

CURRICULUM VITAE



Assoc. Prof. Ir. Dr. Raizal Saifulnaz Muhammad Rashid
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Education

1. PhD (Structural Engineering), 2008, University of Adelaide,
2. B.Eng.HONS (Civil Engineering), 1991, Universiti Teknologi Malaysia

Areas of Interest

1. Structural Engineering
2. Rehabilitation of reinforced concrete structures with Carbon Fiber Reinforced Polymer

Professional Qualification/ Membership/ Affiliation

1. Member, Board of Engineers Malaysia
2. Member, Institute of Engineers Malaysia
3. Member, Road Engineering Association of Malaysia
4. Technical Committee on Building Design and Construction, SIRIM
5. Technical Committee on Uniform Building By Law (UBBL), CIDB

Appointments

Position	Duration
1. Associate Professor, Department of Civil Engineering, Faculty of Engineering, UPM	1 Nov 2014 – to date
2. Head, Department of Civil Engineering, Faculty of Engineering, UPM	8 Sept. 2014 – to date
3. Senior Lecturer, Department of Civil Engineering, Faculty of Engineering, UPM	June 2008 to Sept 2014
4. Civil Engineer, Pejabat Pembangunan dan Pengurusan Asset, UPM	1999-2008
5. Resident Engineer, EDP Consultant Sdn Bhd	1999

Publications

Journals (30 recent journals)

1. Mugahed Amran, Y.H., **Rashid, R.S.M.**, Hejazi, F., Safiee, N.A., Bida, S.M., 2017, Structural performance of Precast Foamed Concrete Sandwich Panel subjected to axial load, KSCE Journal of Civil Engineering, Article in Press
2. 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, Source of the Document Journal of Building Engineering, Vol.7, pp. 143-158
3. 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.107, pp. 307-320
4. 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
5. Farzad Hejazi, Mohammad Dalili Shoaie, 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

6. 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
7. 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, Document A review of The Corrosion Behavior Of Metallic Heritage Structures And Artifacts, *Jurnal Teknologi*, 77 (1), pp. 95-100
8. 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
9. **Raizal Rashid** and Riyad S. Aboutaha, 2014, Analytical Model for CFRP Strengthened Circular RC Columns under Elevated Temperature Computers and Concrete, *An International Journal*, Vol.13(3), pp1-13, IF0.94
10. 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.19(6), pp1-15, IF0.38
11. 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 1 – Analysis and Design Procedures and Enviromental Impact Calculations (EIC) *KSCE Journal of Civil Engineering*, Vol.18(6), pp1-11, IF0.38
12. 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), pp1-6, Scopus
13. 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.
14. O. Kohnehpooshi, 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, Scopus
15. O. Kohnehpooshi, 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, Scopus
16. O. Kohnehpooshi, 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, IF2.11
17. O. Kohnehpooshi, 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, *Journal of Civil Engineering (Building and Housing)*, Vol.17(1): 1-11
18. Omid Kohnehpooshi, Mohd Saleh Jaafar, Jamaluddin 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, IF0.586
19. 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
20. 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
21. **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.
22. 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

Conference Proceedings (30 recent Conference Proceedings)

1. M.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

Books (If any)
Chapter in Books (If any)

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)

Research Grants

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	PUTRA GRANT
5.	Shape Memory Alloy (SMA) Application in Retrofit and Strengthening Circular Hollow Reinforced Concrete Column	14,800	2016-2018	UPM
6.	Elastomeric Rubber Bearing Using Carbon Fiber Reinforced Polymer As Alternative To Steel Plate For Earthquake Isolation	20,000	2016-2018	UPM
7.	Development of Smart Structural Strengthening Technique Using Shape Memory Alloy (SMA)	99,980	2017-2019	GPB, UPM

Awards/Recognition (Current)

No.	Name of awards	Title	Award Authority	Award Type	Year
1.	2000 Excellence Award in Service	-	UPM	University	2001
2.	2001 Excellence Award in Service	-	UPM	University	2002
3.	2002 Excellence Award in Service	-	UPM	University	2003
4.	Award for PhD studentship in University of Adelaide, Australia.	-	UPM	University	01/06/2003 – 01/01/2007
5.	2008 Excellence Award 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	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 Award 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
11.	PI20122000681 (Pending)	Elastomeric Isolator using multilayer CFRP Rubber Bearing as an alternative to steel plates.		National	2012

Professional Services/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	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	Design and planning for 4pgrade works of Sultan Abdul Samad Building for Ministry of art and culture Kuala Lumpur	Ministry of Art and Culture Kuala Lumpur	-
5.	2009	Build 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	Panel Penilai Program Akademik Universiti Tenaga Nasional (UNITEN)	Universiti Tenaga Nasional (UNITEN)	-
8.	2017	Panel Penilai Akreditasi Program Kejuruteraan	Engineering Accreditation Council (EAC), Malaysia	-
9.	2017	Panel Jawatankuasa Penjaminan Kualiti ITEM Dwibahasa (JKPKID) Lembaga Peperiksaan	Kementerian Pendidikan Malaysia	-
10.	2017	Professional Assessment Examination (PAE)	Malaysian Society for Engineering and Technology (MySET)	-

Student Supervision

PhD (Main Supervisor)

No.	Name	Title	Status
1.	Ruqayyah Ismail (GS41885)	Biomimicry Study of Bamboo Mechanical Properties in Reinforcing Circular Hollow Concrete Column	On Going
2.	Azmi Mohammad @Hassan	Smart Circular SMA Based Rubber Bearing Using Carbon Fiber Reinforced Polymer (CFRP) for Earthquake Isolation System	On Going
3.	Mugahed Yahya Hussein Amran (GS35979)	Determination Of Structural Behavior Of Precast Foamed Concrete Sandwich Panel	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	On Going
2.	Behzad Nematollahi (GS26016)	Enhancing dHUPC ductile high performance concrete	Graduated

MS without Thesis (Main Supervisor)

No.	Name	Title	Status
1.	Ayinla Nafiu Yokoti (GS47959)	Fire rating assessment to CFRP strengthen RC beam	On Going
2.	Roziana Mahmood (GS18567)	Improving Intermediate Crack Debonding Resistance Equation of Externally Bonded and Near Surface Mounted Plate to Concrete Joint	Graduated

No.	Name	Title	Status
3.	Mohd Zawawi Zakaria (GS37233)	Structure Assessment, Rehabilitation and Reconstruction	Graduated
4.	Mohd Zuwairi Samsudin (GS37447)	Humidity Effects on Reinforced Concrete Strengthened with CFRP	Graduated
5.	Alireza Payesteh (GS34930)	Thermal Expansion in Circular Column Wrapped with CFRP Sheet	Graduated
6.	Alireza Payesteh (GS34930)	Thermal Expansion in Circular Reinforced Concrete Column Strengthened with CFRP	Graduated
7.	Tok Yee Lei (GS37218)	Behavior of Bracing and Braced Core System in Curve Tall Buildings Frames Under Wind Loads	Graduated
8.	Mohammed Keiss Ali (GS36531)	Compressive Membrane Action in Box Ginder Segment	Graduated
9.	Saroosh Abbasi (GS34405)	Humidity Effect on Reinforced Concrete Beam Strengthened with CFRP	Graduated
10.	Mohd Zuwairi Samsuddin (GS37447)	Humidity Effect on Reinforced Concrete Structures Strengthened with CFRP	Graduated
11.	Mohd Zawawi Zakaria (GS37233)	Structures Assessment, Rehabilitation and Reconstruction	Graduated
12.	Azmi Mohammad (GS35448)	Earthquake Elastomeric Isolation System Using Multilayer CFRP Rubber Bearing As An Alternative to Steel Plate	Graduated
13.	Nadia Binti Azmi (GS37350)	Comparison between BS5400 (BD37/01) and EUROCODE CEN1991-1 and EN1991-2)	Graduated
14.	Hussein Ahmed (GS37519)	Investigation of Optimum Size of Core Structure with Cantilever Beam System	Graduated
15.	Amin Ali Ali (GS38412)	Finite Element Modeling of Behavior of Sea Sand RC Beam Strengthened with GIFRP	Graduated
16.	Ebrahim Abdulmalek Al-Qalisi (GS37867)	Pile Cap Analysis and Design	Graduated
17.	Tan Yee Pin (GS38746)	Utilizing shape memory alloys to enhance the performance and safety of civil infrastructure	Graduated
18.	Mustafa Kareem Hamzah (GS40017)	Structural behaviour of repaired beam-column joints reinforced with superplastic shape memory alloys	Graduated
19.	Hazem Mahmood Yaseen (GS38913)	Static behaviour of end plate beam column connection under temperature using finite element method	Graduated
20.	Hamdi Abdulrahman Saif (GS38034)	Lateral load resistance of bridge column and piers under flexure and shear load.	Graduated
21.	Kaldon Hussain (GS38740)	Assessment and design of FRP-based high damping rubber bearing incorporated with shape memory alloy wires/fibres	Graduated

No.	Name	Title	Status
22.	Shahrizal Bin Abd Rasid (GS42996)	Study on application of ultra high performance concrete (UHPC) to the pontoon structure	Graduated
23.	Laith Nasser Hussain (GS40836)	Analysis of flexural RC Beam with FRP bars.	Graduated
24.	Chao Yuen Sun (GS40646)	Advantages and Disadvantages of Prefabricated Prefinished Volumetric Construction (PPVC) in Comparison to Conventional Building Method. (Connection).	Graduated
25.	Azriani Binti Makbul@Makhsoll (GS40152)	Structural health monitoring on damage using sensors	Graduated
26.	Sri Maryazie Bt Mohamad Nor (GS43626)	Fire Rating Assessment to CFRP Strengthen RC Beam.	Graduated
27.	Mohd Eizzuddin Mahyeddin (GS43500)	Structural Behaviour And Water Penetration of Concrete Wrapped With Carbon Fibre Reinforced Polymer (CFRP).	Graduated
28.	Wong Chien Chan (GS43953)	Compressive Strength Analysis of Concrete Cylinder Actively and Passively Confined	Graduated
29.	Mustafa Yahya Ahmed Al-Shami (GS41664)	Effect of CFRP-Passive Confinement on Reinforced Concrete Hollow Column Strength Enhancement	Graduated
30.	Saddam Mansour Ali Ankaa (GS43015)	Evaluation of various tendon layout in post tensioning flat slab	Graduated
31.	Ahmed Abdulrhman Ahmed Al Sharafi (GS40831)	Specifying the best position of bearing in straight box girder beam based on reactions	Graduated
32.	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