Measurement: Journal of the International Measurement Confederation (IMEKO) ( <b>SCOPUS &amp; SCI</b> )	Journal manuscript
15	Concise Handbook of Civil Engineering. UTP Press (28 January 2020)	Book
16	Advanced Structural Damage Detection: From Theory to Engineering Application. Wiley ( 2013)	Book
17	Structured Programming. UTM Press (January 2010)	Book
18	International Graduate Conference of Engineering, Science and Humanity (IGCESH 2016)	Conference manuscript
19	24 <sup>th</sup> Australian Conference on the Mechanics of Structures and Materials (ACMSM24)	Conference manuscript
20	Australian Structural Engineering Conference (ACEC 2012)	Conference manuscript
21	Asia Pacific Structural Engineering and Construction 2018 (APSEC 2020)	Conference manuscript

#### Visiting scholar

NO	ROLE	PLACE	STARTING DATE	ENDING DATE
1	Visiting Associate Professor	Curtin University, Western Australia	24 December 2017	28 February 2018

#### Community and University Services

NO	ROLE	TITLE OF PROGRAMME	DATE	LEVEL	LOCATION
1	Chairman	Committee of Perdana Parkhome, Taman Seri Pulai Perdana, Johor Bahru	January 2013 – December 2015	Community	Johor Bahru, Johor
2	Speaker	Career talk, MRSM Pontian	June 2014	Community	Pontian, Johor
3	Interviewer	Mock Interviewer for MRSM Pontian student MRSM Pontian	March 2015	Community	Pontian, Johor
4	Demonstrator	Introducing and Demonstrating Earthquake Engineering Research in School	June 2013	Community	Sekolah Kebangsaan Taman Universiti 2



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NO	YEAR	NAME OF COPYRIGHT	STATUS OF COPYRIGHT	REFERENCE NUMBER
1	2011	ERCAD software	Approved	IP/CP/2011/2618
2	2013	ERCAD Software Ver. 2.0	Approved	IP/CP/2013/3686
3	2019	Teaching Module: Programming in Visual Basic	Approved	IP/CR/2019/1202
4	2019	MOOC - Research Methodology for Engineering	Approved	IP/CR/2019/0200
5	2019	SKAB Curriculum for Bachelor's degree of Civil Engineering UTM	Approved	IP/CR/2019/0163
6	2018	2nd Proceeding of Civil Engineering Volume 1- Structure and Materials	Approved	IP/CR/2018/0089
7	2017	The Online Academic Scoreboard System for Engineering Competition	Approved	IP/CR/2017/0380
8	2016	Basic Truss Analysis Software	Approved	IP/CR/2016/1387