



Mohd Khairul Kamarudin, PhD, P.Eng, P.Tech

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Senior Lecturer
School of Civil Engineering
College of Engineering, Universiti Teknologi MARA

Date of first appointment in UiTM: 3rd August 2015



EDUCATION BACKGROUND

PhD. University of Surrey, United Kingdom
Structural Engineering (2015)

MSc. University of Surrey, United Kingdom
Bridge Engineering (2007)

BEng. Universiti Teknologi Malaysia
Civil Engineering (2005)

PROFESSIONAL MEMBERSHIP

Graduate Engineer, Board of Engineers
Malaysia (BEM), G147710A
Professional Engineer, Board of Engineers
Malaysia (BEM), P121882
Member of The Institution of Engineers
Malaysia (IEM), 116668
Professional Technologist, Malaysia Board of
Technologist (MBOT), PT21070872

TEACHING & RESEARCH

Research: Structural glass, Finite element
analysis, Structural engineering, Structural
bamboo

Teaching: Mechanics of solids, Engineers in
society, Bridge engineering, Prestressed
concrete design, Research methodology

WORK EXPERIENCE

2005: NOHA Builders Sdn. Bhd. (Contractor)
2007, 2014: OMK Jurutera Perunding Sdn.
Bhd. (Consultant)
2017-2018: DNP Consult Sdn. Bhd.
(Consultant), Khairi Consult Sdn. Bhd.
(Consultant)

CONSULTANCY / KNOWLEDGE TRANSFER EXPERIENCE

2017: Program Keselamatan Dan Kesihatan
Pekerjaan Tahun 2017 (PERKESO)
2018-2019: Pelan Pengurusan Lembangan
Sungai Bersepadu (IRBM) Sungai Skudai,
Johor Bahru (JPS)
2020-2021: Projek Penswastan Lebuhraya
Bertingkat Damansara-Shah Alam Pakej
DASH CB4 (DASH)
*Speaker for JKR CREaTE on Bridge
Competency from 2017 - 2020*

ACADEMIC PROFESSIONAL SERVICE

International / National Appointment / Committee	17
Research Examiner	2
PhD Supervision	5
Master Supervision	8
Scopus / Clarivate Analytics Journal Reviewer	2
Invited/ Guest Speaker	11

MOU/MOU (PIC)



RESEARCH GRANTS

National	5	RM 506K	International	1	RM 11K
University	6	RM 158K	Industry	4	RM 590K

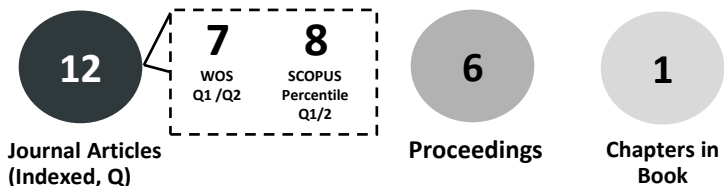
CITATION INDICES



SDG PRIORITIES



PUBLICATIONS



Awards & Recognitions

2022: Johan Anugerah Khas YB Menteri KPT (AKRI) Pentaksiran Alternatif
2021: Gold Medal KILIX UiTM
2020: Silver Medal iVEDIIC UiTM
2019: Anugerah Perkhidmatan Cemerlang UiTM, Anugerah Ahli Akademik Harapan FKA, UiTM, Anugerah Pensyarah Aktif (Komuniti) FKA, UiTM, Anugerah Auditor Terbilang FKA, UiTM, Silver Medal IDEX UiTM, Gold Medal MOOC UiTM
2018: Anugerah Penerbitan Q1 FKA, UiTM
2017: Silver Medal IDEX UiTM, Bronze Medal IDEX UiTM

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 <https://scholar.google.com/citations?user=rTiKAEQAAAAJ&hl=en>

Scopus <https://www.scopus.com/authid/detail.uri?authorId=57147162400>

SDG PRIORITIES



In 2015, Ir. Ts. Dr. Mohd Khairul Kamarudin received his PhD from the University of Surrey in the United Kingdom. Prior to his PhD, he earned a Master's degree in Bridge Engineering from the same university in 2007. He has three years of industrial experience, primarily in structural building and bridge design. He is currently a Senior Lecturer at Universiti Teknologi MARA (UiTM) Malaysia's School of Civil Engineering. He has been involved in teaching and research since 2015, and he has written in international journals, conference papers, and chapters in research books on structural glass, structural engineering, and finite element modelling. He is well-known for his duties as the Coordinator for the Research and Industry Network (2019-2021) and the Coordinator for the Community Network (2021-2023), in which his leadership excels in managing data for performance indicators and addressing a variety of issues pertaining to the faculty's strategic planning enhancement. His credibility in coordinating community programmes under Service Learning Malaysia-University for Society (SULAM) initiatives led to his achievement as the Champion for Ministry of Higher Education Special Award (Anugerah Khas YB Menteri KPT - AKRI 2022) in Alternative Assessment category entitled 'An Innovative Alternative Assessment For The Engineers in Society Course Integrating SULAM and Design Thinking Approaches (EiS-Dt)'. He is currently working on a bamboo engineering research project worth more than RM330,000 supported by university, national and international grants.

2. EDUCATION

PhD. Structural Engineering, University of Surrey, United Kingdom (2015)

MSc. Bridge Engineering, University of Surrey, United Kingdom (2007)

BEng. (Hons) Civil Engineering, Universiti Teknologi Malaysia (2005)

3. EMPLOYMENT

Aug 15' - present **Senior Lecturer**
School of Civil Engineering, Universiti Teknologi MARA, Malaysia

- Dec 17' – Dec 18' **Professional Training Engineer**
DNP Consult Sdn. Bhd., Malaysia (Dec 17' – Jun 18')
Khairi Consult Sdn. Bhd., Malaysia (Jun 18' – Dec 18')
- Apr 14' – Jul 15' **Senior Engineer**
OMK Jurutera Perunding Sdn. Bhd., Malaysia
- Jul 07' – Dec 08' **Engineer**
OMK Jurutera Perunding Sdn. Bhd., Malaysia and attachment at Hewson Consulting Ltd., UK (in conjunction with the collaborative design work between OMK - Hewson Consulting for the bridge design)
- Apr 05' – Dec 05' **Site Engineer**
NOHA Builders Sdn. Bhd., Malaysia

4. PROFESSIONAL MEMBERSHIP

- Professional Engineer, Board of Engineers Malaysia (BEM), P121882 (Since Feb 22')
- Member of The Institution of Engineers Malaysia (IEM), 116668 (Since Dec 21')
- Professional Technologist, Malaysia Board of Technologist (MBOT), PT21070872 (Since Jul 21')
- Graduate Engineer, Board of Engineers Malaysia (BEM), G147710A (Since May 06')

5. RECENT INDICATORS OF PROFESSIONAL ESTEEM

Coordinator Community Network, College of Engineering, Universiti Teknologi MARA, Malaysia (Apr 21' – Mar 23')

Coordinator Research & Industry Network, Faculty of Civil Engineering, Universiti Teknologi MARA, Malaysia (Mar 19' - Mar 21')

Coordinator Industrial Training, Faculty of Civil Engineering, Universiti Teknologi MARA, Malaysia (Jan 16' - Jan 19')

Liaison Officer:

Quacquarelli Symonds (QS) Ranking Champion for UiTM (Civil) (May 21' – May 23')

Service-Learning Malaysia University for Society (SULAM) Coordinator for UiTM (Civil) (Jun 21' - May 23')

Publication Repository Information System Management (PRISMa) Coordinator for UiTM (Civil) (Oct 19' – Dec 21')

Awards & Recognitions:

Champion for Ministry of Higher Education Special Award (Category: Alternative Assessment) (Oct 22')

Universiti Teknologi MARA Excellence In Service (19')

Dedicated Young Academician Award, Faculty of Civil Engineering, UiTM (19')

Dedicated Academician in Community Award, Faculty of Civil Engineering, UiTM (19')

Dedicated Internal Auditor, Faculty of Civil Engineering, UiTM (19')

Publication Q1 Award (18')

Citation Profile: Citations: 82; h-index: 5; i10-index: 2 (as of July 2023, *source: Google Scholar*)

Knowledge transfer experience:

Social Security Organization (SOCISO) Malaysia, AECOM Perunding Sdn. Bhd. Malaysia, Projek Lintasan Kota Holdings Sdn Bhd. (PROLINTAS) Malaysia, Department of Irrigation and Drainage (JPS) Malaysia, Department of Civil Works (JKR-CREaTE) Malaysia, University Kuala Lumpur-British Malaysian Institute (UniKL-BMI) Malaysia

Teaching experience: Determinate structures, Mechanics of solids, Engineers in society, Bridge engineering (Postgraduate), Prestressed concrete design, Integrated design project, Research methodology (Postgraduate).

6. RECENT PUBLICATIONS (JOURNAL)

- Bahrin, N.A., **Kamarudin, M.K.**, Mansor, H., Sahol-Hamid, Y., Ahmad, Z., Lopez, L.F. (2023) Mechanical Characterization of Bamboo Pole for Building Engineering: A Review, *BioResources*, Volume 18, Issue 3, <https://doi.org/10.15376/biores.18.3.Bahrin> (WOS & SCOPUS indexed)
- Udi, U.J., Yussof, M.M., Ayagi, K.M., Bedon, C., **Kamarudin, M.K.** (2023) Environmental degradation of structural glass systems: A review of experimental research and main influencing parameters, *Ain Shams Engineering Journal*, Volume 14, Issue 5, 101970, <https://doi.org/10.1016/j.asej.2022.101970> (WOS & SCOPUS indexed)
- Hasim, A.M., Shahid, K.A., Ariffin, N.F., Zaimi, M.N.S., **Kamarudin, M.K.** (2022) Coal bottom ash concrete: Mechanical properties and cracking mechanism of concrete subjected to cyclic load test, *Construction and Building Materials*, Volume 346, 128464, <https://doi.org/10.1016/j.conbuildmat.2022.128464> (WOS & SCOPUS indexed)
- Muda, M.F., Mohd Hashim, M.H., **Kamarudin, M.K.**, Rahman, M.A., Paik, J.K. (2022) Burst pressure strength of corroded subsea pipelines repaired with composite fiber-reinforced polymer patches, *Engineering Failure Analysis*, Volume 136, 106204, <https://doi.org/10.1016/j.engfailanal.2022.106204> (WOS & SCOPUS indexed)
- Muda, M.F., Hashim, M.H.M., **Kamarudin, M.K.**, Mohd, M.H., Rahman, M.A. (2022) Corroded Subsea Pipelines Burst Pressure Prediction Utilizing Finite Element Data Using ANN, *Civil Engineering and Architecture*, Volume 10, Issue 1, Pages 334 - 344, <https://doi.org/10.13189/cea.2022.100128> (SCOPUS indexed)
- Mousa, M.A., Yussof, M.M., Udi, U.J., Nazri, F.M., **Kamarudin, M.K.**, Parke, G.A.R., Assi, L.N., Ghahari, S.A. (2022) Application of digital image correlation in structural health monitoring of bridge infrastructures: A review, *Infrastructures*, Volume 6, Issue 12, 176 <https://doi.org/10.3390/infrastructures6120176> (WOS & SCOPUS indexed)
- Mousa, M.A., Yussof, M.M., Ruii, C.Z., Nazri, F.M., **Kamarudin, M.K.** (2021) Prediction of crack path on concrete prism based on strain field using image analysis technique, *Malaysian Construction Research Journal*, Volume 14, Issue 3 Special issue, Pages 85 – 97 (SCOPUS indexed)
- Yussof, M.M., Silalahi, J.H., **Kamarudin, M.K.**, Chen, P.-S., Parke, G.A.R. (2020) Numerical evaluation of dynamic responses of steel frame structures with different types of haunch connection under blast load, *Applied Sciences (Switzerland)*, Volume 10, Issue 5, 1815, <https://doi.org/10.3390/app10051815> (WOS & SCOPUS indexed)
- Kamarudin, M.K.**, Yusoff, M.M., Disney, P., Parke, G.A.R. (2018) Experimental and Numerical Investigation of the Buckling Performance of Tubular Glass Columns under Compression, *Structures*, Volume 15, Pages 355 - 369, <https://doi.org/10.1016/j.istruc.2018.08.002> (WOS & SCOPUS indexed)
- Khiyon, N.H., Rahman, A.A., Arshad, M.F., **Kamarudin, M.K.**, Rahman, S.T.A. (2018) Dynamic mechanical properties of polyurethane shape memory polymer composites (smpc) with different volume fractions of chopped strand mat glass fiber, *International Journal of Integrated Engineering*, Volume 10, Issue 9, Pages 158 - 162, <https://doi.org/10.30880/ijie.2018.10.09.011> (WOS & SCOPUS indexed)
- Mohamad, W.N.N., Suliman, N.H., **Kamarudin, M.K.**, Mohd-Amin, N., Hassan, R. (2018) Pull-out strength of steel rods bonded into mengkulang (*tarrietia javanica*) glulam at five different angles to the grain, *Journal of Tropical Forest Science*, Volume 30, Issue (1), pp. 67–74, <https://doi.org/10.26525/jtfs2018.30.1.6774> (WOS & SCOPUS indexed)
- Kamarudin, M.K.**, Disney, P., Parke, G.A.R. (2016) Structural performance of single and bundled glass columns, *ARPJN Journal of Engineering and Applied Sciences*, Volume 11, Issue 3, pp. 1593–1599 (SCOPUS indexed)

7. PUBLICATIONS (CONFERENCE PAPER / BOOK CHAPTER)

- Abuzaid, M.A.N., **Kamarudin, M.K.**, Yussof, M. (2022) Numerical Investigation of Structural Behavior of Timber-Glass Composite Wall Panel, *Lecture Notes in Civil Engineering*, Volume 215, Pages 911 – 928, https://doi.org/10.1007/978-981-16-7924-7_59 (SCOPUS indexed)
- Ahmed-Abdullamohamed, A.W., **Kamarudin, M.K.**, Yussof, M.M. (2021) Numerical Analysis of Crack Propagation in Tubular Glass Column, *IOP Conf. Series: Materials Science and Engineering*, Volume 1200, 012020, <https://doi.org/10.1088/1757-899X/1200/1/012020>
- Yussof, M.M, Lim, S.H., **Kamarudin, M.K.** (2020) The Effect of Short-Term Exposure to Natural Outdoor Environment on the Strength of Tempered Glass Panel, *Lecture Notes in Civil Engineering*, Volume 53, Pages 997 – 1005, https://doi.org/10.1007/978-3-030-32816-0_74 (WOS & SCOPUS Indexed)
- Mansor, H., Wahab, N.M.A.A, Hamid, Y.S., **Kamarudin, M.K.** (2019) A mockup unit of the an-eco budget bamboo chalet: design and cost estimation analysis, *MATEC Web of Conferences*, Volume 258, 01010 <https://doi.org/10.1051/mateconf/201925801010> (WOS Indexed)
- Kamarudin, M.K.**, Rais, N.H.M., Yusoff, M.M., Parke, G.A.R. (2019) Buckling behaviour of laminated glass panel in compression, *MATEC Web of Conferences*, Volume 258, 05010 <https://doi.org/10.1051/mateconf/201925805010> (WOS Indexed)
- Bakar, I.A.A., **Kamarudin, M.K.** (2018) Uncertain mesoscopic parameters in dry woven fabric with Gaussian Emulation Machine for Sensitivity Analysis (GEM-SA), *Journal of Physics: Conference Series*, Volume 1130, Issue 1, <https://doi.org/10.1088/1742-6596/1130/1/012016> (WOS & SCOPUS Indexed)
- Yussof, M.M., Parke, G.A.R., **Kamarudin, M.K.** (2017) Glass Stiffness Contribution of Flat and Curved Cable-net Supported Glass Façade Systems, *IPTEK Journal of Proceedings Series*, Volume 3, Issue 6, <http://dx.doi.org/10.12962/j23546026.y2017i6.3300>.

8. RECENT GRANTS (RESEARCH & CONSULTANCY)

Principal Investigator (PI)

No.	Level	Year	Title Project	Amount (RM)	Grant	Funder
1	International	2022-2024	Development of Characteristic Strength of Treated And Untreated Structural Bamboo Culm From Buluh Beting (Gigantochloa Levis) Malaysian Tropical Species	10,450.00	Strategic Research Partnership (SRP)	Base Bahay Foundation Inc. Philippines
2	University	2022-2024	Development of Characteristic Strength of Structural Bamboo Culm From Buluh Semantan (Gigantochloa Scortechinii) Malaysian Tropical Species	14,550.00	Strategic Research Partnership (SRP)	Universiti Teknologi MARA (UiTM)
3	University	2021-2023	Development of Strength Class for Structural Bamboo from Malaysian Tropical Species	20,000.00	LESTARI SDG-Triangle	Universiti Teknologi MARA (UiTM)
4	National	2020-2021	Projek Penswastaan Lebuhraya Bertingkat Damansara-Shah Alam Pakej DASH CB4	32,000.00	Contract Research	Usains Biomics Laboratory Testing Services Sdn. Bhd.
5	University	2017-2018	Design and Creative Approach in Repair and Conservation of Administration Building in Kuala Keniam	63,000.00	Special Grant	Universiti Teknologi MARA (UiTM)

6	National	2015-2017	A constitutive model for predicting shape memory polymer composites (SMPC) deformation behavior under different strain rates	53,000.00	Research Acculturation Grant Scheme	Ministry of Education, Malaysia
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Co-Principal Investigator (Co-PI)

No.	Level	Year	Title Project	Amount (RM)	Grant	Funder
1	National	2022-2024	Projek Pembangunan Data Kelas Kekuatan (Strength Class) untuk Batang Buluh Bagi Rekabentuk Struktur Buluh dari Spesis Buluh Malaysia	285,452.80	Contract Research	Jabatan Standard Malaysia
2	Industry	2022-2024	Failure Analysis of Bonded FRP Composites on Corroded Subsea Pipelines Using Artificial Neural Networks	477,195.00	Contract Research	Petronas Research Sdn. Bhd.
3	National	2019-2021	Burst Pressure Strength Characterization of Composite Fiber Reinforced Polymer (CFRP) On Circular API Pipes Under Multiple Degree Of Corrosion Through Artificial Neural Networks	65,720.00	Fundamental Research Grant Scheme (FRGS)	Ministry of Education, Malaysia
4	National	2019-2021	Mechanism of Thermal Stress Breakage of Glass Façade Under Varying Temperature Condition	69,900.00	Fundamental Research Grant Scheme (FRGS)	Ministry of Education, Malaysia
5	Industry	2019	Program Keselamatan Dan Kesihatan Pekerjaan Tahun 2019 (Prevention Through Design)	26,180.00	Contract Research	Pertubuhan Keselamatan Sosial (PERKESO)
6	Industry	2018-2019	Pelan Pengurusan Lembangan Sungai Bersepadu (IRBM) Sungai Skudai, Johor Bahru	51,586.50	Contract Research	OMK Jurutera Perunding Sdn. Bhd.
7	Industry	2017	Program Keselamatan dan Kesihatan Pekerjaan Tahun 2017 (Work Improvement at Small Construction Sites (WISCON))	35,150.50	Contract Research	Pertubuhan Keselamatan Sosial (PERKESO)
8	University	2016-2018	Tropical Glulam Angle-Dowelled Connection	20,000.00	LESTARI	Universiti Teknologi MARA (UiTM)
9	University	2016-2018	Development of Quantitative Algorithm In Determining Location of Column for Removal in Performing Alternate Load Path Analysis Method (ALPM)	20,000.00	LESTARI	Universiti Teknologi MARA (UiTM)
10	University	2016-2018	Behaviour of Space Trusses Incorporating Novel Soft Members	20,000.00	LESTARI	Universiti Teknologi MARA (UiTM)

9. JOURNAL, BOOK & CONFERENCE REVIEWER

Journal

Journal of Mechanical Engineering
Jurnal Teknologi: Special Issue

Book

Seismic Behaviour of Precast Shear-Key Wall Under In-Plane Cyclic Loading, Penerbit UiTM

Conference

The International Conference on Civil Engineering, 2019
The Conference of Green Technology and Sustainable Development, 2018
The 13th International Conference on Concrete Engineering and Technology, 2016

10. INTERNATIONAL APPOINTMENT / COMMITTEE

Scientific Committee, 2021 The 7th International Conference on Spatial Structures, University of Surrey, UK.
Organizing Committee (Secretary), 2020 The 5th International Conference on Sustainable Civil Engineering Structures and Construction Materials, Universiti Teknologi MARA, Malaysia.
Organizing Committee (Website), 2016 The 13th International Conference on Concrete Engineering and Technology, Universiti Teknologi MARA, Malaysia.
President, 2008-2010 Overseas Malays Club, University of Surrey, UK.
Postgraduate Exco, 2006 Malaysian Student Society, University of Surrey, UK.

11. UNIVERSITY / NATIONAL APPOINTMENT / COMMITTEE

University / Faculty

Committee: Service-Learning Malaysia - University for Society (SULAM), Engineering Accreditation Council, Strategic Planning, Internal Auditor, Curriculum Review, Vice Chancellor Quality Award (AKNC), Volleyball Manager, Building Information Modelling (BIM), Industrial Linkage, Research and Publication.

National

Working Group for Bamboo Industry Development Action Plan, Malaysian Timber Industry Board (MTIB), Malaysia, 2020
Working Group for Standard Development MS544: Part 5-2003 Timber Joint, Malaysian Timber Industry Board (MTIB), Malaysia, 2016.
Panel Advisor Board Committee Member for Malaysian Timber Industry Board (MTIB), Malaysia, 2016-2018.

12. POST GRADUATE SUPERVISION

Master by Coursework

No.	Year	Name	Title	Status
1	2022	Ahmad Syarifuddin Muhammad	Stability of Assembled Scaffold System on Different Height	Graduated

2	2020	Ahmed Waled Ahmed Abdullah Mohamed	Numerical Analysis of Crack Propagation in Tubular Glass Column	Graduated
3	2020	Maged Abdullah Naji Abuzaid	Numerical Investigation of Timber-Glass Composite Wall Panels	Graduated
4	2019	Nur Arinah Mohd Asri	Assessment on Behaviour of Novel Soft Member with Longer Span Subjected to Progressive Collapse of Space Structure	Graduated
5	2017	Amira Roslan	Lateral Torsional Buckling Behaviour in Laminated Glass Beams	Graduated
6	2017	Nurul Hariyanti Mohd Rais	Buckling Behaviour of Laminated Glass Panel in Compression	Graduated

Master by Research

No.	Role	Year	Name	Title	Status
1	Main SV	2023- 2025	Sarah Nadhrah Yai'd	Derivation of Compression Strength and Shear Modulus of Bamboo Through State of Pure Compression and Shear Action	On Going
2	Co- SV	2016- 2018	Wan Nor Nasuha Mohammad	Performance of Splice Bonded Steel Dowelled Mengkulang Glulam Connection at Selected Angle	Graduated

PhD

No.	Role	Year	Name	Title	Status
1	Main SV	2023- 2026	Nur Hanani Abdul Rahim	Properties Micro Fine Quarry Dust (MFQD) Blended Concrete	On Going
2	Co- SV	2022- 2025	Nur Amira Bahrin	Structural Performance and Design Characteristics of Prefabricated Bamboo Walls under Vertical and Lateral Loadings	On Going
3	Co- SV	2022- 2025	Siti Suhaila Suderman	Bamboo as Buoyant System at Approach Slab and Road Pavement to Reduce Differential Settlement	On Going
4	Co- SV	2016- 2023	Mohd Fakri Muda	Failure Analysis of Aging Subsea Pipelines using Artificial Neural Networks and The Rehabilitation Method by Composite Fiber Reinforced Polymer	Thesis Submitted
5	Co- SV	2016- 2023	Nor Hanim Khiyon	Characteristic of Thermomechanical Constitutive Model of Polyurethane Shape Memory Polymer Composites Containing Kenaf Fiber	On Going

13. RESEARCH PANEL EXAMINER

No.	Year	Name	Title	Institution
1	2020	Nur Ezzaryn Asnawi Subki (2016318875) <i>MSc Research</i>	Energy-Based Alternate Load Path Method (ALP) for Progressive Collapse Assessment of A Double-Span Steel Beam using The Plastic Hinge Energy Dissipation Model	Internal Examiner School of Civil Engineering, Universiti Teknologi MARA
2	2019	Anuar Abdul Wahab (2016212158) <i>MSc Research</i>	Development of Hybrid Strength Brick (HSB) Containing Bottom Ash	Internal Examiner School of Civil Engineering, Universiti Teknologi MARA

14. STUDENT & COMMUNITY RELATED ACTIVITIES

- Director, *UiTM Health Competition Raising Awareness on Rare Disease & Mental Health*, 1 September 2022 – 21 February 2023, National.
- Advisor, *Fun Engineering Community Carnival* at Kolej Vokasional Klang, Malaysia, 29 November 2022, College of Engineering, UiTM.
- Facilitator, *STEM4FUN at Public Schools Malaysia*, 19 September 2022 – 5 October 2022, College of Engineering, UiTM.
- Project Member, *Karnival STEM SMK Seksyen 18, Shah Alam, Malaysia*, 27 September 2022, College of Engineering, UiTM.
- Project Leader, *Karnival STEM SMK Rawang, Malaysia*, 5 – 6 July 2022, College of Engineering, UiTM
- Project Leader, *STEM Champion Career Talk, Pusat Kecemerlangan PPD Sabak Bernam, Malaysia*, 2 July 2022, College of Engineering, UiTM.
- Advisor, *Road Safety Vision Zero Community at Sekolah Kebangsaan Tanjong Karang, Kuala Selangor, Malaysia*, 25 April 2022 – 24 June 2022, College of Engineering, UiTM.
- Committee, *Karnival EKSPLO Selangkah ke UiTM 2020*, 7 – 8 Mac 2020, UiTM.
- Advisor, *Debat Ala Parlimen for Engineering Week*, 5 – 6 November 2019, Faculty of Civil Engineering, UiTM.
- Mentor, *Program Rekabentuk & Teknologi Peringkat Daerah Kuala Pilah*, 1 – 2 November 2017, Faculty of Civil Engineering, UiTM.
- Project Manager, *Optimising Creativity and Internal Expertise to Design and Execute Repair of Kuala Keniam UiTM-Perhilitan Research Station - Main Administration Lobby, Chalet, Musolla and Public Toilet*, 13 – 27 August 2017, UiTM.
- Advisor, *International UTM Bridge Model Competition*, 26 – 29 Mac 2017 (3rd Place) and 22 – 25 September 2019, National.
- Manager (Volleyball – Men), *Sukan Antara Fakulti (SAF)*, 1 September 2016 – 31 Ogos 2018, Faculty of Civil Engineering, UiTM.
- Facilitator, *KACA Programme*, 28 – 30 October 2016 and 25 – 26 March 2017, Faculty of Civil Engineering, UiTM.
- Liaison Officer, *Program Orang Asli (Aboriginal) Pos Raya Simpang Pulai, Cameron Highlands, Malaysia*, 20 – 22 May 2016, Faculty of Civil Engineering, UiTM.

15. NATIONAL / INTERNATIONAL LINKAGES / COLLABORATIVE PARTNERSHIP

- Coordinator; MoA on Development of Characteristic Strength of Structural Bamboo Culm between UiTM and Base Bahay Foundation Inc, Philippines (September 2022 – 2024).
- Coordinator; MoU between UiTM and De La Salle University, Philippines (August 2021 - 2024).
- Coordinator; MoU between UiTM and Base Bahay Foundation Inc, Philippines (September 2020 – 2023).

16. INVITED / GUEST SPEAKERS

Invited Speaker “Occupational Safety and Health in Construction Industry (Management) OSHCI(M) Professional Training, AECOM Perunding Sdn. Bhd., 11 -13 April 2023.

Appointed Emcee “Engineering Research and Innovation Week”, Faculty of Civil Engineering, UiTM, 10 -11 November 2022.

Invited Speaker “Best Practices in SULAM Implementation”, Office of Deputy Vice Chancellor Academic and International, UiTM, 30 September 2022.

Jury for “Bridge Building Competition Secondary School, Karnival STEM State of Selangor, Malaysia”, 12 -13 October 2022.

Invited Speaker “Bridge Competency – Steel Bridge Design”, JKR CREaTE, Malaysia 15 -16 August 2022.

Moderator, “STEM Street Engineering, State of Selangor”, Malaysia, 27 July 2022.

Invited Speaker “Kursus Asas Pembinaan Jambatan & Jejambaf”, Pusat Khidmat Kontraktor Melaka, Malaysia, 20 -21 September 2021.

Invited Speaker “STEM Bridging Our Future”, PPD Sabak Bernam, Malaysia, 11 September 2021.

Keynote Speaker “Unikl-BMI Postgraduate Colloquium 1/2021”, University Kuala Lumpur-British Malaysian Institute (UniKL-BMI) Malaysia, 14 July 2021.

Session Chairperson “The 5th International Conference on Sustainable Civil Engineering Structures and Construction Materials (SCESCM2020)”, 8 –9 December 2020.

Appointed Emcee “Conference of Heads of Academic Departments 2020 (CHAD 2020)”, UiTM, Malaysia, 10 September 2020.

Moderator, “21st Century Materials: Eco-Friendly Bamboo House – Bamboo Engineering International Webinar”, WEBEX, 27 August 2020.

Invited Speaker “Bridge Competency – Steel Bridge Design”, JKR CREaTE, Malaysia 9 -10 July 2020.

External Vetter “Final Examination Paper Civil Engineering Degree Program”, UiTM Penang, Malaysia, 10 - 12 September 2019.

Invited Speaker “Bridge Competency – Bridge Design Superstructures”, JKR CREaTE, Malaysia 24 -25 July 2019.

Invited Speaker “Program Pemantapan Destini Siswa dan Taklimat Pelajar Baru”, February 2019, Faculty of Civil Engineering, UiTM.

Invited speaker “2nd Webinar on Design for Safety (DfS) in Construction”, Universiti Teknologi MARA & The Prevention Through Design: Civil & Structural Engineers, DOSH Safety & Health Workshop, 25 - 26 October 2018.

Jury for “Bridge Building Competition Secondary School, Primary School, Kuala Pilah”, Negeri Sembilan, Malaysia, 2 November 2017.

Invited Speaker “Bridge Competency – Steel Bridge Design”, JKR CREaTE, Malaysia 19 -21 April 2017.

17. INVENTION & INNOVATION COMPETITION

Year	Name of Innovation	Event	Award
2021	Innovation in Alternative Assessment Instrument Incorporating Design Thinking for SULAM	Kelantan International Learning & Innovation Exhibition (KILIEEX 2021)	GOLD
2020	Innovative Assessment Tool for Integrated Society Project (ISP) for Engineers in Society Course during Covid19 Pandemic	International Virtual Educational Invention, Innovation & Design Competition (iVEDIIC 2020)	SILVER
2019	Mechanics of Solids	National e-Content Development Competition (eCONDEV 2019)	GOLD
2019	Energy-Based Collapse Prediction Model for Steel Structures	Invention, Innovation & Design Exposition (IIDEX 2019)	SILVER
2018	Behaviour of Space Trusses Incorporating Novel Soft Members	Invention, Innovation & Design Exposition (IIDEX 2018)	SILVER
2017	A Mock Up Unit of An Eco Budget Chalet	Invention, Innovation & Design Exposition (IIDEX 2017)	SILVER
2017	Bundling System of Structural Glass Column	Invention, Innovation & Design Exposition (IIDEX 2017)	BRONZE

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- Energy-Based Collapse Prediction Model for Steel Structures (CRL Y00008292)
- Bundling System of Structural Glass Column (CRL Y00020825)