

## CURRICULUM VITAE



**Raizal Saifulnaz Muhammad Rashid (PhD, FIEM, PEPC, ACPE)**

Professor

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### Education

1. PhD (Structural Engineering), 2008, University of Adelaide
2. B.Eng.Hons (Civil Engineering), 1998, Universiti Teknologi Malaysia

### Areas of Interest

1. Structural Rehabilitation
2. Bridge Engineering
3. Composite Structures

### Professional Qualification/ Membership/ Affiliation

1. Fellow, Institute of Engineers Malaysia
2. Member, Board of Engineers Malaysia
3. Member, Malaysian Society for Engineering and Technology
4. Member, Akademi Profesor Malaysia
5. Member, International Institute for FRP in Construction

### Appointments

Position	Duration
1. Associate Director, Engineering Technology Accreditation Council, Board of Engineers Malaysia	1 June 2022 – to date
2. Professor, Department of Civil Engineering, Faculty of Engineering, UPM	1 April 2021 – to date
3. Programme Coordinator, Master of Structural Engineering and Construction	May 2014 – to date
4. Associate Professor, Department of Civil Engineering, Faculty of Engineering, UPM	1 Nov 2014 – 31 March 2021
5. Head, Department of Civil Engineering, Faculty of Engineering, UPM	8 Sept. 2014 – Sept 2019
6. Post-Doctoral fellowship at Syracuse University, New York, USA.	June 2011 – July 2013
7. Industry Attachment at Arup Jururunding Sdn Bhd,	July 2009 – July 2010
8. Senior Lecturer, Department of Civil Engineering, Faculty of Engineering, UPM	June 2008 to October 2014
9. Head of Laboratory, Materials Lab, Department of Civil Engineering, Faculty of Engineering, UPM	May 2008 – May 2011
10. Student and Alumni Affairs Coordinator, Department of Civil Engineering, Faculty of Engineering, UPM	January 2008 – June 2010
11. Lecturer, Department of Civil Engineering, Faculty of Engineering, UPM	December 2007
12. Civil Engineer, Pejabat Pembangunan dan Pengurusan Asset, UPM	December 1999 – November 2007
13. Resident Engineer, EDP Consultant Sdn Bhd	Jan – November 1999

## Professional Services

Position	Duration/Appointment
1. Committee Member, Working Group (WG) 21-11 on Fiber Reinforced Polymer, Jabatan Standard Malaysia	January 2023
2. External Review Panel for Master of Engineering (Civil), Universiti Tunku Abdul Rahman	November 2022
3. Panel Academic Programme Assessor, Universiti Tenaga Nasional (UNITEN)	15 Aug 2017 – 31 Disember 2027
4. Head of Panel, Bachelor of Engineering (Hons) Civil, Universiti Teknologi MARA, Mock Accreditation.	25 – 26 May 2022
5. External Examiner, School of Civil Engineering, Faculty of Engineering, Universiti Teknologi Malaysia	1 April 2022 – 31 March 2024
6. Interviewer, Hadiah Latihan Persekutuan, Kementerian Pengajian Tinggi	28 March 2022
7. Guest Speaker, Design of Structural Strengthening Using Steel Plate Bonding, CFRP and Others, Centre of Excellence for Engineering and Technology (CREaTE), JKR	16 – 18 March 2022
8. Intellectual Property Evaluation Committee, Putra Science Park, UPM	1 March 2022 – 28 February 2024
9. Standing Committee Member, Education Fund Committee, Road Engineering Association of Malaysia (REAM)	2022 - 2023
10. FRGS Evaluation Committee, Kementerian Pengajian Tinggi & Jabatan Pendidikan Tinggi	2020 - 2022
11. PRGS Evaluation Committee, Kementerian Pengajian Tinggi & Jabatan Pendidikan Tinggi	2022
12. External Assessor, Master of Engineering (Civil) Programme, Universiti Teknologi Malaysia	2022 - 2024
13. National Standard Committee (NSC D - Building, Construction and Civil Engineering), Jabatan Standard Malaysia	2018 - 2024
14. External Assessor, Bachelor of Civil Engineering Programme, Universiti Teknologi MARA	2021 – 2023
15. Panel (ETAC, Interim), Diploma in Construction Engineering Technology (Green Building), Kolej Kemahiran Tinggi MARA, Sri Gading	December 2021
16. Panel (ETAC, Interim), Diploma in Civil Engineering, Politeknik Kuching, Sarawak	December 2021
17. Panel (EAC, Interim), Bachelor of Engineering (Environmental Engineering), Curtin University of Technology, Sarawak Campus	December 2021
18. External Assessor, Diploma of Civil Engineering Programme, Politeknik Sultan Azlan Shah.	14 October 2021
19. Promotion External Assessor Panel, Academic Staff (Professor), Universiti Sains Malaysia	14 July 2021
20. Studies Committee, Faculty of Engineering, Universiti Malaya	26 April 2021

21. Head of Panel, Bachelor of Civil Engineering, City University, Engineering Accreditation Council (EAC) 5 – 6 April 2021
22. Head of Panel (ETAC), Diploma in Engineering Technology Construction (Geo-Structure), KKTU Sri Gading 5 – 6 January 2021
23. External Assessor, Master of Science (Sustainable Infrastructure), Universiti Teknologi Malaysia 4 January 2021
24. ASEAN Chartered Professional Engineer (ACPE) 2020
25. Editorial Board of Advances in Civil Engineering 2020
26. Scientific Committee, Civil Infrastructure and Construction Materials, CICM 2020, Dhaka 2020
27. External Review Panel for Master of Engineering (Civil), Universiti Tunku Abdul Rahman September 2020
28. Chairman, Technical Evaluation Committee 4, Form 5 Civil Engineering Textbook, Ministry of Education Malaysia 07 -12 September 2020
29. External Assessor for Bachelor of Civil Engineering Programme, UniMAP Academic calendar 2020/2021 and 2021/2022
30. Technical Committee on Building Design and Construction, Jabatan Standard Malaysia Jan 2020
31. Building Assessment Lecture, Pejabat Pembangunan dan Pengurusan Aset, UPM 25 Julai 2019
32. Chairman, Technical Evaluation Committee 4, Form 4 Civil Engineering Textbook, Ministry of Education Malaysia 22 - 27 Julai 2019
33. Audit Evaluation Panel 'Master of Engineering (Civil), Universiti Kebangsaan Malaysia 10 Julai 2019
34. Investigation Committee (Disciplinary Committee), Board of Engineers Malaysia 30 April 2019 – to date
35. Melaka Modern Pig Farming Adaptation (Subject Matter Expert) 15 February 2019
36. Head of Panel (ETAC), Diploma In Construction Engineering Technology(Green Energy And Energy Efficient Building), KKTU Sri Gading 14 – 17 April 2019
37. Trainer for CIDB CPD Certified Training Program 28 October 2018 – 27 December 2020
38. International Standard Committee Member for Building, Construction and Civil Engineering (ISC, SIRIM) May 2018 – to date
39. External Assessor for Bachelor of Civil Engineering Programme, UniMAP Academic calendar 2017/2018 and 2018/2019
40. Second Interviewer for MySET Professional Assessment Examination 2016 – to date
41. Principal and Second Interviewer for IEM Professional Engineers Assessment 2017 – to date
42. Head of Panel, Diploma Kejuruteraan Awam (7 Politeknik), Jabatan Pendidikan Politeknik & Kolej Komuniti, Engineering Technology Accreditation Council (ETAC) 4 September – 31 December 2018

43. Panel, Curtin Malaysia, Majlis Akreditasi Kejuruteraan (EAC) 19 – 20 September 2018
44. Committee Member, Petugas Pembangunan, UPM 9 October 2017 – 8 October 2020
45. Uniform Building By Law Amendments Technical Committee Member (CIDB) August 2017
46. Panel, Limkokwing University of Creative Technology (LUCT), Majlis Akreditasi Kejuruteraan (EAC) 15 – 16 Nov 2017
47. Panel, Universiti Tunku Abdul Rahman, Kampus Perak (UTAR), Majlis Akreditasi Kejuruteraan (EAC) 15 Mar 2017
48. Head of Panel, Programme Accreditation Audit Assessor, Master of Structural Engineering, Universiti Tenaga Nasional (UNITEN) 28-29 September 2017
49. Co – Chair, Global Civil Engineering Conference (GCEC 2017) 25-28 July 2017
50. Expert Panel Workshop (EPW), Universiti Teknologi Petronas curriculum review for Civil & Environmental Engineering 4 October 2017
51. Panel, Jawatankuasa Penjamin Kualiti Item Dwibahasa (JKPKID) LembagaPeperiksaan 01 June 2017 – 31 December 2018
52. Building Design and Construction Technical Committee Member (CIDB) October 2017 – to date
53. Auditor SETARA 2017, Kementerian Pengajian Tinggi August 2017
54. Trainer for International Malaysia Training (ITMC), Kuala Lumpur November 2016 – to date
55. Engineering Accreditation Council (EAC) Panel (Observer), Monash Universiti 24 - 25 Oct. 2016
56. Invited Lecture on CFRP Strengthening for Reinforced Concrete Structures for Cawangan Kejuruteraan Awam & Struktur, Jabatan Kerja Raya Malaysia, Kuala Lumpur 29 October 2015
57. Committee Member, Penilaian Perunding (JPP), UPM Jun 2015 – to date
58. Exam Questions Moderator, Pengajian Kejuruteraan Awam, Kementerian Pendidikan Malaysia October 2015, November 2016, May 2017, February 2018
59. Committee Member, Review and Update Standard Specification for Road Works, Jabatan Kerja Raya – Section 9 : Concrete Works November 2014
60. Judge for Creative Innovation Technology Competition (CITEC) 2014 13 -14 April 2014
61. Final Examination Items Assessor Panel (IPT), Bengkel Penilai dan Pemurnian Item Peperiksaan Akhir Politeknik Kurikulum Baru, JPP, KPM 24 – 26 September 2014
62. Construction Practices Technical Committee Member (CIDB) September 2009 – to date
63. Benchmarking Visit Auditor, Jawatankuasa Panel Audit Kejuruteraan di UTM, Kementerian Pengajian Tinggi. 20 Mei 2008

### Teaching Experience

Session	Sem	Course	Code	Level	Credit
2007/2008	2	Structural Analysis II	ECV3204	Undergraduate	(3+0)
2007/2008	2	Capstone Design	KAW3813	Undergraduate	(1+2)
2008/2009	1	Prestress Concrete Design	KAW4214	Undergraduate	(3+0)
2008/2009	2	Structural Analysis II	ECV3204	Undergraduate	(3+0)
2009/2010	1	Reinforced Concrete Structures	KAW5212	Postgraduate	(3+0)
2009/2010	1	Structural Analysis I	ECV3202	Undergraduate	(2+0)
2009/2010	1	Bridge Engineering	ECV4202	Undergraduate	(3+0)
2009/2010	2	Design of Tall Building	ECV4203	Postgraduate	(3+0)
2009/2010	2	Bridge Assessment and Rehabilitation	KAW5112	Postgraduate	(3+0)
2009/2010	2	Structural Analysis II	ECV3204	Undergraduate	(3+0)
2010/2011	1	Bridge Engineering	ECV4202	Undergraduate	(3+0)
2010/2011	1	Structural Analysis II	ECV3204	Undergraduate	(3+0)
2010/2011	2	Design of Tall Building	ECV4203	Undergraduate	(3+0)
2010/2011	2	Bridge Assessment and Rehabilitation	KAW5112	Postgraduate	(3+0)
2010/2011	2	Structural Analysis II	ECC3204	Undergraduate	(3+0)
2013/2014	1	Assessment and Rehabilitation of Structures	ECV4701	Postgraduate	(3+0)
2013/2014	1	Bridge Design and Analysis	ECV4701	Postgraduate	(3+0)
2013/2014	2	Design of Tall Building	ECV4203	Undergraduate	(3+0)
2014/2015	1	Bridge Design and Analysis	ECV5224	Postgraduate	(3+0)
2014/2015	1	Assessment and Rehabilitation of Structures	ECV4701	Postgraduate	(3+0)
2015/2016	1	Bridge Design and Analysis	ECV5224	Postgraduate	(3+0)
2015/2016	1	Assessment and Rehabilitation of Structures	ECV4701	Postgraduate	(3+0)
2016/2017	1	Assessment and Rehabilitation of Structures	ECV4701	Postgraduate	(3+0)
2016/2017	1	Bridge Design and Analysis	ECV5224	Postgraduate	(3+0)
2017/2018	1	Engineer and Society	ECV3001	Undergraduate	(3+0)
2017/2018	1	Assessment and Rehabilitation of Structures	ECV5227	Postgraduate	(3+0)
2017/2018	2	Bridge Design and Analysis	ECV5224	Postgraduate	(3+0)
2018/2019	1	Assessment and Rehabilitation of Structures	ECV5227	Postgraduate	(3+0)



2018/2019	1	Design of Tall Building	ECV5226	Postgraduate	(3+0)
2018/2019	2	Bridge Design and Analysis	ECV5224	Postgraduate	(3+0)
2019/2020	1	Assessment and Rehabilitation of Structures	ECV5227	Postgraduate	(3+0)
2019/2020	2	Bridge Design and Analysis	ECV5224	Postgraduate	(3+0)
2019/2020	2	Assessment and Rehabilitation of Structures	ECV4216 ECV4701	Undergraduate	(3+0)
2020/2021	1	Assessment and Rehabilitation of Structures	ECV5227	Postgraduate	(3+0)
2020/2021	2	Bridge Design and Analysis	ECV5224	Postgraduate	(3+0)
2020/2021	2	Assessment and Rehabilitation of Structures	ECV4216	Undergraduate	(3+0)
2020/2021	2	Engineer and Society (Lab)	ECV3001	Undergraduate	(2+1)
2021/2022	1	Assessment and Rehabilitation of Structures	ECV5227	Postgraduate	(3+0)
2021/2022	2	Assessment and Rehabilitation of Structures	ECV4216	Undergraduate	(3+0)
2022/2023	1	Assessment and Rehabilitation of Structures	ECV5227	Postgraduate	(3+0)

#### Publication

##### Cited Index Journals (CIJ)

1. Zakaria, N.A., Ismail, R., Zakwan, F.A.A., Ahmad, H., Rosle, M.F., Hashim, M.H.M, **Raizal S.M. Rashid**, 2023, Numerical Investigation of Fully Confined RC Column with Carbon Fiber Reinforced Polymer when Expose to Fire, Physics and Chemistry of the Earth, vol. 129, 103335
2. Loganina, V., Fediuk, R., Lesovik, V., Amran, M., Qader, D.N., Litvinets, O., Okhotkina, V., **Raizal S.M. Rashid**, Lomov, M., Moskovaya, I., 2023, Evaluation of Some Composite Paint Coatings' Appearance Quality Using Fractal Dimension, Journal of Composites Science, vol. 7(1), 1-9
3. Jayanthi, V., Avudaiappan, S., Amran, M., Prakash, K., Qader, D.N., Delgado, M.C., Flores, E.I.S., **Raizal S.M. Rashid**, 2022, Innovative Use of Micronized Biomass silica-GGBS as agro-industrial by-products for the production of a sustainable high-strength geopolymers concrete, Case Studies in Construction Materials, in press
4. Amran, M., Lesovik, V., Tolstoy, A., Fediuk, R., Rusinov, R., Rusinova, N., Qader, D.N., Mohammed Kachalla, M., **Raizal S.M. Rashid**, 2022, Properties and Performance of Polypropylene Fibered High-Strength Concrete with an Improved Composite Binders, Case Studies in Construction Materials, vol. 17, e01621
5. Abdullah, M.A.H., **Raizal S.M. Rashid**, B., Amran, M., Hejazi, F., Azreen, N.M., Fediuk, R., Voo, Y.L., Vatin, N.I., Idris, M.I, 2022, Recent Trends in Advanced Radiation Shielding Concrete for Construction of Facilities: Materials and Properties, Polymers, vol. 14(14), 2830
6. Chakrawarthy, V., Dharmar, B., Avudalappan, S., Amran, M., Flores, E.S., Alam, M.A., Fediuk, R., Vatin, N.I., **Raizal S.M. Rashid**, 2022, Destructive and Non-Destructive Testing of the Performance of Copper Slag Fiber-Reinforced Concrete, Materials, vol. 15(13), 4536
7. Amran, M., Onaizi, A.M., Fediuk, R., Vatin, N.I., **Rashid, R.S.M.**, Abdelgader, H., Ozbakkaloglu, T., 2022, Self-Healing Concrete as a Prospective Construction Material : A review, Materials, Vol 15(9), 3214
8. Abu Sosain MA, **Rashid Raizal SM**, El-Zaedani M, 2022, Numerical Investigation of CFRP-

- strengthened Circular Concrete Columns under Transverse Impact Loading, Jordan Journal of Civil Engineering, vol. 16, pp 307 - 319
9. M Amran, SS Huang, S Debbarma, **RMR Rashid**, 2022, Fire Resistance of Geopolymer Concrete: A Critical Review, Construction and Building Materials, vol. 324, pp 1-26
  10. Soh, W.S., **Rashid Raizal S.M.**, Amran M, Alengaram U.J., 2022, Structural Behavior of Piles Under Vehicular Collision Load on Bridge Substructure – A Case Study, Case Studies in Construction Materials, Vol. 16, pp 1- 22
  11. Bakar M.B.C, **Muhammad Rashid R.S.**, Amran M, Saleh Jaafar M, Vatin N.I., Fediuk R., 2022, Flexural Strength of Concrete Beam Reinforced with CFRP Bars: A Review, Materials, Vol. 15, pp 1-21
  12. M. Amran, HS Abdelgader, AM Onaizi, R Fediuk, T Ozbakkaloglu, **Raizal SM Rashid**, G Murali, 2022, 3D-printable alkali-activated concretes for building applications: A critical review, Construction and Building Materials, Vol 319, pp 1-24
  13. Mubarak M, **Muhammad Rashid RS**, Amran M, Fediuk R, Vatin N, Klyuev S, 2021, Mechanical Properties of High-Performance Hybrid Fibre-Reinforced Concrete at Elevated Temperatures, Sustainability, Vol 13(23), pp 1-17
  14. D Altalabani, F Hejazi, **RSBM Rashid**, FNA Abd Aziz, 2021, Development of new rectangular rubber isolators for a tunnel-form structure subjected to seismic excitations, Structures, Vol 32, pp1522-1542
  15. S.M. Iqbal S. Zainal, Farzad Hejazi, **Raizal S.M. Rashid**, 2021, Enhancing the Performance of Knee Beam-Column Joint using Hybrid Fibers Reinforced Concrete, International Journal of Concrete Structures and Materials, Vol 15, 20, pp1-28
  16. M.A. Abdul Malek, **R.S.M. Rashid**, A.A. Shukri, M. El-Zeadani, 2021, Experimental Study of Impact Loading Effect on Bridge Substructures including Piles, Vol 31, pp419 – 427
  17. El-Zeadani, M., **Raizal Saifulnaz M.R.**, Amran, M., 2021, Full-range bondstress-slip model for externally bonded FRP plates including a frictional component, Composite Structures, 2021, Vol 262, pp1-25
  18. N.M. Azreen, **Raizal S.M. Rashid**, Y.H. Mugahed Amran, Y.L. Voo, M.Haniza, M. Hairie, Rayed Alyousef, Hisham Alabduljabbar 2020, Simulation of ultra-high-performance concrete mixed with hematite and barite aggregates using Monte Carlo for dry cask storage, Construction and Building Materials, Vol 263, pp1-14
  19. YHM Amran, M El-Zeadani, **MRR Saifulnaz**, R. Alyousef, H. Alabduljabbar, F. Alrshoudi, A. Alaskar 2020, RC beam strengthening using hinge and anchorage approach, Results in Materials, Vol 5, pp1-17
  20. **Raizal S.M. Rashid**, S. Mohammed Salem, N.M. Azreen, Y.L. Voo, M.Haniza, A.A. Shukri, Mohd Syukri Yahya 2020, Effect of elevated temperature to radiation shielding of ultra-high performance concrete with silica sand or magnetite, Construction and Building Materials, Vol 262, pp1-7
  21. M El-Zeadani, **RSM Rashid**, MYH Amran, MI Swi., 2020, Effect of the plate bondstress- slip property on the flexural strength of FRP Plated RC beams using a displacement-based approach, SN Applied Sciences, Vol 2(11), pp1-23
  22. S Basim, F Hejazi, **RSB Muhammad Rashid**, Hafezolghorani Esfahani, M., 2020, Development of finite element model for embedded carbon fiber–reinforced polymer rod in reinforced concrete frame joints, International Journal of Protective Structures, Vol 11(4), pp533-553
  23. S Basim, F Hejazi, **RSBM Rashid**, 2019, Embedded carbon fiber-reinforced polymer rod in reinforced concrete frame and ultra-high-performance concrete frame joints, International Journal of Advanced Structural Engineering, Vol 11(1), pp35-51
  24. El-Zeadani, M., **Rashid, R.S.M.**, Amran, M.Y.H., Hejazi, F., Jaafar, M.S., 2019, Short-term deflection of RC beams using a discrete rotation approach, International Journal of Advanced Structural Engineering, Vol 11(4), pp473-490
  25. El-Zeadani, M., **Saifulnaz, M.R.R.**, Mugahed Amran, Y.H., Hejazi, F., Jaafar, M.S., Alyousef, R., Alabduljabbar, 2019, H. Flexural strength of FRP plated RC beams using a partial-interaction displacement-based approach, Structures, Vol. 22, pp405-420
  26. Mohamed El-Zeadani, **Raizal Saifulnaz MR**, YH Mugahed Amran, F Hejazi, MS Jaafar,

- Rayed Alyousef, Hisham Alabduljabbar, 2019, Analytical mechanics solution for measuring the deflection of strengthened RC beams using FRP plates, Case Studies in Construction Materials, Vol. 11, pp1-14
27. El-Zeadani, M., **Raizal Saifulnaz, M.R.**, Hejazi, F., Mugahed Amran, Y.H., Jaafar, M.S. Alyousef, R., Alrshoudi, F., 2019, Mechanics-based approach for predicting the short-term deflection of CFRP plated RC beams, Composite Structures, Vol 225, pp1-11
  28. Ismail, R., **Rashid, R.S.M.**, Chan, W.C., Jaafar, M.S., Hejazi, F., 2019, Compressive behavior of concrete cylinder fully and partially confined by carbon fibre-reinforced polymer (CFRP), Construction and Building Materials, Volume 201, pp. 196-206
  29. Mugahed Amran, Y.H., Alyousef, R., Alabduljabbar, H., Alrshoudi, F., **Rashid, R.S.M.**, 2019, Influence of slenderness ratio on the structural performance of lightweight foam concrete composite panel, Case Studies in Construction Materials, Volume 10, pp. 1-24
  30. Hashim, D.T., Hejazi, F., Jaafar, M.S., Lai, V.Y., **Rashid, R.S.M.**, 2019, Performance of base connections for concrete segmental communication tower, International Journal of Civil Engineering and Technology, Volume 10 (2), pp 2040-2056
  31. Mugahed Amran, Y.H., Alyousef, R., **Rashid, R.S.M.**, Alabduljabbar, H., Hung, C.-C., 2018, Properties and applications of FRP in strengthening RC structures: A review. Structures. Volume 16, pp. 208-238
  32. Azreen, N.M., **Rashid, R.S.M.**, Haniza, M., Voo, Y.L., Mugahed Amran, Y.H., 2018, Radiation shielding of ultra-high-performance concrete with silica sand, amang and lead glass. Construction and Building Materials. Volume 172, pp. 370-377
  33. Mugahed Amran, Y.H., **Rashid, R.S.M.**, Hejazi, F., Safiee, N.A., Bida, S.M., 2018, Structural performance of Precast Foamed Concrete Sandwich Panel subjected to axia load, KSCE Journal of Civil Engineering. Volume 22 (4), pp 1179-1192
  34. Amran, Y.H.M., **Rashid, R.S.M.**, Hejazi, F., Safiee, N.A., Ali, A.A.A., 2016, Response of Precast Foamed Concrete Sandwich Panels To Flexural Loading, Journal of Building Engineering, Vol.7, pp. 143-158
  35. Mugahed Amran, Y.H., Abang Ali, A.A., **Rashid, R.S.M.**, Hejazi, F., Safiee, N.A., 2016, Document Structural Behavior of Axially Loaded Precast Foamed Concrete Sandwich Panels, Construction and Building Materials, Vol.172, pp. 307-320
  36. Al-Adnani, N.N.A., Mustapha, F., Sapuan, S.M., **Saifulnaz, M.R.R.**, 2016, Structural Health Monitoring And Damage Identification For Composite Panels Using Smart Sensor, Source of the Document Journal of Intelligent Material Systems and Structures, Vol. 27 (17), pp. 1-11
  37. Farzad Hejazi, Mohammad Dalili Shoaee, Mohd Saleh Jaafar and **Raizal Saifulnaz Bin Muhammad Rashid**, 2015, Effect of Viscous Dampers on Yielding Mechanisms of RC Structures During Earthquake, Journal of Earthquake and Structures, IF1.23, 8 (6), pp. 1499-1528
  38. H.Abdi, F. Hejazi, M.S. Jaafar, I.A. Karim and **R. Saifulnaz**, 2015, Response Modification Factor for Steel Structure Equipped with Viscous Damper Device, International Journal of Steel Structures, 15 (3), pp. 605-622
  39. Darain, K.M., Jumaat, M.Z., Nazimuddin, S.M., Ahsan, A., **Rashid, R.**, Aziz, M.M.A., Obaydullah, M., Islam, A.B.M.S., 2015, A review of The Corrosion Behavior Of Metallic Heritage Structures And Artifacts, Jurnal Teknologi, 77 (1), pp.95-100
  40. **Raizal Rashid** and Riyadh S. Aboutaha, 2014, Analytical Model for CFRP Strengthened Circular RC Columns under Elevated Temperature Computers and Concrete, An International Journal, Vol.13(4), pp 517-529
  41. Behzad Nematollahi, Yen Lei Voo and **Raizal Saifulnaz M.R.**, 2014, Structural Behavior of Precast Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) Cantilever Retaining Walls : Part II – Full Scale Experimental Testing, KSCE Journal of Civil Engineering, Vol.18(5), pp 1481-1495
  42. Behzad Nematollahi, Yen Lei Voo and **Raizal Saifulnaz M.R.**, 2014 Structural Behavior of Precast Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) Cantilever Retaining Walls : Part I – Analysis and Design Procedures and Enviromental Impact Calculations (EIC) KSCE Journal of Civil Engineering, Vol.18(5), pp1470-1480



43. Behzad Nematollahi, **M.R. Raizal Saifulnaz**, and Yen Lei Voo, 2014, Sustainability Assessment of Precast Ultra-High Performance Fiber Reinforced Concrete (UHPFRC) Cantilever Retaining Walls, Research Journal of Applied Sciences, Engineering and Technology, Vol.7(19), pp. 3971-3977
44. O. Kohnepooshi, J. Noorzaei, M.S. Jaafar and **Raizal Saifulnaz. M.R.**, 2011, Development of a Special Interface Element Between Brick and Plate Bending Elements, Procedia Engineering Vol.14, pp734-742
45. O. Kohnepooshi, J. Noorzaei, M.S. Jaafar, A.A. Abdulrazeq and **M.R. Raizal Saifulnaz**, 2011, 3D Numerical Models for Reinforced Concrete Components, Materials Science and Engineering, Vol.17(1), pp71-82
46. O. Kohnepooshi, J. Noorzaei, M.S. Jaafar, A.A. Abdulrazeq and **M.R. Raizal Saifulnaz**, 2011, Three Dimensional Finite Element Modeling of Reinforced Concrete Beams, Using Lagrangian and Truss-Linkage Element, Asean Journal of Civil Engineering (Building and Housing), Vol.17(1): 1-11
47. Omid Kohnepooshi, Mohd Saleh Jaafar, Jamaloddin Noorzaei and **Raizal Saifulnaz Muhammad Rashid**, 2010, Three Dimensional Finite Element Simulation of Reinforced Concrete Beams Post-tensioned in Shear Region, KCSE Journal of Civil Engineering, Vol.15(6), pp1081-1090
48. Oehlers, D.J., **Rashid, R.** and Seracino, R., 2008, IC Debonding Resistance of Groups of FRP NSM Strips In Reinforced Concrete Beams, Construction and Building Materials, Vol.22(7), pp1574—1582
49. **Rashid, R.**, Oehlers, D.J. and Seracina, R., 2008 IC Debonding of FRP NSM and EB Retrofitted Concrete : Plate and Cover Interaction Tests. Journal of Composite for Construction , Vol.12(2), pp160--167.
50. Seracino, R., **Raizal Saifulnaz, M.R.**, and Oehlers, D.J., 2007, Generic Debonding Resistance of EB and NSM Plate-To-Concrete Joints, Journal of Composite for Construction, Vol.11(1), pp62—70

#### Non Cited Index Journals (NonCIJ)

1. Mohamed El-Zeadani, **Raizal Saifulnaz Muhammad Rashid**, Mugahed Yahya Hussein Amran, Mohamed Ibrahim Swi, 2020, Effect of the plate bondstress-slip property on the flexural strength of FRP Plated RC beams using a displacement-based approach, SN Applied Sciences, Vol 2(11), pp1-23
2. YH Mugahed Amran, Mohamed El-Zeadani, **MR Raizal Saifulnaz**, Rayed Alyousef, Hisham Alabduljabbar, Fahed Alrshoudi, Abdulaziz Alaskar, 2020, RC Beam Strengthening Using Hinge and Anchorage Approach, Results in Materials, Vol 5, pp1-17
3. Y.H. Muhaged Amran, **Raizal S.M. Rashid**, Farzad Hejazi, Nor Azizi Safiee, A.A. Abang Ali, 2016, Structural Behavior of Laterally Loaded Precast Foamed Concrete Sandwich Panel, International Journal of Civil and Environmental Engineering, Volume 10(3), pp. 270-278
4. Y.H. Muhaged Amran, **Raizal S.M. Rashid**, Farzad Hejazi, Nor Azizi Safiee, A.A. Abang Ali, 2016, Structural Behavior of Precast Foamed Concrete Sandwich Panel Subjected to Vertical In-Plane Shear Loading, International Journal of Civil and Environmental Engineering, Volume 10(6), pp. 705-714
5. Nisreen N. Ali, F. Mustapha, S. M. Sapuan, **R. S. M. Rashid**, 2015, An Approach and Experimental Technique for Damage Detection of Composite Penals Using PZT Sensor, International Journal of Civil and Structural Engineering Research, Vol 3, pp29-38
6. M. S. Mohd Amirul, **M. R. Raizal Saifulnaz**, N. A. Farah, S. Norazizi, 2014, Bond Slip Model of FRP-to-Concrete Surfaces, International Journal of Sustainable Materials and Structural Systems, Vol.1(4), pp332-350
7. KM Darain, A Ahsan, ABMS Islam, M Obaydullah, **RSM Rashid.**, 2014, Investigating the

- deterioration of an industrial heritage structure, *International Journal of Sustainable Materials and Structural Systems*, Vol 1(3), pp. 282-302
8. Behzad Nematollahi, **Raizal Saifulnaz M.R.**, Mohd Saleh Jaafar and Yen Lei Voo, 2012, A Review on Ultra High Performance 'Ductile' Concrete (UHPdC) Technology, *International Journal of Civil and Structural Engineering* Vol.2(3), pp1003-1018.
  9. O. Kohnepooshi, J. Noorzaei, M.S. Jaafar and **M.R.R. Saifulnaz**, 2011, A New 3D Interface Element for Three Dimensional Finite Element Analysis of FRP Strengthened RC Beams, *Interaction and Multiscale Mechanics*, Vol.4(4), pp257-271
  10. Algorafi, M.A., A.A.A. Ali, M.S. Jaafar, I. Othman, M.P. Anwar and **R. Rashid.**, 2009, Effect of Torsion on Externally Prestressed Segmental Concrete Bridge with Shear Key, *American J. of Engineering and Applied Sciences*, Vol.2(1), pp54-60

### Conference Proceedings

1. Hamzah, M.K., **Rashid, R.S.M.**, Hejazi, F., Cyclic performance of exterior R.C beam-column strengthened with different thicknesses of CFRP sheets, 2nd International Conference of Al-Esraa University College for Engineering Sciences (ICAUC\_ES 2021) 3rd-4th November 2021, Baghdad, Iraq
2. Zakwan, F.A.A., Ismail, R., Ahmad, H., **Rashid, R.S.M.**, 3D Finite Element Simulation of Reinforced Concrete Column Strengthened By Partially Confined Carbon Fibre Reinforced Polymer Under Concentric Loading, *International Conference on Concrete Sustainability*, 8th-10th September 2021, Prague, Czech Republic.
3. R Ismail, **RSM Rashid**, FAA Zakwan, H Ahmad, F Hejazi, Axial behaviour of strengthened circular hollow reinforced concrete column with CFRP partial confinement, *International Conference on Concrete Sustainability*, 8th-10th September 2021, Prague, Czech Republic.
4. Al-Doori, A.-H., **Rashid, R.S.M.**, Tasdemir, E., Seracino, R., Determination of a Large-Diameter Carbon Fiber Anchor Capacity, 10th International Conference on Fibre-Reinforced Polymer (FRP) Composites in Civil Engineering, CICE 2021; 8 – 10 December 2021, Istanbul, Turkey
5. Nor SMM, **Raizal SM Rashid**, El Zeadani M, Yeketi AN, Shukri AA, Effect of Fire Insulation Materials on Cable Action of CFRP plated RC Beams under Elevated Temperature, *International Symposium on Blast and Impact Resistant Materials for Civil Engineering*, SBIRMCE 2021 CICE 2021; 16 November 2021, UPM, Malaysia
6. **Raizal SM Rashid**, Effect of Fire Insulation Materials on Cable Action of CFRP plated RC Beams under Elevated Temperature, *International Seminar On Forensic Engineering: Leveraging The Fourth Industrial Revolution (Ir 4.0) To Create Future Opportunities And Manage Challenges In Forensic Engineering*; 4 - 6 October 2021, Melaka, Malaysia
7. Ismail, R., **Rashid, R.S.M.**, Zakwan, F.A.A., Hejazi, F., Experimental study of circular hollow reinforced concrete column strengthened with partial Carbon Fibre Reinforced Polymer (CFRP) confinement, 7th International Conference on Euro Asia Civil Engineering Forum, EACEF 2019; 30 Sept 2019 - 2 Oct 2019, Stuttgart; Germany
8. Zulkifli SNI, Mohd Hisbany MH, Ismail R, Zakwan FAA, Hazrina A, Ismail BN, **Rashid RSM**, Application of shape memory alloys (SMA) as a retrofit and strengthening component on reinforced concrete columns: Review Paper, 2nd Joint International Conference on Emerging Computing Technology and Sports, JICETS 2019, 25 – 27 November 2019, Bandung, Indonesia.
9. Ahmed, R., Jaafar, M.S., Bareq, M., Hejazi, F., **Rashid, R.S.M.**, Effect of supplementary cementitious material on chemical resistance of concrete, *Sustainable Civil and Construction Engineering Conference 2018*, SCCEC 2018; 25 - 27 August 2018, University Putra Malaysia, Kuala Lumpur; Malaysia

10. Abdulrahman Ftaikhan, A., Hejazi, F., **Rashid, R.S.M.**, Ostovar, N., Performance of Reinforced-Concrete Frame with Embedded FRP rod, Effect of supplementary cementitious material on chemical resistance of concrete, Sustainable Civil and Construction Engineering Conference 2018, SCCEC 2018; 25 - 27 August 2018, University Putra Malaysia, Kuala Lumpur; Malaysia
11. Hairum, H., Hejazi, F., **Rashid, R.S.M.**, Saleh Jaafar, M., Review paper on development of interactive user guideline for finite element software, Sustainable Civil and Construction Engineering Conference 2018, SCCEC 2018; 25 - 27 August 2018, University Putra Malaysia, Kuala Lumpur; Malaysia
12. Ahmed, B.R., Hussein, A.-J., Saleh, D., **Rashid, R.S.M.**, Influence of Carbon Nanotubes (CNTs) in the Cement Composites, Sustainable Civil and Construction Engineering Conference 2018, SCCEC 2018; 25 - 27 August 2018, University Putra Malaysia, Kuala Lumpur; Malaysia
13. Sarah, J., Hejazi, F., **Rashid, R.S.M.**, Ostovar, N., A Review of Dynamic Analysis in Frequency Domain for Structural Health Monitoring, Sustainable Civil and Construction Engineering Conference 2018, SCCEC 2018; 25 - 27 August 2018, University Putra Malaysia, Kuala Lumpur; Malaysia
14. Talib Khalid, W.T., Qazi, O., Abdirizak, A.M., **Rashid, R.S.M.**, Comparison of different waste materials used as cement replacement in concrete, Sustainable Civil and Construction Engineering Conference 2018, SCCEC 2018; 25 - 27 August 2018, University Putra Malaysia, Kuala Lumpur; Malaysia
15. Ismael Adil, A., Hejazi, F., **Rashid, R.S.M.**, Voided Biaxial Slabs - State of Art, Sustainable Civil and Construction Engineering Conference 2018, SCCEC 2018; 25 - 27 August 2018, University Putra Malaysia, Kuala Lumpur; Malaysia
16. Hassan, A.M., **Rashid, R.S.M.**, Ahmad, N., Alam, S., Hejazi, F., Safiee, N.A., Behaviour of Super elastic Nickel Titanium Shape Memory Alloy Material under Uniaxial Testing and its Potential in Civil Engineering. International Conference on Civil, Offshore & Environmental Engineering 2018 (ICCOEE 2018), August 13-14, 2018. Kuala Lumpur, Malaysia
17. Hejazi, F., **Rashid, R.S.M.** and Jaafar, M.S., Evaluate Effect Of Rubber Wall Damper In Seismic Response Of Reinforced Concrete Structure, 8th World Congress on Joints, Bearings and Seismic Systems for Concrete Structures 2016, Atlanta, Georgia, USA
18. Sarah Jabbar, Farzad Hejazi, Ng Wan Chi, **Raizal Saifulnaz Muhammad Rashid**, Mohd Saleh Jaafar, Evaluate Effect of Opening in Shear Walls in Seismic Response of Structures. 6th Brunei International Conference on Engineering And Technology (BICET) 2016, Universiti Teknologi Brunei, Brunei Darussalam, 14 - 16 November 2016
19. Ismail, R., **Rashid, R.S.M.** and Jaafar, M.S., Review of Hollow Reinforced Concrete Column with CFRP Confinement: Research Progress. Fourteenth East Asia-Pacific Conference on Structural Engineering and Construction (EASEC-14), January 6-8, 2016. Ho Chi Minh City, Vietnam
20. Ismail, R., **Rashid, R.S.M.**, Jaafar, M.S. and Hejazi, F., State-of-the-art : CFRP Strengthening and Rehabilitation Confinement of Hollow Reinforced Concrete Bridge Columns. 7th International Conference on Advanced Composite Materials in Bridges and Structures, 22-24 August 2016, British Columbia, Canada
21. **Raizal Saifulnaz Muhammad Rashid**, Thamer Ahmad Mohammad, Azlan A. Aziz, Farah Nora Aznieta Abd. Aziz. Civil Engineering Design Project: A Demonstration Of A Proposed Learning Organization Model. FEIIC International Conference on Engineering Education and Research, 19-21 December 2015, Madinah, Saudi Arabia
22. Mohd Zuwairi Samsuddin, **Raizal Rashid** and Riyadh Aboutaha., Axial Strength of CFRP Strengthened Concrete Columns Under Elevated Humid Environments, 12th International Symposium on Fiber Reinforced Polymers for Reinforced Concrete Structures (FRPRCS & The 5th Asia-Pacific Conference on Fiber Reinforced Polymers in Structures (APFIS-

- 2015)Joint Conference, 14-16 December 2015, Nanjing, China
23. **M.R. Raizal Saifulnaz**, M.H Azmia, A Riyad and P.Alireza, Effects of Temperature on the CFRP Confining Pressure in Strengthened Concrete Columns, 12th International Symposium on Fiber Reinforced Polymers for Reinforced Concrete Structures (FRPRCS & The 5th Asia-Pacific Conference on Fiber Reinforced Polymers in Structures (APFIS-2015)Joint Conference, 14-16 December 2015, Nanjing, China
  24. **R. Rashid** and R. S., Aboutaha (2013). Analytical Model for CFRP Strengthened RC Columns in Humid Conditions. 3rd International Conference on Sustainable Construction Materials and Technologies. 18th-21st August 2013, Kyoto, Japan.
  25. **R. Rashid** and Riyad S., Aboutaha (2013). Analytical Model for CFRP Strengthened RC Columns at Elevated Temperatures. 2013 International Van Earthquake Symposium. 23- 27 October. Van, Turkey.
  26. **Raizal Saifulnaz Muhammad Rashid** (2012). Shear capacity of fiber reinforced polymer strengthened reinforced concrete beams. 72nd NYSATE Conference. 23-25 May. Syracuse, New York.
  27. Panjehpour M, **Rashid RSM** and Aznieta FN, Ali AAA (2012). A review for characterization of FRP composite in the concrete structures. 11th International Conference on Concrete Engineering and Technology 2012 (CONCET), 12-13 June 2012, Putrajaya.
  28. Behzad Nematollahi, **Raizal Saifulnaz M.R.** and Yen Lei Voo, Ultra High Performance Concrete (Uhcp) Technology From Material To Structure: A Review, International Building & Infrastructure Technology Conference 7-8 June 2011, Vistana Hotel, Penang, Malaysia
  29. O. Kohnepooshi, J. Noorzaei, M.S. Jaafar, **M.R. Raizal Saifulnaz**, A.A. Abdulrazeg. A 3D Interface Element For Plate Bending Elements. World Engineering Congress 2010, 2nd – 5th August 2010, Kuching, Sarawak, Malaysia Conference on Buildings and Infrastructure Technology
  30. **Raizal Saifulnaz MR**, An Overview of Intermediate Crack Debonding Capacity For Externally And Near Surface Mounted Bonded FRP Plate. World Engineering Congress 2010, 2nd – 5th August 2010, Kuching, Sarawak, Malaysia Conference on Buildings and Infrastructure Technology
  31. Seracino, R., Oehlers, Deric John and **Raizal Saifulnaz, M.R.**, Towards a Generic Model of The Intermediate Crack Debonding Resistance of Plates Adhesively Bonded to Concrete, Proceeding of The International Symposium on Bond Behaviour of FRP Structures, 7-9 December 2005. Hong Kong, China

#### Seminar/Conference/Lecture (Invited Speaker)

1. Invited speaker, Shear capacity of fiber reinforced polymer strengthened reinforced concrete beams at the 72th NYSATE Conference. 23-25 May 2012. Syracuse, New York.
2. Invited lecture on CFRP Strengthening for Reinforced Concrete Structures, Cawangan Kejuruteraan Awam & Struktur, Jabatan Kerja Raya Malaysia, 2015 Kuala Lumpur
3. Invited speaker, Assessment and Structural Integrity of existing building in Malaysia, Seminar Keutuhan Bahan 2018, Agensi Nuklear Malaysia, Hotel Cititel Midvalley, Kuala Lumpur.
4. Invited speaker, Condition Assessment of the Deteriorated Reinforced Concrete Bridge: Jambatan Sg. Senduk Hulu, Jambatan Sg. Cheh and Jabatan Sg. Bukit Gantang, PIARC International Seminar On Towards Advanced Technology & Material In Bridge Engineering 2019, Sunway Putra Hotel, Kuala Lumpur
5. Invited lecture on Building Assessment, Pejabat Pembangunan dan Pengurusan Aset (PPPA) 2019, Universiti Putra Malaysia
6. Invited lecture on Basic Foundation Works, Ikram Training and Infrastructure Development Institute 2019, Kumpulan IKRAM Sdn Bhd



7. Invited speaker, Chemical, Non-Destructive Test (NDT) and Residual Capacity Evaluation for Deteriorated Reinforced Concrete Structures, CREaTE International Seminar On Forensic Engineering : Leveraging the Fourth Industrial Revolution (IR 4.0) to Create Future Opportunities and Manage Challenges in Forensic Engineering 2021, CREaTE , Melaka
8. Lecture, Design of Structural Strengthening Using Steel Plate Bonding, CFRP and Others, 2022, CREaTE, Melaka
9. Invited speaker, Natural Disaster Mitigation for SDGs 2030, 2022, Universitas Hasanuddin, Sulawesi Selatan, Indonesia.
10. Invited speaker, Seminar on Non-Destructive Testing in Civil Engineering, 2022, Agensi Nuklear Malaysia.

### Books

1. Mohd Shahrizal Ab Razak, Aidi Hazimi Ales@ALias, Nabilah Abu Bakar, **Raizal Saifulnaz Muhammad Rashid**, 30 tahun Jabatan Kejuruteraan Awam 1985 - 2015, (ISBN-978-967-344-592-9)

### Chapter in Books

1. **Raizal Saifulnaz Muhammad Rashid** and Dahlia Zawawi, 2011, It All Came Down: Case Study: A New Teaching-Learning Method in Civil Engineering, UPM Press, Serdang,. (ISBN-978-967-344- 244-9)
2. Jabbar, S., Hejazi, F., **Rashid, R.S.M.**, 2019, Nonlinear analysis of reinforced concrete hollow beam with GFRP bars and stirrups using finite element method under cyclic load, Lectures Notes in Civil Engineering, pp. 485-501
3. Jabbar, S., Hejazi, F., Jaafar, M.S., **Rashid, R.S.M.**, 2019, Seismic behaviour of prestressed and normal reinforcement of communication tower with ultra-high performance concrete, high strength concrete and normal concrete materials, Lectures Notes in Civil Engineering, pp. 579-594

### Standards

1. Guide to Modular Coordination in Buildings – Part 10, Coordinating Sizes and Preferred Sizes for Reinforced Concrete Components, MS 1064-10:2018, Department of Standards Malaysia
2. Standard Specification for Road Works, Jabatan Kerja Raya – Section 9 : Concrete Works, JKR / SPJ / 2008-S9 (Pindaan 2018)
3. Manual on Bridge Asset Management, Road Engineering Association Malaysia, REAM- GL 13/2011
4. Demolition of Buildings – Code of Practice, MS 2318:2010, SIRIM
5. Temporary Construction Site Workers' Amenities and Accommodation –Code of Practice, CIDB (Pending for Public Comments)
6. Guide to Modular Coordination in Buildings – Part 8, Coordinating Sizes and Preferred Sizes for Reinforced Concrete Components, Department of Standards Malaysia (Pending for Public Comments)
7. Guide to Modular Coordination in Buildings – Part 3, Coordinating Sizes and Preferred Sizes for Reinforced Concrete Components, Department of Standards Malaysia (Pending for Public Comments)



## Articles

1. **Raizal Saifulnaz Muhammad Rashid** and Ahmad Azim Shukri, Heritage Buildings: Sources of Damage and Assessment Methods, *The Ingenieur*, Vol. 85 January – March 2021, Pp 36-45.

## Journals and Books Reviewer (Cited)

1. Hong-yan Chu (2020), Mechanical properties and environmental evaluation of ultra-high-performance concrete with aeolian sand, *Construction Building Materials*
2. Manh-Hung HO (2020), Flexural performance of composite reinforced concrete beams, *Structures*
3. Kaspar Lasn (2020), Blast protection of concrete columns with thin strips of GFRP overlay, *Structures*
4. Yaman Sami Shareef Al-Kamaki (2019), Experimental and Numerical Study on Wrapping Concrete Cylinders under Preload using CFRP Fabrics, *Construction Building Materials*
5. Kil-Hee Kim (2019), Pure Torsional Behavior of RC Beams in Relation to the Amount of Torsional Reinforcement and Cross-Sectional Properties, *Construction Building Materials*
6. Tan, Jiawei; Li, Xiaopeng; Pan, Jinlong and Cai, Jingming (2019); Bond behaviors between FRP rebars and ECC under direct pullout conditions, *Advances in Structural Engineering*
7. Khaled Mohammed Alaa (2019), New Definition For Torsional Irregularity Based On Floors Rotations Of Reinforced Concrete Buildings, *Structures*
8. Yaman Sami Shareef Al-Kamaki (2019), Ultimate Strain Models Derived using a Digital Image Correlation (DIC) System for Preloaded RC Columns Subjected to Heating and Cooling and Confined with CFRP Sheets, *Structures*
9. Abo Sabah, Saddam; Zainal, Nur; Muhamad Bunnori, Norazura; Megat Johari, Megat; Hassan, Mohd (2019); Interfacial behavior between normal substrate and green ultra-high performance fiber reinforced concrete under elevated temperatures, *Structural Concrete*
10. Haider M. Al-Jelawy and Kevin R. Mackie (2019), Durability and Failure Modes of Concrete Beams Strengthened with Polyurethane or Epoxy CFRP, *Structures*
11. Muhammad Usman Hanif, Zainah Ibrahim, Khaled Ghaedi, Huzaifa Hashim, Ahad Javanmard (2018), Damage assessment of reinforced concrete structures using a model-based nonlinear approach – A comprehensive review, *Construction and Building Materials*
12. R. Yu, L. van Beers, P. Spiesz, H.J.H. Brouwers (2018), Impact resistance of a sustainable Ultra-High Performance Fibre Reinforced Concrete (UHPFRC) under pendulum impact loadings, *Construction and Building Materials*
13. 2017, Experimental Study of Concrete Prepared With Fine Recycle Aggregate and Treated Coarse Recycle Aggregate, *Journal of Materials and Structural Integrity*
14. A. Masood, M.M. Alam, A. Umar, M. Shariq and A. Haiyan (2016), Behavior of confined high strength concrete at elevated temperature, *Computers and Concrete, An International Journal*
15. Yaman Al-Kamaki and Riadh Al-Mahaidi (2016) Strength model for heat-damaged RC circular columns confined with CFRP fabrics, *Journal of Reinforced Plastics and Composites*.
16. Jiangtao Yu, Yanning Xu, Jing Chen, Thomas L. Attard (2015), A Preliminary Study to Enhance the Ductility of Near-Surface Mounted CFRP Strengthened RC Beam, *Journal of Composites for Construction*
17. Amir Mofidi, Omar Chaallal, Lijuan Cheng and Yixin Shao (2014), Investigation of Near-Surface Mounted Method for Shear Rehabilitation of Reinforced Concrete T-Beams using CFRP Rods, *Journal of Composites for Construction*
18. Omar I. Abdelkarim, Mohamed A. ElGawady (2014). Finite Element Modelling of FRP-Concrete-Steel Double-Skin Tubular-Column. *Journal of Bridge Engineering*.
19. Y. Ye, Z. X. Guo and L. Chai (2013). Flexural behaviour of stone slabs reinforced with

- prestressed NSM CFRP bars. *Journal of Composites for Construction*.
20. El-Hacha, R. And Oudah, F. (2013). Post-Fatigue Monotonic Behavior of RC Beams Strengthened with Prestressed NSM CFRP Strips: Ductility Evaluation. *Journal of Composites for Construction*.
  21. Detection of Multiple cracks in a Finite Element RC beam model using Local Stiffness Indicator. (2008) Institute of Engineers Malaysia.
  22. Jaafar, M.S., Wong, N.J., Noorzaei, J. And Thanoon, W.A. (2008). Modelling of precast concrete composite slab using finite and interface elements. *Pertanika Journal of Science & Technology*

#### **Journals and Books Reviewer(Non-Cited)**

1. 2020, Normal Concrete Mix Design Based On The Isoresponse Of Slump As A Function Of Specific Surface Area Of Aggregate And Cement Paste-Aggregate Ratio, *International Journal of Technology*
2. S. A. Al-Ta'an and R.N. Wadie (2010). Flexural Strength of Steel Fibrous Reinforced Concrete Beams. The 4th World Engineering Congress on 2-5 August, 2010 in Kuching, Malaysia.
3. J. R. Al-Feel and M. Abdul Aziz (2010). Fresh and Hardened properties of self-compacted concrete using Lime-Stone Dust or Clinker waste powder at different curing conditions. The 4th World Engineering Congress on 2-5 August, 2010 in Kuching, Malaysia.
4. O.A. Alawad, A.R. Al-Hozaimy, M.S. Jaafar, A.A.Al-Neghemish and J.Noorzaei (2010). Characterization of Pozzolan Materials used as Partial cement replacement: A review. The 4th World Engineering Congress on 2-5 August, 2010 in Kuching, Malaysia.
5. S. A. Al-Ta'an and A. A. Mohammed (2010). Tensile Strength and Behaviour of Single Short Headed Anchors in Steel Fibrous Concrete. The 4th World Engineering Congress on 2-5 August, 2010 in Kuching, Malaysia.
6. Rozaina Ismail, Azlan Adnan and Azmi Ibrahim (2010). Vulnerability of Public Buildings in Sarawak subjected to Earthquake by Finite Element Modeling. The 4<sup>th</sup> World Engineering Congress on 2-5 August, 2010 in Kuching, Malaysia.
7. Trade Liberalization and Environmental Sustainability in Malaysia, 7<sup>th</sup> Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context 2015
8. Utilization of Agricultural Waste in Polymer Composites, 7<sup>th</sup> Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context 2015.
9. Penerbit UPM, Steel Design Based on Eurocode 3, 2015
10. Dewan Bahasa dan Pustaka, Buangan Kelapa Sawit Bernilai Tinggi, 2018.
11. C. L. Oh, M. Z. Mohd Raizamzamani, Y. Norrul Azmi, C. H. Goh, S. W. Lee, Experimental Work on Flexural Strength of SCC Beams Containing Eggshell, *Green Technology and Sustainable Development* 2018
12. T. Jena, K. C. Panda (2018), Strength and Sorptivity of Concrete Using Fly Ash And Silpozz In Marine Environment, *Journal of Engineering Science and Technology*
13. Tongyuan Ni, YANG Yang, Chunping Gu, Jintao LIU, CHEN Jin and Xiaotian Lou (2019), Early-Age Tensile Basic Creep Characteristics of High Strength Concrete Containing Admixtures, *Advances in Civil Engineering*
14. Prof. Dr Nasir Shafiq, Investigating The Functional Characteristics Of A Hybrid Mixture Of Graphene And Graphene Oxide Nanoplates As An Additive In The Geopolymer Paste For Protecting The Offshore Structures (2019), UTP RMC Grant Proposal

**Principal Investigator**

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Investigation on Fiber Reinforced Polymer Plated Structures Research University Grants Scheme	30,000	2009-2011	RUGS
2.	Flexural and Shear Capacity of Fiber Reinforced Polymer Strengthened Reinforced Concrete Structures	50,000	2009-2011	FRGS
3.	Investigation of CFRP Strengthened RC Columns under Humid and Elevated Temperature Conditions	93,000	2013-2015	FRGS
4.	Development of New Analytical Model for Carbon Fiber Reinforced Polymer Strengthened Reinforced Concrete Circular Columns Under Humidity and Temperature Exposure	122,000	2015-2017	Geran Putra Berimpak
5.	Shape Memory Alloy (SMA) Application in Retrofit and Strengthening Circular Hollow Reinforced Concrete Column	14,800	2016-2018	Geran Putra Inisiatif Siswazah
6.	Elastomeric Rubber Bearing Using Carbon Fiber Reinforced Polymer As Alternative To Steel Plate For Earthquake Isolation	20,000	2016-2018	Geran Putra Inisiatif Siswazah
7.	Development of Smart Structural Strengthening Technique Using Shape Memory Alloy (SMA)	99,980	2017-2019	Geran Putra Berimpak
8.	Circular FRP (Fiber Reinforced Polymer) Seismic Elastomeric Bearings Fitted With Shape Memory Alloy Wire	50,000	2018-2020	Geran Putra
9.	Research attachment: North Carolina State University (NCSU)	21,320	2018	Geran Kolaborasi
10.	Inspection Procedures for Better and Efficient Building Maintenance in UPM	54,500	2018-2019	Geran Isu Semasa
11.	Determination of Large Diameter Carbon Fiber (CF) Anchor Capacity	4,150	2019-2020	Geran Kolaborasi Antarabangsa (Syracuse University)
12.	A Novel Strength Parameters Study of Shape Memory Alloy as Smart Retrofitting Technique for Circular Bridge Column.	116,200	2020-2022	FRGS
13.	Flexural Performances Of Precast Concrete Beam Reinforced With Carbon Fibre Reinforced Polymer (CFRP) Rebars	25,000	2020-2023	Geran Putra Inisiatif Siswazah
14.	Prediction of Damage Behavior of Fiber Reinforced Concrete Slab Subjected to Impacts Load	15,957	2020-2021	Geran Antarabangsa (Sudan University of Science and Technology)

## Co-Researcher

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Formulation of Partially Prestressed Concrete Frame Elements Subjected to Dynamic Loads	93,800	2015-2017	FRGS
2.	Development and Construction of the First World Internet Transmission Tower Using Ultra High Performance Concrete	1,370,231 (UPM received 100,000)	2015-2016	Technofund (MOSTI)
3.	Investigation Of Out-Of-Plane Buckling Of Slender Reinforced Concrete Shear Wall Designed In Non-Seismic Region	60,000	2016-2018	Geran Putra Inisiatif Putra Muda
4.	Rubber Wall Damper Device For Framed Structures Subjected To Dynamic Loads	420,800	2017-2019	Geran Putra Pembangunan Inovasi
5.	Strength characterization of the CFRP confined circular reinforced concrete column under high temperature (PI : UiTM)	61,400	2018-2020	FRGS
6.	Constitutive modeling of reinforced concrete circular columns strengthened with shape memory alloy strips (PI : UiTM)	63,500	2018-2020	FRGS
7.	Vibration Damper Research and Testing For Re-Gasification Terminal Sungai Udang (RGTSU)	193,430	2020-2021	Petronas Technical Services Sdn Bhd (PTSSB)
8.	Research & Development of Piping Vibration Quick Solutions	197,300	2020-2021	Petronas Technical Services Sdn Bhd (PTSSB)
9.	Structural And Construction Assessment And Forensic Studies For Cendana Apartments, Rawang	168,590	2020-2022	Mahsing Group Company
10.	Moment-Curvature Model of Reinforced Concrete Beam Strengthened with Shape Memory Alloy (SMA)	100,985	2021-2023	FRGS

## Patent/Copyright

No	Patent Number	Product
1.	MY-168334-A	Elastomeric Isolator using multilayer CFRP Rubber Bearing as an alternative to steel plates.
2.	AR2020003562	Modern Pig Farming Model (MPF)

## Memorandum of Understanding (MoU)

No	Parties	MoU
1.	UPM - JKR	Kerjasama Strategik Dalam Bidang Kejuruteraan Forensic Struktur (2021 – 2026)

Awards/Acknowledgement					
No	Name of awards	Title	Award Authority	Award Type	Year
1.	2000 Excellence in Service	-	UPM	University	2001
2.	2001 Excellence in Service	-	UPM	University	2002
3.	2002 Excellence Award in Service	-	UPM	University	2003
4.	PhD scholarship, University of Adelaide, Australia. (for UPM, Non – Academic Staff)	-	UPM	University	01/06/2003 – 01/01/2007
5.	2008 Excellence in Service	-	UPM	University	2009
6.	2008 Excellence Award in conjunction with Appreciation and Quality Day, Engineering Faculty, UPM	-	UPM	University	2009
7.	2009 Excellence Award in conjunction with Appreciation and Quality Day, Engineering Faculty, UPM	-	UPM	University	2010
8.	Silver Medal (Co-Researcher)	Development of Numerical 3D Finite Element Code F to Simulate Structural Response of Reinforced and Prestressed Concrete Bridges	UPM Invention, Research and Innovation 2010 Exhibition	University	20-22 July 2010
9.	2010 Excellence in Service	-	UPM	University	2011
10.	2010 Excellence Award in conjunction with Appreciation and Quality Day, Engineering Faculty, UPM	-	UPM	University	2011
11.	Award for Post-Doctoral fellowship in Syracuse University, Syracuse, New York.	-	Ministry of Higher Education (MOHE)	National	2011
12.	2011 Excellence Award in conjunction with Appreciation and Quality Day, Engineering Faculty, UPM	-	UPM		2012



14.	Gold Medal (Co-Researcher)	The FEM program for Analysis of RC Structure with Prestress Elements	Creative Invention in the International Engineering Invention and Innovation Exhibition UPM	International          University	2016
15.	2016 Excellence in Service	-		UPM	2017
16.	2015 Excellence in Service	-		UPM	2016
17.	2016 Excellence in Service	-		UPM	2017
18.	2017 Excellence in Service	-		UPM	2018
19.	2018 Excellence in Service	-		UPM	2019
20.	Silver Medal (Co-Researcher)	Ipoh International Summit on Professionalism, Research and Education (INSPIRED 2019)	Ipoh International Summit on Professionalism, Research and Education (INSPIRED 2019)	International	2019
21.	2019 Excellence in Service	-		UPM	2020
22.	Anugerah Setia Putra			UPM	2020
23.	MOSTI Best Innovation Award Best Category Award, Gold Medal (Co-Researcher)	Malaysia Technology Expo, The International Expo on Innovation and Technology (MTE2021).	Malaysia Technology Expo, The International Expo on Innovation and Technology (MTE2021).	International	2021
24.	Best Paper Award	International Symposium On Blast And Impact Resistant Materials For Civil Engineering (SBIRMCE) 2021	Universiti Pertahanan Malaysia	International	2021
25.	2020 Excellence in Service	-		UPM	2021
26.	2021 Excellence in Service	-		UPM	2022

### Consultation

No	Year	Title	Authority	Amount
1.	2009	Cadangan Menaiktaraf Bangunan Sedia Ada 'Supercritical Fluid-SFC' Fakulti Sains dan Teknologi Makanan, Universiti Putra Malaysia	Universiti Putra Malaysia	-
2.	2009	Projek Menaiktaraf Dewan Makan Kolej Pendeta Zaaba, Universiti Putra Malaysia.	Universiti Putra Malaysia	-
3.	2009	(Industry Attachment for Professional Engineer at Arup Jururunding Sdn Bhd) Geotechnical and Structural Assessment to Property on Lot 331 Seksyen 14 at Jalan 51A/223 Petaling Jaya, Selangor Darul Ehsan (Subaru 3S Center)	Subaru Malaysia	-
4.	2009	(Industry Attachment for Professional Engineer at Arup Jururunding Sdn Bhd) Design and planning for upgrade works of Sultan Abdul Samad Building for Ministry of art and culture Kuala Lumpur	Ministry of Art and Culture Kuala Lumpur	-
5.	2009	(Industry Attachment for Professional Engineer at Arup Jururunding Sdn Bhd) Design a Private Hospital on Lot PT 17482, Desa Parkcity, Mukim Batu, Wilayah Persekutuan, Kuala Lumpur for Sime Darby Medical Center Sdn. Bhd	Sime Darby Medical Center Sdn. Bhd	-
6.	2010	Concrete Compressive Strength and X-Ray Diffractometer (XRD) tests for Malaysian Institute of Road Safety Research (MIROS)	Malaysian Institute of Road Safety Research (MIROS)	RM 10,000.00
7.	2017	Melaksanakan Kerja Merekabentuk, Membina dan Menyiapkan Kerja Membaiki Kerosakkan Struktur Lantai di Gudang Baja Felcra Berhad, Pelabuhan Klang, Selangor.	FELCRA BERHAD	RM2,030,000
8.	2018	Structural Storage Design for Extraction Pilot Plant related to Integrated Modular Palm Oil Milling Processes for High Oil Recovery Research Project.	Universiti Putra Malaysia	-
9.	2019	Pemeriksaan Keselamatan Struktur Perpustakaan Sultan Abdul Samad (PSAS) UPM..	Universiti Putra Malaysia	-
10.	2020	Galvanised Iron Gutter Thickness Testing..	IJM Land Berhad	RM1,500.00
11.	2020	Vibration Damper Research and Testing For Re-Gasification Terminal Sungai Udang (RGTSU)	Petronas Technical Services Sdn Bhd (PTSSB)	RM193,430.00

12,	2020	Research & Development of Piping Vibration Quick Solutions	Petronas Technical Services Sdn Bhd (PTSSB)	RM197,300.00
13.	2020	Structural And Construction Assessment And Forensic Studies For Cendana Apartments, Rawang	Mahsing Group Company	RM168,590.00
14.	2022	Forensic Investigation of Building Structural Element System at Sekolah Agama AT-Toyyibah.	Adrian Technology Resources	RM3,000.00

### Student Supervision

#### PhD (Main Supervisor)

No.	Name	Title	Status
1.	Mohd Basri Che Bakar (GS55299)	Flexural Performances Of Precast Concrete Beam Reinforced With Carbon Fibre Reinforced Polymer (Cfrp) Rebars	On-Going
2.	Mohannad Saleh (GS58606)	Monitoring And Determining The Diffusion Of Corrosion In Structures Using Infrared Thermography System	On-Going
3.	Muhd Afiq Hizami Abdullah (GS58628)	Durability Of Ultra High Performance Dense Radiation-Shielding Concrete At Elevated Temperature With Barite, Colmanite And Polyvinyl Alcohol	On-Going
4.	Obaidullah Abdul Qayyum (GS60747)	Strength Parameters Study of Shape Memory Alloy as Smart Retrofitting Technique for Circular Bridge Column.	On-Going
5.	Benidir Rima (GS56816)	Design Rc Structure With Uhpfrc Material According To Performance Based Design Method	On-Going
6.	Al Radhi Yazeed Abdulmalek Mohammed (GS58162)	Modular Cold Formed Steel Structural Dynamic Behaviour With Anit Vibration Device	On-Going
7.	Abdulateef Wisam Safaa Abdulateef (GS58425)	Optimization Of Adaptive Control Systems For Structures Subjected To The Dynamic Loads	On-Going
8.	Ziyaaee Navid (GS59373)	Development Of Isolated Slabs As Tuned Mass Damper System For Structures	On-Going
9.	Godarzi Neda (GS59403)	Health Monitoring Of Vibration Dissipation Systems In Structures	On-Going
10.	Abdulhafedh Salah Ahmed Abdulwahab (GS59555)	Development Of Hybrid Triple Friction Pendulum Isolator With Restrainer Damping System.	On-Going

11.	Yazan Jasim Dawood (GS59780)	Development Of Hybrid Rubber Viscoelastic Isolator Damping System For Structure	On-Going
12.	Sadeghi Adel (GS59912)	The Effect Of Vertical Component Of Earthquake On Base Isolation	On-Going
13.	Saeed Firas Hassan Saeed (GS60367)	Using UHPFRC To Strengthen The Existing Structures Of Reinforced Concrete Members	On-Going
14.	Ziaee Mohammad (GS61115)	Development of the Visco-Elastic Frictional Dampers Under Harmonic Excitation	On-Going
15.	Ruqayyah Ismail (GS41885)	Behaviour Of Reinforced Concrete Circular Hollow Column Strengthened With Carbon Fibre Reinforced Polymer (Cfrp) And Shape Memory Alloy (SMA)	Graduated
16.	Mugahed Yahya Hussein Amran (GS35979)	Determination Of Structural Behavior Of Precast Foamed Concrete Sandwich Panel	Graduated

#### PhD (Co-Supervisor)

No.	Name	Title	Status
1.	Kolothum Thodika Azoom (GS53874)	Development Of Seismic Resistant Joint For The Modular Steel Structures	On Going
2.	Aljburi Najad Amer Ayyas (GS54992)	Development Of An Optimization Method For Structural Damper Devices According To Performance Based Design Method	On Going
3.	Jehanzeb Khan Patha (GS56397)	Development Of Design Process For Bridges With Supplementary Rubber Damper Devices	On Going
4.	Shah Syed Jahanzaib (GS56853)	Seismic Assessment Of Structures According To Performance Based Design Method	On Going
5.	Tan Kar Chu (GS54288)	Development Of An Innovative Metal Core Elastomeric Bearing	Submitted
6.	Mahmood Yahya Alkhatee (GS49028)	The Retrofitting And Rehabilitation Of (Beam, Column, Joint) Using CFRP Rod And Concrete Jacketing Subjected To Dynamic	Graduated
7.	Nima Ostovar (GS49982)	Development Of Rubber Buckling Restrained Bracing (R-BRB)	Graduated
8.	Altalabani Diyar Nasih Qader (GS54068)	Seismic Performance Of Inter-Story Isolation Tunnel Form Building Structures Using Lead-Plug Rubber Bearings	Graduated
9.	Balamurugan a/l A Gopal (GS45049)	Shear Strength Of Steel Reinforced Ultra High Performance Concrete Dry And Epoxy Joints For Segmental Girder	Graduated

10.	Doaa Talib Hashim (GS44858)	Performance Of Bolted Connection In Ultra High Performance Fiber-Reinforced Concrete Communication Tower	Graduated
11.	Sarah Jabbar Gatea (GS46013)	Development Of Optimized Damage Prediction Method For Health Monitoring Of Ultra High Performance Fibre-Reinforced Concrete Communication Tower	Graduated
12.	Anwer Sabah Mekki (GS36869)	Microwave Sensor For Rebar Sensing In Non-Destructive Tests	Graduated
13.	Shahriar Shahbazpanahi (GS19917)	Simulation Of Cracks Propagation Of Reinforced Concrete Beam-To-Column Joint With Frp Strengthening In Flexural And Shear Region	Graduated
14.	Nisreen N. Ali Al-Adnani (GS28524)	Structural Health Monitoring And Damage Detection For Composite Panel Structures Via Statistical Analysis	Graduated
15.	Mohammad Panjehpour (GS26480)	Development Of Strut-And-Tie Model For Carbon Fiber Reinforced Polymer Strengthened Deep Beams	Graduated
16.	Omid Kohnehpooshi (GS18725)	Nonlinear Three-Dimensional Finite Elements For Composite Concrete Beams	Graduated

#### MS with Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Noor Azreen bin Masenwat (GS44025)	Quality Control Of Ultrahigh Performance Concrete As Radiation Shielding With Mixture Of High Density Mineral	Graduated
2.	El-Zeadani Mohamed Hassan Hamad	Mechanics Based Solutions For Determining The Deflection And Moment Capacity Of RC Beams And Adhesively Plated RC Beams	Graduated
3.	Behzad Nematollahi (GS26016)	Structural Behavior And Environmental Impact Of Precast Ultra-High Performance Ductile Concrete Cantilever Retaining Walls	Graduated

#### MS with Thesis (Co-Supervisor)

No.	Name	Title	Status
1.	Azarkerdar Arash (GS53465)	Development Of Analytical Model For Bonding Of Cfrp Rod In Concrete Subjected To Dynamic Load	Submitted
2.	Shahnaz Basim Ali (GS42134)	Effects Of CFRP On Reinforced Conventional Concrete And Ultra High Performance Concrete Frames	Graduated
3.	Sadegh Naserkhaki (GS24899)	Pounding Between Adjacent Buildings In Consideration Of Soil Structure Interaction	Graduated



### PhD Thesis (Internal Examiner)

No.	Name	Title
1.	Abdulmohaimn Imad Mohammed (GS47142)	Strength Recovery And Healing Efficiency Of Cement-Based Materials Containing Autogenous Healing Binders And Autonomous Encapsulated Healing Agents
2.	Sheikh Mohd Iqbal Bin S. Zainal Abidin (GS47353)	Enhancement Of Knee Beam-Column Joint Performance Using Hybrid Fiber-Reinforced Concrete
3.	Zaty Aktar binti Mokhta (GS40426)	Modelling Tsunami Bore-Induced Pressures On Various Seawall Types
4.	Woon Kai Siong (GS42020)	Development Of High Damping Rubber Joint For Precast Beam-Column Connection Under Cyclic Loads
5.	Sani Mohammed Bida (GS45203)	Structural Behaviour Of Precast Concrete Sandwich Panel With High Thermal Efficiency
6.	Ammar Nasiri Hanoon (GS38703)	Modified Strut-And-Tie Models For Reinforced Concrete Deep Beams With Externally Bonded CFRP Systems
7.	Farzad Hejazi (GS17486)	Development Of Earthquake Energy Dissipation System In Reinforced Concrete Frame Buildings
8.	Nor Azizi Safiee (GS17282)	Structural Behavior Of Interlocking Mortarless Putra Block Wall System
9.	Peyman Ghatee (GS15709)	Development Of Modified Performance-Based Design Method For Shear Walls Subjected To Near Field Earthquake Excitation
10.	Sheikh Mohd Iqbal bin S. Zainal Abid (GS47353)	Enhancing The Ductility Of Knee Beam-Column Connection Under Lateral Cyclic Loading Via Hybrid Fiber Reinforced Concrete Joints
11.	Fayyadh Nahal Kamil Fayyadh (GS50491)	Development Of Hybrid Rubber-Concrete Isolation Slab System For 3d Vibrations
12.	Abdulmohaimen Imad Mohammed (GS47142)	Strength And Microstructure Properties Of Enhanced Autogenous Healing In Cementitious Compounds Using Encapsulated Healing Agent

### Master Thesis (Internal Examiner)

No.	Name	Title
1.	Samira Jilani Kojouri (GS18940)	Seismic Assessment And Strengthening Of Existing Residential Reinforced Concrete Buildings
2.	Choy Wai Kent (GS20614)	Structural Behavior Of Strengthened Interlocking Load-Bearing Hollow Block Wall With Opening Subjected To Axial And Seismic Loads
3.	Samira Jilani Kojouri (GS18940)	Seismic Assessment And Strengthening Of Existing Residential Reinforced Concrete Buildings



4. Parviz Moradi Pour (GS20617) A Numerical Time Integration Method For Nonlinear Seismic Response Analysis Of Roller-Compacted Concrete Dams
5. Mehran Kouchaknezhad (GS18628) Causes Of Delay In The Building Construction Industry In Major Cities Of Iran
6. Sanusi Saheed (GS32128) Flexural And Shear Behaviour Of Lightweight Expanded Polystyrene Precast Concrete Half-Slab
7. Heshmatollah Abdi (GS35470) Response Modification Factor For Steel And Reinforced Concrete Structures With Viscous Dampers
8. Munirah binti Mohd Ramly (GS31156) Strength Of Reduced-Size Mortarless Interlocking Putra Load Bearing Hollow Block System
9. Soheil Nikpour Khoshkroudi (GS39228) Development Of Divergent Viscous Wall Damper For Framed Structures Under Dynamic Loading
10. Mukaddas Ahmad Musa (GS37116) Durability Performance Of Rubberised Fibre Mortar

#### PhD Thesis (External Examiner)

No.	Name	Title	University
1.	Md Habibur Rahman Sobuz	The Manufacture and Compressive Ductility of Ultra-high Performance Fiber Reinforced Concrete	University of Adelaide
2.	Fatemeh Nateghi	Development of a Hybrid Decision Support System for Assessment of Significant Environmental Aspects Associated with Demolition Activities	UTM
3.	Farahbod Mohammadi	Development of a Hybrid Safety Risk Assessment Decision Support System for Demolition Projects	UTM
4.	Abdullah Zaid Mohammed Zaid (2010511327)	Internal Arching Action Within Top Deck Slabs Of A Box Girder	UiTM
5.	Ean Lee Woen (PE20370)	Development of Bricks Utilizing reservoir Sediments	UNITEN
6.	Ashok Kumar	Experimental Investigation on Strength of Geopolymer Concrete Paver Block	Dr. MGR Educational & Research Institute University
7.	Tianyu Xie	Behaviour of High-and- Ultra-High Performance Fibre Reinforced Concrete Flexural Members	University of Adelaide
8.	Chin Chee Loong	Confinement Mechanisms in Concrete Partially Confined with Pre-Tensioned Steel Under Compression	UTM



9.	Muhammad Sani Lim Abdullah	Examination and Mitigation of Factors Causing Delays and Cost Overruns During the Construction of a Palm Oil Refinery Project in Malaysia	UTP
10.	Shinde Sumant Nivarutti	Structural Investigation of Steel Fiber Impregnated Reinforced Concrete Composite	Savitribai Phule Pune University
11.	Makwana Mahesh Maganlal	Development of optimal engineering properties for precast structural concrete products made of recycled concrete aggregate An innovative and sustainable material technology approach	Savitribai Phule Pune University
12.	Hamdi Abdulrahman Saif Salem	Bond Strength and Cracking Behaviour of Reinforced High Calcium Fly Ash Geopolymer Concrete Prism	UTM

#### Master Thesis (External Examiner)

No.	Name	Title	University
1.	Ratni Nurwidayati (2010511327)	An Empirical Approach to Simulate the Concrete Softening Mechanism in RC Members	University of Adelaide
2.	Aminuddin Jameran	Mechanical Properties of Fibre Reinforced Concrete Exposed to Elevated Temperature	UTM
3.	Ahmed Farid Mahmoud Saleh Oweida	Experimental Evaluation of the Effects of Clay and Wood Sawdust on the Mechanical Properties of Cement-Sand Bricks	UNITEN
4.	Praveen A/L Regunathan (SC21952)	Development of an optimal mix design of the polluted concrete treated with waste yeast and calcium oxide	UNITEN
5.	Chiew Shing Mei Sani	Biaxial behaviour of steel fiber reinforced concrete	UTM

#### PhD Examiner Committee UPM

No.	Name	Title	Category
1.	Wisam Dheyab Khalaf (GS46330)	Carbonated Alkali-Activated Olivine With Glass Fiber For Soil Stabilization	Chairman
2.	Ng Choy Peng (GS30097)	Relative Improvements In Road Mobility Compared To Improvements In Road Accessibility, Urbanization And Economic Growth	Chairman
3.	Anijiofor Sandra Chinenyenwa (GS43361)	Adsorption And Biodegradation Of Pollutants From Livestock Wastewater By Aged Refuse Bioreactor	Chairman

4.      Lew Yoke Lian                      Development Of Integrated Criteria For Chairman  
           (GS24457)                           Selection And Monitoring Of Subcontractors  
   In Malaysia

#### Master Thesis Examiner Committee UPM

No.	Name	Title	Category
1.	Abbas Solouki (GS27653)	Effect Of Blending Process On Rheological And Volumetric Properties Of Asphalt Binder	Chairman
2.	Suhaimizi bin Yusoff (GS34085)	Gold Potential Mapping Using Bivariate And Multivariate Statistical Models In Gis At Gua Musang, Malaysia	Chairman

#### MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Ayinla Nafiu Yokoti (GS47959)	Fire rating assessment to CFRP strengthen RC beam	Graduated
2.	Roziana Mahmood (GS18567)	Improving Intermediate Crack Debonding Resistance Equation of Externally Bonded and Near Surface Mounted Plate to Concrete Joint	Graduated
3.	Mohd Zuwairi Samsudin (GS37447)	Humidity Effects on Reinforced Concrete Strengthened with CFRP	Graduated
4.	Alireza Payesteh (GS34930)	Thermal Expansion in Circular Reinforced Concrete Column Strengthened with CFRP	Graduated
5.	Tok Yee Lei (GS37218)	Behavior of Bracing and Braced Core System in Curve Tall Buildings Frames Under Wind Loads	Graduated
6.	Mohammed Keiss Ali (GS36531)	Compressive Membrane Action in Box Ginder Segment	Graduated
7.	Saroosh Abbasi (GS34405)	Humidity Effect on Reinforced Concrete Beam Strengthened with CFRP	Graduated
8.	Mohd Zawawi Zakaria (GS37233)	Structures Assessment, Rehabilitation and Reconstruction	Graduated
9.	Azmi Mohammad (GS35448)	Earthquake Elastomeric Isolation System Using Multilayer CFRP Rubber Bearing As An Alternative to Steel Plate	Graduated
10.	Nadia Binti Azmi (GS37350)	Comparison between BS5400 (BD37/01) and EUROCODE CEN1991-1 and EN1991-2)	Graduated
11.	Tan Ee Leng (GS36877)	Blast Resistance Of High-Rise Building Structures	Graduated
12.	Hussein Ahmed (GS37519)	Investigation of Optimum Size of Core Structure with Cantilever Beam System	Graduated
13.	Amin Ali Ali (GS38412)	Finite Element Modeling of Behavior of Sea Sand RC Beam Strengthened with GFRP	Graduated



14.	Ebrahim Abdulmalek Al-Qaliss (GS37867)	Pile Cap Analysis and Design	Graduated
15.	Tan Yee Pin (GS38746)	Utilizing shape memory alloys to enhance the performance and safety of civil infrastructure	Graduated
16.	Mustafa Kareem Hamzah (GS40017)	Structural behaviour of repaired beam-column joints reinforced with superplastic shape memory alloys	Graduated
17.	Hazem Mahmood Yaseen (GS38913)	Static behaviour of end plate beam column connection under temperature using finite element method	Graduated
18.	Hamdi Abdulrahman Saif (GS38034)	Lateral load resistance of bridge column and piers under flexure and shear load.	Graduated
19.	Kaldon Hussain (GS38740)	Assessment and design of FRP-based high damping rubber bearing incorporated with shape memory alloy wires/fibres	Graduated
20.	Shahrizal Bin Abd Rasid (GS42996)	Study on application of ultra-high performance concrete (UHPC) to the pontoon structure	Graduated
21.	Laith Nasser Hussain (GS40836)	Analysis of flexural RC Beam with FRP bars.	Graduated
22.	Chao Yuen Sun (GS40646)	Advantages and Disadvantages of Prefabricated Prefinished Volumetric Construction (PPVC) in Comparison to Conventional Building Method. (Connection).	Graduated
23.	Azriani Binti Makbul@Makhsoll (GS40152)	Structural health monitoring on damage using sensors	Graduated
24.	Sri Maryazie Bt Mohamad Nor (GS43626)	Fire Rating Assessment to CFRP Strengthen RC Beam.	Graduated
25.	Mohd Eizzuddin Mahyeddin (GS43500)	Structural Behaviour And Water Penetration of Concrete Wrapped With Carbon Fibre Reinforced Polymer (CFRP).	Graduated
26.	Wong Chien Chan (GS43953)	Compressive Strength Analysis of Concrete Cylinder Actively and Passively Confined	Graduated
27.	Mustafa Yahya Ahmed Al-Shami (GS41664)	Effect of CFRP-Passive Confinement on Reinforced Concrete Hollow Column Strength Enhancement	Graduated
28.	Saddam Mansour Ali Ankaa (GS43015)	Evaluation of various tendon layout in post tensioning flat slab	Graduated
29.	Ahmed Abdulrhman Ahmed Al Sharafi (GS40831)	Specifying the best position of bearing in straight box girder beam based on reactions	Graduated
30.	Abdulwali Yahia Yahia Al Wazir (GS40832)	Investigating stability of superstructure (uplift) due to curvature in various radius and superelevation for curved box girder bridge	Graduated
31.	Lim Teck Huat (GS45632)	Effects of Base Connection for Precast Wall on Seismic Performance of IBS Structures	Graduated
32.	Al- Hakam Al Doori Finas Younus (GS51609)	Determination of large diameter Carbon Fiber Reinforced Polymer (CFRP) fan anchors capacity	Graduated



33.	Maysa Adel Hasan Abu Susain (GS53688)	Experimental and numerical investigation of CFRP Strengthening concrete columns under impact load	Graduated
34	Bareq Muayad (GS49550)	Study of Precast Foamed Concrete Sandwich Wall Panel Behaviour under Horizontal Distribution Load.	Graduated
35	Muhamad Aziman Abdul Malek (GS51082)	Behavior of bridge substructures under vehicular collision load and its effect on pile capacity	Graduated
36	Fuad Khaled Alwashali (GS49923)	Localize deterioration of RC bridge beam: What went wrong.	Graduated
37	Zukhairi Md Redzuan (GS49276)	Investigation of residual strength of deteriorated RC bridge.	Graduated
38	Lee Wei Ying (GS49435)	Deterioration of RC bridge beam due to environment attack	Graduated
39	Sharifah Rafizah Binti Syed Husin (GS49649)	Field test in assessing cause of RC concrete deterioration	Graduated
40	Ibrahim Hassan Abdillahi (GS49649)	Digital image correlation analysis of crack behavior in a reinforced concrete beam during a load test.	Graduated
41	Edmund Tiew Siew Jun (GS50773)	Predicting load carrying capacity reduction of deteriorated RC bridge beam deteriorated RC bridge beam	Graduated
42	Mohd Sainuzi Abdullah (GS55303)	Evaluation of Residual Capacity Deteriorated Reinforced Concrete Structure	Graduated
43	Siti Noreena Mohd Yusof (GS55701)	Structural Condition Assessment of Reinforced Concrete Structure Based on Chemical and Non – Destructive Test (NDT)	Graduated
44.	Saja Saber Abdulwahhab (GS58264)	Validation of A Developed Procedure of Moment Redistribution for Flexural Strengthening of RC Beam with Adhesively Externally Bonded CFRP using ABAQUS	Graduated

#### **Bachelor Project (Main Supervisor)**

<b>No.</b>	<b>Name</b>	<b>Title</b>	<b>Status</b>
1.	Wan Nur Aida Wan Zainal (2008/2009)	Prestressed FRP Plates for Flexural Strengthening of Reinforced Concrete Beams	Graduated
2.	Song Kok Rong (2008/2009)	Portal Frame Behaviour Due to Soil Settlement	Graduated
3.	Normarina Bashah (2008/2009)	Prestressed FRP Plates for Shear Strengthening of Reinforced Concrete Beams	Graduated
4.	Liew Chean Yau (2008/2009)	Methods on how to Demolish Prestressed Structures	Graduated
5.	Ho Hon Wei (2008/2009)	Investigate the Behaviour of Externally Prestressed Beams	Graduated



6.	Hajar Abu Bakar (2008/2009)	Prestressed FRP Plates for Flexural Strengthening of Reinforced Concrete Beams	Graduated
7.	Tan Kok Haur (2009/2010)	Development of Rapid Precast Bridge Construction System	Graduated
8.	Pavithra A/P Lachmanan (2009/2010)	Earthquake : Do Malaysian Structural Engineers Take for Granted	Graduated
9.	Ooi Kee An (2009/2010)	Tunnel : How to Build One	Graduated
10.	Mohd Firdaus Samsudin (2009/2010)	Investigation on Fiber Reinforced Polymer (FRP) Strengthened Structure Resistance Towards Explosions	Graduated
11.	Liew Mun Fei (2009/2010)	Industrial Building System : Advantages and Disadvantages towards Structural Engineer	Graduated
12.	Faidhil Mohamad (2009/2010)	Wind Load Effects on High Rise Building	Graduated
13.	Wan Suhaili Wan Abdul Rahman (2010/2011)	Fiber Reinforced Polymer Strengthening for Earthquake Prone Building	Graduated
14.	Nabila Rossley (2010/2011)	Wind Load Effect on High Building : Wind Interaction with Built Environment	Graduated
15.	Izyan Nazihah Nor Azman (2010/2011)	Modeling of Integral Prestressed Concrete Beam using StaadPro. Universiti Putra Malaysia	Graduated
16.	Amirah Abdul Malek (2013/2014)	Assessment and Rehabilitation of Structures at Faculty of Engineering, Universiti Putra Malaysia.	Graduated
17.	Low Jue Jiunn (2014/2015)	Fiber Reinforced Polymer usage in Malaysia	Graduated
18.	Loke Heng Hwa (2014/2015)	Visual Inspection on Engineering Faculty Buildings	Graduated
19.	Ho Kah Seng (2014/2015)	Moment Redistribution of CFRP plated beams	Graduated
20.	Liu Junxin (2015/2016)	Plate End Debonding Mechanism	Graduated
21.	Mohamed Hassan Hamad El-Zeadan (2015/2016)	Structural Strengthening using anchorage and hinge approach	Graduated
22.	Terrance Ng Lok Mun (2016/2017)	Non-destructive Evaluation for concrete structures	Graduated
23.	Amira Syamila Atira Kamarudin (2017/2018)	Non-destructive Concrete Characterizations System for concrete structures	Graduated
24.	Anas Mohammed Mohammed Ali (2017/2018)	Partial Interaction Analysis of CFRP Plate Strengthen RC Beam	Graduated
25.	Yang Ming (2018/2019)	Digital image correlation analysis of crack behavior in a reinforced concrete beam during a load test	Graduated
26.	Soh Wei Siang (2020/2021)	Piles structural behaviour under vehicular collision load on bridge substructure	Graduated



### Student Internship (Supervisor)

No.	Session	Name	Company
1.	2007-2008	Leonard Goh Chia Ning	Intellectual Builders Sdn. Bhd.
2.	2007-2008	Catherine Tan Poh Phin	Intellectual Builders Sdn. Bhd.
3.	2007-2008	Thanasegaran Sukumaran	Maju Gemilang Builders Sdn. Bhd.
4.	2007-2008	Muhammad Izzuwan Ghazali	HST Consulting Engineer
5.	2008-2009	Farhana Ismail	Northport (Malaysia) Bhd.
6.	2008-2009	Ng Kien Ping	Tripoly Enviroment Sdn. Bhd.
7.	2008-2009	Nik Mohd. Haniff Nik Hamid	Arup Jururunding Sdn. Bhd.
8.	2009-2010	Foo Shyh Hua	Chemi-com (M) Sdn. Bhd.
9.	2009-2010	Randall Chirng Chern Zhin	Megasteel Sdn Bhd
10.	2009-2010	Sek Kei Rol	Dr. Y.G. Tan Jurutera Perunding Sdn. Bhd.
11.	2015-2016	Avinaash A/L Subramaniam	JKR Wilayah Persekutuan Putrajaya
12.	2016-2017	Mussab Elzubair Mohamad Ali	AZS Ali Zaher El-Shehry, Saudi Arabia
13.	2016-2017	Alharbi, Haitham Muslih A Ali	Tawafuq Alamal, Saudi Arabia
14.	2017-2018	Nur Afiqah Nabilah Abu Bakar	Dr Nik and Accociates Sdn Bhd
15.	2017-2018	Ummi Amira Rashid	Dr Nik and Accociates Sdn Bhd
16.	2018-2019	Abd Raheem Maruff Oriyomi	Bakraz Consult
17.	2018-2019	Ahmad Mohamed Gasim	Al-Joudah Contracting (Zahiran Group of Companies)
18.	2020-2021	Nur Asyikin Samsudin	YL Design Consultancy Services
19.	2020-2021	Angeli Nagi Anak Jarayee	YL Design Consultancy Services
20.	2020-2021	Syed Muhammad Syuwari Syed Yahya	YL Design Consultancy Services
21.	2020-2021	Nazurah Afiqah Nadzli	ON-9 Engineering Sdn Bhd
22.	2020-2021	Nurul Nadiah Iskandar	ON-9 Engineering Sdn Bhd
23.	2021-2022	Nur Hidayah Ahmad Hapez	Setiakon Builders Sdn Bhd
24.	2021-2022	Muhammad Akmal Hanif Mohd Zuki	Ibarat Duta Sdn Bhd
25.	2021-2022	Nur Qamarina Abdul Wahab	Setiakon Builders Sdn Bhd

## Student Development

No.	Activity	Year
1.	National Competition in Engineering and Innovation 2008. Floating Tower Competition. (Civil Engineering Student Club, CESC)	2008
2.	International UTM Bridge 2009 Model Competition. (Civil Engineering Student Club, CESC)	2009
3.	Lawatan Tapak ke Integrated Transport Terminal Bandar Tasik Selatan. (Civil Engineering Student Club, CESC)	2009
4.	The Institute of Structural Engineers. Build and Break Competition 2009. (Civil Engineering Student Club, CESC)	
5.	Civil Games (Civil Engineering Student Club, CESC)	2010
6.	The Institute of Structural Engineering Malaysia Division : Half day talk. (Civil Engineering Student Club, CESC)	2010
7.	Logo Design Competition. (Civil Engineering Student Club, CESC)	2010
8.	Civil Bowling Tournament. (Civil Engineering Student Club, CESC)	
9.	Introducing and Demomstrating Earthquake Engineering Research in School (IDEERS) Competition. (Civil Engineering Student Club, CESC)	2010
10.	Assessment and Rehabilitation (ECV4701) subject Site Visit to Klinik Kesihatan 3 Kota Damansara	2014
11.	Technical Visit to Nanyang Technical University Singapore on Water Resources Management	2015
12.	Tall Building Design (ECV5226) subject site visit to Kuala Lumpur City Center, KLCC	2018
13.	Technical visit to Agensi Nuklear Malaysia on Non-Destructive Test (NDT) equipment and assessment.	2018-2022
14.	Technical visit to Masjid Negara on structural repair and rehabilitation works.	2022

