



CURCULUM VITAE

A. PERSONAL DETAILS

Name : Ts. Dr. Rozaina Binti Ismail
 Office Address : School of Civil Engineering, College of Engineering,
 Universiti Teknologi MARA, 40450 Shah Alam, Selangor,
 Malaysia
 Tel. : (6) 03-5543 6188 (office)
 (6) 019-2345 215 (h/p)
 E-mail : rozaina_fka_utm@yahoo.com
rozaina4076@uitm.edu.my
 Current position : Senior Lecturer, UiTM Shah Alam, Selangor

Google Scholar

<https://scholar.google.com/citations?hl=en&user=A00tUVsAAAAJ>



<http://prisma.uitm.edu.my/prisma/?doit=pubRec>

Scopus®

<https://www.scopus.com/authid/detail.uri?authorId=56428624300>



<https://orcid.org/0000-0003-1991-1122>

B. ACADEMIC QUALIFICATION

No.	Name of Institution	Degree/Qualification	Date awarded
1.	Universiti Teknologi MARA, Malaysia, Shah Alam, Selangor, Malaysia	PhD in Civil Engineering	2020
2.	Universiti Teknologi Malaysia, Skudai, Johor, Malaysia	Master Degree in Engineering (Civil & Structure) by Research	2008
3.	Universiti Teknologi Malaysia, Skudai, Johor, Malaysia	Bachelor of Science in Civil Engineering	2006

C. WORKING EXPERIENCE / CURRENT POST

1.	2009-Present	Senior lecturer, School of Civil Engineering, College of Engineering in Universiti Teknologi MARA (UiTM) - Teaching structural engineering subjects
2.	2016-2021	Principle Researcher at Institute for Infrastructure Engineering and Sustainable Management (IIESM)
3.	2013-Present	Staf Resident, Delima College, UiTM Shah Alam, Selangor
4.	2006-2008	Research Assistant, Structural Earthquake Engineering Research (SEER) (2006-2008)
5.	2005	Trainee – RiaCon Sdn. Bhd., Sungai Petani, Kedah, Malaysia

D. TEACHING / SUPERVISION EXPERIENCE

Courses & Codes	Course Level
Mechanics of Solid (ECS428)	Undergraduate
Numerical Analysis & Finite Element Methods (ECS555)	Undergraduate
Determinate Structures (ECS448)	Undergraduate
Basic Timber and Steel design (ECS444)	Undergraduate
Reinforced Concrete Design (ECS478/ ECS559)	Undergraduate
Basic Structural Design (ECS458)	Undergraduate
Statics and Dynamics (ECS408)	Undergraduate

No.	Title	Student	Year
1.	Structural Pounding of Soft-Storey Building Under Seismic Loading	Ahmad Kusyairi B. Omar	2009
2.	Structural Pounding of Concrete Frame Structure with Masonry Infill Wall Under Seismic Loading	Mohd. Hafizudin B. Hasnan	2009
3.	The Behaviour of Multi-Storey Building Under Seismic Load	Mohd. Shahril B. Abd Rahman	2009
4.	Pounding Effect on Medium Rise Building at Different Angles Under Earthquake Excitation	Abdul Rasyid Bin Zainal Abidin	2009
5.	Property Management of Building of MAIS	Mohd Shafie Bin Othman	2009
6.	Causes of Delay In IBS Residential Projects: Lessons Learned From Engaging Incomplete Installers	Surezal Bin Suwaji	2009
7.	Finite Element Modelling of Medium-Rise Concrete Building Performance Under Earthquake Loading	Sofia Bt Mohamed Shapie	2010
8.	Performance of Low-Rise Concrete Building Under Earthquake Loadings. (Case Study: Annex Building, Terengganu)	Muhammad Shahrul Hisham Bin Samsudin	2010

9.	Performance of Medium-Rise Concrete Building Under Earthquake Loadings	Mohd Norazwani Bin Mohd Nor	2010
10.	Finite Element Modelling of Medium-Rise Concrete Building Performance Under Earthquake Loading	Ahmad Fadzly Bin Misron	2010
11.	Finite Element Analysis of Bekok Dam Under Dynamic Loading. (Case Study: Bekok Dam, Johor)	Hafizul Fahmi Rin Roslan	2010
12.	Finite Element Analysis of A Dam Under Dynamic Loading (Beris Dam)	Jefni Ehsan Bin Mohd Rosni	2010
13.	Dynamic Analysis of Concrete Faced Rockfill Dam Using Finite Element Method (Case Study: Bakun Dam)	Mohd Izhar Bin Ismail	2010
14.	Seismic Analysis of A Concrete Dam By Using Finite Element Method (Case Study-Sungai Kinta Dam)	Muhamad Hilfi Bin Kamsani	2010
15.	Behaviour of Concrete Bridge (Deck) Due to Earthquake Effects	Mohamad Syazali Bin Roslan	2011
16.	Concrete Bridge (Deck) Performance Under Earthquake Loading By Using LUSAS	Mohd Firdaus Bin Kamarudin	2011
17.	Analysis of Concrete Bridge Pier Due to Earthquake	Mohd Ritzman Abdul Karim	2011
18.	Seismic Analysis of Deck Concrete Bridges for Low Intensity Earthquake Region	Mohd Syahmi Bin Abd Jalil	2011
19.	Analysis of Medium Rise Building Due To Seismic Loading.	Masitah Binti Hassim	2011
20.	Performance of Low Rise Building Due to Earthquake	Mohamad Fareez Bin Jamaludin	2011
21.	Performance of Reinforced Concrete Building Due To Seismic Loading	Nurul Fasihah Binti Zamahidi	2011
22.	Non Linear Dynamic Analysis of Building Frame For Earthquake Intensity Value Damage Using 2D IDARC Software	Rahayu Binti Abdul Rafar	2011
23.	Seismic Performance of Concrete Dam With Finite Element Methods	Faizatul Farha Binti Sahdan	2012
24.	Rockfill Dam Performance Under Earthquake Load By Using LUSAS	Zainab Binti Mohamed Yunus	2012
25.	Earthfill Dam Performance Under Earthquake Load By Using LUSAS	Nurul Hanis Binti Ramli	2012
26.	Eggshells and Cockle Shells Powder as Partial Replacement of Cement for Production of Concrete Bricks	Farah Amalina Binti Adenan	2012

27.	Study The Awareness of The Contractors On Using Light Weight Masonry Block In Malaysian Construction Industry	Noorhidayat Bin Zainudin	2012
28.	Seismic Performance for Vertical Geometric Irregular Frame Structures	Nor Amira Bt Mahmud	2012
29.	Seismic Analysis for Regular Reinforced Concrete Frame Building	Wan Nur Atikah Bt Wan Mahadi	2012
30.	The Risk Study of the Earthquake in Shah Alam	Nazyatul Akma Binti Zamri	2012
31.	Seismic Performance of Various Steel Braced Frames	Mohamad Faiez Bin Amir	2013
32.	Performance of Semi-Rigid Connection Steel Frame under Low Intensities Earthquake Using Finite Element	Mohd Nadhirul Bin Anuar	2013
33.	Study on Seismic Performance of Various Steel Braced Reinforced Concrete Frames Building	Md Sabran Azmin Bin Ruslan	2013
34.	Effect The Percentage of Carbon Black Filler Loading to The Rubber Bearing as Base Isolation	Zul Azarizi B Mahadi	2013
35.	The Different Types of Fillers to High Damping of Rubber Bearing Base Isolation	Muhd Safwan B. Ahmad Rozali	2013
36.	The effect of steel fiber percentage to the flexural and compressive strength of concrete containing recycled concrete aggregates and crumb rubber	Siti Saidatul Syafika Binti Mohd Zahir	2014
37.	Effect in displacement of tuned liquid damper with different level of water	Hamudah Binti Mohd Halim	2014
38.	Dynamic Non-Linear Analysis of Reinforced Concrete Frame Due to Earthquake Load	Syaza Hazwani Biti Azman	2015
39.	Damage Analysis of Reinforced Concrete Frame: High Rise Building	Nurain Binti Azman	2015
40.	The effect of Polycarboxylate Content to the Compressive and Flexural Strength of Carbon Nanotubes Mortar	Tengku Shahrin Bin Tg Mamat	2015
41.	The Influence of Carbon Nanotubes on the Performance of Cement Composites	Muhammad Azzhary Bin Mohd Azly	2015
42.	Steel Building With Rubber Isoloator Subjected to Acheh Eqrthquake Event	Muhammad Muhsin Bin Mokhtar	2015
43.	Vulnerability of Public Buildings Subjected to Earthquake by Finite Element Modelling	Nor Hazlila Razali	2016

44.	The effect of Polycarboxylate Content to the Compressive and Flexural Strength of Carbon Nanotubes Concrete Cube	Abu Zaim Bin Abu Bakar	2016
45.	The Influence of Multi-Walled Carbon Nanotubes on the Performance of Concrete Cube	Muhamad Syafiq Bin Mohd Radzi	2016
46.	The Performance of Concrete Cube Containing Carbon Nanotubes.	Ahmad Hakim Fitri Bin Hashim	2016
47.	Retrofitting of Soft Storey Building by Using Different Bracing System Due to Earthquake Load	Khalid Bin Ismail	2017
48.	Shear Wall Systems on The Soft Storey Building Due to Aceh Event	Mohamad Zulharimi Bin Zuriman	2017
49.	Design of Lead Rubber Bearing (LRB) Using Visual Basic 6.0	Nurul Shaidatul Hidayah Binti Jamaludin	2018
50.	Determination of Design Properties of High Damping Rubber Bearing by Using Visual Basic	Wan Nur Faraaysha Binti Wan Adnan	2018
51.	Performance and damage analysis of a high-rise building in Kuala Lumpur against seismic intensity by finite element modelling	Izzah Mardhiah binti Md Aris	2019
52.	Seismic Behavior of Earth- Fill Dam Using Finite Element Method	A'in Fatin Najihah Binti Akmat	2020
53.	The Performance of Embankment Dam Under Earthquake Events	Nur Ain Binti Awang @ Mat Salleh	2020
54.	Effect of Roller Compacted Concrete (Rcc) Dam Performance Under Seismic Load	Nur Shafika Alia Binti Hussin	2020
55.	Seismic Behavior of Earthfill Dam Due to Ranau Earthquake	Nurul Nabila Binti Muhamad Khuzil	2020
56.	Structural Behaviour of Earth Core Rockfill Dam Due to Earthquake Event	Mohd Zulfadhli Bin Azizan	2020
57.	Dispersion of Carbon Nanotubes in Composite Elastomer: A Review	Fatnin Marha Binti Mazha	2021
58.	Recycled Rubber Powder From Waste Tyre as Filler in Rubber Compound (A Review)	Siti Noor Affezah Binti Abd Kahar	2021
59.	Effect of Different Carbon Fillers on The Properties of Rubber Composites Containing Carbon Black and Carbon Nanotubes: A Review	Nurliyana Binti Mohamed Rashid	2021
60.	Effect of Various Types of Nano-Filler on Natural Rubber Strength: A Review	Nur Anis Fakheera Binti Mohammed Yasri	2021

E. PROFESSIONAL QUALIFICATIONS

1. Graduate Engineer, Board of Engineers Malaysia (BEM)
2. Graduate Member, The Institution of Engineers Malaysia (IEM)
3. Graduate Technologist, Malaysia Board of Technologists (MBOT)
4. Professional Technologist, Malaysia Board of Technologists (MBOT)
5. Member: Malaysian National Committee on Large Dams (MYCOLD)
6. Member: Malaysian Society for Occupational Safety and Health (MSOSH)
7. Member: Concrete Society of Malaysia (CSM)

F. AREA OF RESEARCH

Material and Structural Engineering, Earthquake Engineering, Nanocomposites, Finite Element Analysis and Artificial Neural Network.

G. RESEARCH GRANTS

1. COLLABORATIVE RESEARCH GRANT UTM- NATIONAL: Application of Base Isolator to Structures. (Principal researcher) RM40,000 (2019-2021).
2. FRGS: Effect of Different Preservatives on Durability and Properties of Local Bamboo. (Member) RM137, 800 (2019-2022).
3. FRGS: Serviceability Predictive Model of Vibrating Ultra-High Performance Concrete Structure. (Member) RM88,500 (2019-2021).
4. BESTARI PERDANA: Design and Development Portable Earthquake Shake Table. (Member) RM30,000 (2018-2020).
5. FRGS: Optimal Damage's Prediction Model for Concrete Building due to Seismic Zonantion. RM94,800 (Principal researcher) (2015-2018).
6. E-Science Fund: Development of New Adaptive Seismic Isolator Containing Carbon Nanotubes. (Principal researcher) RM183,000 (2015-2018).
7. RAGS: Characterization of Actuation Properties of New Base Isolation System under Marine Environment. RM55,000 (2012-2014).
8. E-Science Fund: Development of New Adaptive Seismic Isolator Containing Carbon Nanotubes. (Member) RM183,000 (2015-2017).
9. Classification of Bridge Pier and The Site Based on Its Dynamic Characteristics. (Member) RM216,500 (2012-2014).
10. E-Science Fund: Remote Sensing and Field Survey Analysis of Active Faults in Tectonically Active Areas in Malaysia. (Member) RM310,700 (2012-2014).
11. Dana Kecemerlangan Program: Innovative Low Cost laminated Recycled Rubber Bearing for Structural Earthquake Mitigation. (Member) RM32,000 (2012-2014).
12. E-Science Fund: Seismic Risk Assessment and Forecasting of Klang Valley and Kundasang Regions Due to Previous and Possible Local Earthquakes. (Member) RM388,750 (2012-2014).
13. Dana Kecemerlangan Program: The Application of Artificial Neural Network in Damage Prediction of Building Based on Seismic Zonation in Malaysia. ((Principal researcher) RM10,000 (2012-2014).
14. Dana Malaysian Society for Occupational Safety & Health (MSOSH), Malaysia: Workplace Injuries and Accidents Research (Member) RM53,856 (2009-2010).
15. FRGS: Derivation of Attenuation Equations for Distant Earthquake Suitable for Malaysia. (Research Assistant) RM100,000 (2007-2009).
16. Construction Industry Development Board (CIDB): Seismic Hazard Analysis of Peninsular Malaysia for Structural Design Purposes. (Research Assistant) RM968,000 (2004-2008).

H. **PUBLICATION**

Journals/ Articles

1. **Ismail, R.**, Hussin, N.S.A., Ibrahim, A, Rusop. M., Adnan, A. (2021) The Performance of Roller Compacted Concrete (RCC) Dam Under Seismic Load. *Journal of Architecture and Civil Engineering*. Volume 6 (6), 13-23.
2. **Ismail. R.**, Shamsudin. N., Arshad. M.F., Ibrahim. A., Rusop. M., Adnan. A. (2021) 2-Dimensional Finite Element Analysis of Reinforced Concrete Buildings Subjected to Seismic Load. *Journal of Architecture and Civil Engineering*. Volume 6 (6), 01-06.
3. **Ismail, R.** Rajhan, N. H., Hamid, H. A., & Ibrahim, A. (2019) Experimental data for effect of carbon black loading on tensile, hardness and rebound of magnetic iron filled natural rubber composites. *Data in brief*, 25 (104166).1-10. Elsevier Publishing.
4. **R Ismail**, N I Bisnan, Y C Bon and I S Ishak. (2019) Buckling behavior of cold-formed stub channels under compression. *IOP Conf. Series: Materials Science and Engineering* 513 (2019) 012022.
5. **R Ismail**, A.Ibrahim, A.Adnan. (2019) Damage Assessment of High-Rise Reinforced Concrete Buildings in Peninsular Malaysia Subjected to Ranau Earthquake. *IOP Conf. Series: Materials Science and Engineering* 513 (2019) 012020.
6. **R Ismail**, A Ibrahim, M Rusop, A Adnan. (2019) Dynamic mechanical properties of natural rubber vulcanizates with different carbon nanotubes-loaded. *AIP Conference Proceedings* 2151 (1), 020027.
7. **R Ismail**, A Ibrahim, M Rusop, A Adnan. (2019) Magnetic properties of carbon nanotubes-natural rubber composites. *AIP Conference Proceedings* 2151 (1), 020028.
8. Yusoff, M., Najib, F. M., & **Ismail, R.** (2019). Hybrid backpropagation neural network-particle swarm optimization for seismic damage building prediction. *Indonesian Journal of Electrical Engineering and Computer Science*, 14(1), 360-367.
9. **Ismail, R.**, Ibrahim, A., Mahmood, M. R., & Adnan, A. (2018). Determination of mechanical properties natural rubber compounds using double shear test pieces. *International Journal of Civil Engineering and Technology*, 9(8), 37-43.
10. **Ismail, R.**, Ibrahim, A., & Adnan, A. (2018). Damage assessment of medium-rise reinforced concrete buildings in peninsular Malaysia subjected to ranau earthquake. *International Journal of Civil Engineering and Technology*, 9(7), 881-888.
11. **Ismail, R.**, Ismail, K., & Ishak, I. S. (2018, October). A Comparative Study of Different Positioning of Reinforced Concrete Shear Walls in Soft Storey Building Subjected to Acheh Earthquake Event. In *IOP Conference Series: Materials Science and Engineering* (Vol. 431, No. 12, p. 122007). IOP Publishing.

12. **Ismail, R.**, Ismail, K., & Ishak, I. S. (2018, October). Retrofitting of soft storey building by using different bracing system due to earthquake load. In IOP Conference Series: Materials Science and Engineering (Vol. 431, No. 12, p. 122012). IOP Publishing.
13. **Ismail, R.**, Bon, Y. C., Joolkeepri, N. A., & Ishak, I. S. (2018, October). Strength Behavior of Bamboo-Reinforced Concrete Slabs. In IOP Conference Series: Materials Science and Engineering (Vol. 431, No. 11, p. 112003). IOP Publishing.
14. **Ismail, R.**, Ibrahim, A., Rusop, M., & Adnan, A. (2018, May). Comparative studies on the mechanical properties of natural rubber and natural rubber filled with multi-walled carbon nanotubes. In AIP Conference Proceedings (Vol. 1963, No. 1, p. 020009). AIP Publishing.
15. **Ismail, R.**, Ibrahim, A., Rusop, M., & Adnan, A. (2018, May). Shear modulus and damping ratio of natural rubber containing carbon nanotubes. In AIP Conference Proceedings (Vol. 1963, No. 1, p. 020061). AIP Publishing.
16. **Ismail, R.**, Ibrahim, A., Hamid, H., Rusop, M., & Adnan, A. (2018). Experimental study on mechanical properties of elastomer containing carbon nanotubes. *Journal of Engineering Science and Technology*, 13(3), 656-664.
17. **R Ismail**, N A Mahmud and I S Ishak. (2018). Seismic performance for vertical geometric irregularity frame structures. IOP Conf. Series: Earth and Environmental Science 140 (2018) 012101. IOP Publishing.
18. **Ismail, R.**, & Ismail, M. I. (2017). Dynamic analysis of Concrete Faced Rockfill Dam using finite element method. *Journal of Engineering and Applied Sciences*, 12(7), 1772-1776.
19. **Ismail, R.**, & Karim, M. R. A. (2017). Concrete bridge pier performance under earthquake loading. *Journal of Engineering and Applied Sciences*, 12(9), 2254-2258.
20. **Rozaina, I.**, Hilfi, K. M., & Insyirah, M. N. N. (2017). Seismic analysis of concrete dam by using finite element Method. In MATEC Web of Conferences (Vol. 103, p. 02024). EDP Sciences.
21. **Rozaina, I.**, Azmi, I., & Norhazlila, R. (2017). Vulnerability study of public buildings subjected to earthquake event. In MATEC Web of Conferences (Vol. 103, p. 02023). EDP Sciences.
22. **Ismail, R.**, Rosni, J. E. M., & Nadzri, N. I. M. (2017, October). Performance of rockfill dam under dynamic loading. In AIP Conference Proceedings (Vol. 1892, No. 1, p. 120012). AIP Publishing.
23. **Ismail, R.**, Hasnan, M. H., & Shamsudin, N. (2017, October). Structural pounding of concrete frame structure with masonry infill wall under seismic loading. In AIP Conference Proceedings (Vol. 1892, No. 1, p. 120011). AIP Publishing.
24. **Ismail, R.**, Ibrahim, A., Hamid, H. A., Mahmood, M. R., & Adnan, A. (2016, July). Dynamic mechanical behavior magnetorheological nanocomposites containing CNTs: A review. In AIP Conference

- Proceedings (Vol. 1733, No. 1, p. 020060). AIP Publishing.
25. Rajhan, N. H., Hamid, H. A., Ibrahim, A., & **Ismail, R.** (2016). Experimental study on mechanical properties of magnetorheological elastomer. *Jurnal Teknologi*, 78(5-4).
 26. **Ismail, R.**, Ibrahim, A., & Adnan, A. (2016). Vulnerability of high-rise buildings in Kuala Lumpur subjected to Aceh earthquake event. In *InCIEC 2015* (pp. 139-147). Springer, Singapore.
 27. **Ismail, R.**, Ibrahim, A., & Adnan, A. (2016). Seismic damage analysis of reinforced concrete frame of public buildings in Ipoh subjected to Aceh Earthquake event. In *InCIEC 2015* (pp. 149-157). Springer, Singapore.
 28. **Ismail, R.**, Ibrahim, A., Ab Hamid, H., Majid, T. A., & Adnan, A. (2016). Seismic Site Classification of JKR Bridge at Sungai Sepang Using Multichannel Analysis of Surface Wave (MASW). In *InCIEC 2015* (pp. 159-167). Springer, Singapore.
 29. Rajhan, N. H., Ab Hamid, H., Ibrahim, A., & **Ismail, R.** (2016). Magnetorheological Elastomer Performances with the Presence of Carbon Black. In *InCIEC 2015* (pp. 457-468). Springer, Singapore.
 30. **Ismail, R.**, Ibrahim, A., Hamid, H. A., Mahmood, M. R., & Adnan, A. (2015). Performance of carbon nanotubes (CNT) based natural rubber composites: A review. In *InCIEC 2014* (pp. 821-829). Springer, Singapore.
 31. **Ismail, R.**, & Zamahidi, N. F. (2015). An Evaluation of High-Rise Concrete Building Performance Under Low Intensity Earthquake Effects. In *InCIEC 2014* (pp. 79-86). Springer, Singapore.
 32. Rajhan, N. H., **Ismail, R.**, Hamid, H. A., & Ibrahim, A. (2015). Influence of different fillers on the tensile properties of 50/50 NR/NBR blend. In *InCIEC 2014* (pp. 767-777). Springer, Singapore.
 33. **Ismail, R.**, Mohd Saman, H., & Hassim, M. (2014). Evaluation of Medium-Rise Reinforced Concrete Building Performance under Low Intensity Earthquake Effect. In *Applied Mechanics and Materials* (Vol. 661, pp. 106-110). Trans Tech Publications.
 34. **Ismail, R.**, Ibrahim, A., & Adnan, A. (2014). Effect of Input Variable for Neural Network Architecture in Predicting Building Damage Subjected to Earthquake. In *InCIEC 2013* (pp. 201-213). Springer, Singapore.
 35. **Ismail, R.**, Ibrahim, A., & Hamid, H. A. (2014). A Review of Magnetorheological Elastomers: Characterization Properties for Seismic Protection. In *InCIEC 2013* (pp. 237-248). Springer, Singapore.
 36. Adnan, A., Tiong, P. L. Y., **Ismail, R.** & Shamsuddin, S. M. (2012). Artificial neural network application for predicting seismic damage index of buildings in Malaysia. *Electronic Journal of Structural Engineering*. 12, p. 1-9 9 p.

37. **Ismail, R.**, Adnan, A., & Ibrahim, A. (2011). Vulnerability of Public Buildings in Sabah Subjected to Earthquake by Finite Element Modelling. *Procedia Engineering*, 20, 54-60.
38. Adnan, A., Alih, S. C., & **Ismail, R.** (2008). The application of artificial neural network in predicting bridge condition based on seismic zonation. In *The 14th World Conference on Earthquake Engineering*.

Books/Thesis

1. **Rozaina Ismail** and Azmi Ibrahim, (2021) "Structural Pounding: Due to Structures Configurations and Effects of Earthquakes", Malaha PLT. ISBN: 978-967-2424-16-1
2. **Rozaina Ismail**, (2020) "Characterization and Performance of Nanocomposites Elastomer Incorporating Carbon Nanotubes and Microcarbonyl Iron Fillers", PhD Thesis, Universiti Teknologi MARA.
3. **Rozaina Ismail**, (2008) "The Application of Artificial Neural Network in Seismic Evaluation of Building", M.Eng. Thesis, Universiti Teknologi Malaysia.
4. Azlan Adnan, Sophia C. Alih, and **Rozaina Ismail**, (2008), "Predicting of Bridge Condition based on Seismic Zonation by Using Artificial Neural Network", pp 112-127, Chapter 8 in *Book of Advances in Earthquake Engineering Applications*, Penerbit UTM.
5. Azlan Adnan and **Rozaina Ismail**, (2008) "Database System and Digital Earthquake Evaluation of Buildings" pp 128-144, Chapter 9 in *Book of Advances in Earthquake Engineering Applications*, Penerbit UTM.
6. Azlan Adnan, Zamri Ramli, Hendriyawan, Jati Sunaryati, Tan Chee Wei, Meldi, **Rozaina Ismail**, Suriyana Abd. Rahman, Sophia C. Alih, Taksiah Abd Majid, Azmi Ibrahim, (2008), Final Report, Volume C, "Seismic Performance of Dam and Tunnels", MOSTI, ASM, UTM, October 2008.
7. **Rozaina Ismail**, (2006) "Earthquake Design of Fixed Offshore Platform by Using Visual Basic 6.0", Bachelor Degree Thesis, Universiti Teknologi Malaysia.

I. INNOVATION AND AWARDS

1. Silver Medal, International E-Content Development Competition 2021 (e-ConDev 2021), UiTM Shah Alam, Selangor.
2. Silver Medal, Invention, Innovation and Design Exposition (IIDEX 2019), UiTM Shah Alam, Selangor.
3. Silver Medal, International Invention & Innovation Exhibition 2018 (ITEX 2018), KLCC, Kuala Lumpur.
4. Gold Medal, Invention, Innovation and Design Exposition (IIDEX 2017), UiTM Shah Alam, Selangor.

5. 2nd Runner up, Structural Earthquake Stability Competition 3.0, 18 Feb 2017, UTAR, Kajang, Selangor
6. Consolation prize, Structural Earthquake Stability Competition 3.0, 18 Feb 2017, UTAR, Kajang, Selangor
7. Silver Medal, Invention, Innovation and Design Exposition (IIDEX 2016), UiTM Shah Alam, Selangor.
8. Bronze Medal, Invention, Innovation and Design Exposition (IIDEX 2016), UiTM Shah Alam, Selangor.
9. Winner R&D Project of The Year Award, Product:Seer-Intel, (Structural Earthquake Engineering Research, SEER) in 'Malaysian Construction Industry Excellence Award, MCIEA 2008', CIDB.
10. Winner Business Plan Competition 2007, Southeast Asia and Taiwan Universities Business Plan Competition organized by USM (National Level).
11. 2nd Prize Business Plan Competition 2007, USM (University Level)

J. CONSULTANCY

1. Client: TNB Research Sdn Bhd
Year: 2017-2018
Title: The Accelerated Life Test Services on TNB Street Lights
Contribution: Member
The objectives of this research are:
 - To carry out UV accelerated ageing tests on various types of TNB street light.
 - To carry out heavy rain simulation tests on various types of TNB street light.
 - To assess the performance of the street lights due to accelerated life test.
2. Client: TNB Research Sdn Bhd
Year: 2015-2016
Title: Corrosion Test on Medium Voltage Bare Overhead Line Pole
Contribution: Principal researcher
The objectives of this research are:
 - To investigate the corrosion activities of adhesion coating test, chemical resistance test, salt spray resistance test and water absorption test on simulated weathering Medium Voltage Bare Overhead Line Pole for steel, coated steel and galvanised poles.
 - To assess the corrosion rate index of the steel coupon exposed at different site locations namely paddy/swamp, hilltop and shoreline areas.
3. Client: TNB Research Sdn Bhd
Year: 2014-2015
Title: Accelerated Test on TNB Street Lights
Contribution: Member
The objectives of this research are:
 - To carry out UV accelerated ageing tests on various types of TNB street light (LED, Induction and HPSV Type of street lights).

- To carry out heavy rain simulation tests on various types of TNB street light (LED, Induction and HPSV Type of street lights).
- To assess the performance of the street lights due to accelerated life test.

4. Client: Maccaferri Asia

Year: 2010

Title: Conducting Flexural Performance of Fiber-Reinforced (Using Beam With Third-Point Loading)

Contribution: Principal researcher

The objectives of this research are:

- Study the important properties of steel fibre reinforced concrete (SFRC) as its superior resistance to cracking and crack propagation.
- As a result of this ability to arrest cracks, fibre composites possess increased extensibility and tensile strength, both at first crack and at ultimate, particular under flexural loading; and the fibres are able to hold the matrix together even after extensive cracking.

5. Client: Akademi Sains Malaysia, ASM

Year: 2006-2008

Title: Conducting Flexural Performance of Fiber-Reinforced (Using Beam With Third-Point Loading)

Contribution: Research Assistant

Description:

- Collaborative research with UiTM, USM, and UMS.
- Development of seismic map for selected cities in Peninsular, Sabah, & Sarawak.
- Site inspection to evaluate structure performance: bridge, dam, and building.
- Modeled and analyzed selected structures to determine their performance under different seismic intensity.

6. Client: Public Works Department, PWD

Year: 2006-2007

Title: Development of Seismic Design Guidelines for Concrete Buildings in Malaysia

Contribution: Research Assistant

Description:

- Developing a standard guideline procedure of seismic design for concrete buildings.
- Preparing handbook containing a complete design steps.

7. Client: CIDB, SEER UTM, and MDEC

Year: 2005-2007

Title: Commercialization of Earthquake Hazard Reduction Materials (Seismo-Accelerograph, SEER-SAG)

Contribution: Research Assistant

Scope:

- Market research, preparation of business plan and financial report.