

CURRICULUM VITAE

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Qualification:

- **Chartered Professional Engineer (CPEng), MIPENZ, IntPE (NZ)**
 Institute of Professional Engineers in New Zealand (IPENZ)
- **PhD (Civil Engineering), 2000**
 The University of Tokyo, Japan
- **M. E. (Structural Engineering), 1997 (Gold Medallist)**
 Asian Institute of Technology, Thailand
- **B. E. (Civil Engineering), 1993 (Gold Medallist)**
 Tribhuvan University, Nepal

Employment History:

- Apr 10 – May 10** **Senior Visiting Fellow**, Australian Defence Force Academy, University of New South Wales, Australia
- July 09 – Nov 09** **Visiting Professor**, Faculty of Engineering and Built Environment, National University of Malaysia (UKM), Malaysia
- May 03 –Present** **Lecturer → Senior Lecturer → Associate Professor**, Department of Civil and Natural Resources Engineering, University of Canterbury, New Zealand
- Aug 00 – May 03** **Research Fellow**, Nanyang Technological University, Singapore
- May 97 – Sep 97** **Research Associate**, Asian Institute of Technology, Thailand
- Jan 96 – Mar 97** **Research Assistant**, Asian Centre for Engineering Computation and Software (ACECOMS), Asian Institute of Technology, Thailand
- Mar 95 - Sep 95** **Engineer**, Department of Irrigation, Ministry of Water Resources, His Majesty's Government, Nepal
- Jan 94 – Mar 95** **Civil Engineer**, Nepal Telecommunication Corporation, Nepal
- Jun 93 - Dec 93** **Lecturer**, Institute of Engineering, Tribhuvan University, Nepal
- Jun 93 – Mar 95** **Civil Engineering Consultant**, (i) Nepal Engineering and Technical Research Organization (NETRO); (ii) C-Con Consultants, Nepal

Research awards and honours:

- Fulton Downer Gold Medal - The President's Award, 2011 (Along with other IPENZ members), Institution of Professional Engineers in New Zealand (IPENZ)
- Best Poster Paper Award, 2011 (New Zealand Society of Earthquake Engineering)
- Otto Glogau Award for best Journal paper in Earthquake Engineering, 2008 (New Zealand Society for Earthquake Engineering)
- Emerging Researcher Award, 2007 (College of Engineering, University of Canterbury)
- Ivan Skinner Award for the Advancement of Earthquake Engineering Research in New Zealand, 2007 (New Zealand Society for Earthquake Engineering & Earthquake Commission)
- Best Poster Paper Award, 2007 (New Zealand Society of Earthquake Engineering)
- "Leading Engineers of the World", 2007 (International Biographical Centre, Cambridge, England)
- Inducted in "Nepalese Hall of Brain", 2006
- Best Paper Award, 2000 (Japan Concrete Institute, Japan)

Scholarships and awards for academic achievements:

- Nepal Education Medal A & B (The two highest honour given for Academic achievement in Nepal), 2006 (Ministry of Education, The Government of Nepal)
- Asian Development Bank (ADB) Fulbright PhD Scholarship (~USD 100,000), 1997-2000
- Aoyagi Award (Gold medal for the best performance in ME), Asian Institute of Technology, Thailand, 1997
- Government of Japan Fulbright ME Scholarship (~THB 800,000), Asian Institute of Technology, Thailand, 1995-1997
- Vice-Chancellor Gold Medal (Gold medal for the best performance in bachelor degrees across all disciplines in the country), Ministry of Education and Culture, Nepal, 1993
- Mahendra Bidhya Bhusan C (Given by the King for outstanding Academic achievement in Nepal), 1993 (Royal Palace, Nepal)
- Kulratna Tuladhar Award (Gold medal for the best performance in BE), Institute of Engineering, Nepal, 1993
- Paisley Prize (For the best result in the yearly engineering exams), Nepal Engineering Students Society 1989, 1990, 1991
- Master of the Subject (for the best result in the nominated subject for each year), Nepal Engineering Students Society, 1989: *Building Construction*, 1990: *Engineering Mathematics*, 1991: *Design of Structures*

Editorial Board and Peer Review for Professional Publications:

- Lead Guest Editor: Special Issue on "Reinforced Concrete: Experiment, Analysis and Design", Journal of Advances in Civil Engineering, May 2012.
- Guest Editor: Special Issue on "Observations from 2011 Christchurch Earthquake", Bulletin of the NZ Society for Earthquake Engineering, December 2011.
- Associate Editor: ASCE Journal of Structural Engineering
- Associate Editor: Transactions of the Hong Kong Institution of Engineers (HKIE)
- Editorial Board: International Review of Civil Engineering (IRECE), *Praise Worthy Prize*
- Editorial Board: Transaction of Civil Engineering, *Scientia Iranica*
- Editorial Board: Journal of Engineering, *Mehta Press*
- Reviewer: Books: ASCE Press
- Reviewer: Journal articles: Earthquake Engineering and Structural Dynamics, ASCE Journal of Structural Engineering, ASCE Journal of Engineering Mechanics, Engineering Structures, ACI Structural Journal, Computers and Concrete, Structural Engineering and Mechanics, International

Journal of Rock Mechanics and Mining Sciences, Scientia Iranica: Transaction of Civil Engineering, ICE Journal: Structures and Buildings, Advances in Civil Engineering, Advances in Structural Engineering, Journal of Structural Fire Engineering, Bulletin of the NZ Society for Earthquake Engineering

- Reviewer: Conference papers: EASEC8, AESEAP2004, SIF2006, ACMSM19, 8PCEE, NZSEE Annual conferences, 14WCEE, ACMSM20, IS-Tokyo 2009, ACMSM21, 9PCEE

Evidence of Leadership in Research:

- Invited by IPENZ to design an Earthquake Engineering refresher course and deliver it to professional engineers in 6 different cities in NZ, 2011.
- Nominated and selected as a member of the National panel for the 2012 Performance based Research Fund (PBRF) round.
- Invited to serve as Expert Reviewer for Swiss National Science Foundation (SNSF), Switzerland, 2011-2012.
- Invited to give a Keynote Speech in the 6th International conference on Seismology and Earthquake Engineering (SEE6), Iran, 2011 May (costs covered by the organiser).
- Invited to give a Seminar on Seismic design of structures to Thai engineers, Engineering Institute of Thailand (EIT), Bangkok, 2011 February (costs covered by the organiser)
- Invited to give a Keynote Speech on the recent Christchurch Earthquake in the Asian conference on Earthquake Engineering (ACEE), Bangkok, 2010
- Invited to give a Keynote Speech on the recent Christchurch Earthquake in the Australasian Conference on Mechanics of Structures and Materials (ACMSM), Melbourne, 2010
- Invited to serve as Peer Reviewer for Deanship of Scientific Research, King Fahd University of Petroleum and Minerals, Saudi Arabia, 2010- (with honorarium)
- Invited as a Keynote Speaker by Queensland branch of Concrete Institute of Australia in “Concrete in the Tropics” workshop, Townsville, April 2010 (costs covered by the organiser)
- Invited as a Visiting Senior Fellow by University of New South Wales (UNSW), Australian Defence Force Academy, Canberra, April-May 2010 (costs covered by the host)
- Invited to join the Editorial Board of International Review of Civil Engineering (IRECE)
- Invited to join the Editorial Board of the Journal of Hong Kong Institution of Engineers (HKIE)
- Invited to join the Editorial Board of Journal of Engineering; Mehta Press.
- Invited as a Visiting Professor by National University of Malaysia (UKM), July-November 2009 (costs covered by the host)
- Invited to join the Editorial Board of Transactions of Civil Engineering, Scientia Iranica
- Invited to serve as Peer Reviewer for Qatar National Research Fund, Qatar Foundation, 2009- (with honorarium)
- Invited as a referee to review promotion applications from two Universities in Australasia
- Invited to examine PhD Theses from three different Universities in Australasia (with honorarium)
- Recipient of the NZSEE Otto Glogau Award for the best journal paper in Earthquake Engineering Research, 2008 (with cash purse \$\$\$)
- Recipient of the Best Young and Emerging Researcher Award, College of Engineering, University of Canterbury, 2007 (with cash purse \$\$\$)
- Recipient of EQC and NZSEE Ivan Skinner Award for the advancement of Earthquake Engineering Research in NZ, 2007 (with cash purse \$\$\$\$)
- Associate Editor, ASCE Journal of Structural Engineering, 2007-
- Received best paper awards in two conferences
- Invited to serve in the international advisory/scientific committee for 4 international conferences (SIF06, ACMSM19, CENeM07, ACMSM20)
- Contracted by GNS Science to develop a seismic loss assessment tool (with financial aid)
- Invited by Peter Fajfar (Associate Editor of Earthquake Engineering and Structural Dynamics) to adjudicate on split decisions. Adjudication is normally given only to well-known experts

- Contacted regularly by several international researchers and professionals seeking advice. After going through one of my journal papers, the Director of a structural analysis software company contacted me and requested to make my research available to the wider community by including my SFRC material models in the finite element analysis program Strand7
- Published 6 books/chapters, more than 54 technical articles in peer-reviewed journals, more than 70 refereed conference papers and 6 project reports since 2000
- Invited to submit 7 papers (1 as a chapter in a book, 1 as a technical paper in a journal, 4 as invited papers and 1 as a keynote paper in international conferences)
- Led the organization of an International Conference (ACMSM19), 2006
- Invited to give research seminars in several leading national and international institutions
- Invited to review books for publishers, technical articles for all leading journals and international conferences in the field of structural/earthquake engineering
- Invited to chair conference sessions in several international conferences
- Won more than \$300,000 of contestable research grants as the project leader and more than \$3 million as a co-researcher
- One of the only 17 people Inducted in “Nepalese Hall of Brain”
- International recognition as a leading engineer and academic through invited induction into three different exclusive achiever lists
- Requested by Institute of Geological and Nuclear Science (IGNS) to act as an expert consultant and devise a generic national framework for financial risk assessment framework for NZ
- Approached by Standards New Zealand to recommend appropriate material strain limits to be implemented in the New Zealand Concrete Standard NZS310) (This is a big honor as the resulting national standard (NZS3101) would govern the design of all RC structures in NZ)
- Invited to act in the Management Committee of Structural Engineering Society (SESOC), the NZ professional body: 2004

Involvement in Organizing Conferences:

- Chair: Organizing Committee: Annual Conference of the NZSEE, April 2012, Christchurch.
- International Scientific Committee: Australian Structural Engineering Conference (ASEC), July 2012, Perth.
- Organizing Committee: Pacific Conference on Earthquake Engineering (PCEE), April 2011, Auckland, New Zealand.
- Program Committee: 21st Australasian Conference in Mechanics of Structures and Materials (ACMSM21), December 2010, Melbourne, Australia.
- International Scientific Committee, 20th Australasian Conference in Mechanics of Structures and Materials (ACMSM20), December 2008, Toowoomba, Queensland, Australia.
- Advisory Panel, International Conference on Civil Engineering in the New Millennium (CENeM-2007), January 2007, Howrah, India.
- Organizing Committee, 19th International Australasian Conference on Mechanics of Structures and Materials (ACMSM19), 2006 November, Christchurch, New Zealand.
- Scientific Committee, 4th International Workshop on Structures in Fire (SiF06), May 2006, Aveiro, Portugal.
- Organizing Committee, Park and Paulay Symposium, 2003, Christchurch.
- Session Chair, Several International Conferences (ACMSM19, EASEC10, ISISS2005, START05, ACMSM20, CENeM07, ACEE10, ACMSM21, PCEE9, NZSEE).

Educating people through public seminar and media interviews/articles (Since 2010)

- Interviewed on “importance of ductility on earthquake resistance of buildings” by TV3 for News @ 7pm, 10 February 2012.
- Speaker in the Earthquake Research Forum “Regaining Solid Ground” organised by University of Canterbury, 2 September 2011

- Speaker in “Free Public Earthquake Engineering Seminar” organised by University of Canterbury, 24 August 2011
- Speaker in “Darfield Earthquake Symposium”, organised by the Natural Hazards Research Centre, University of Canterbury, 27 October 2010
- Morning News *Sunrise* Interview on “Post-Earthquake Recovery of Christchurch”, TV3, 15 April 2011
- “Ceiling panels pose major risk”, The Press, New Zealand, 19 January 2011
- “Earthquake impact not just structural”, Commercial Property New Zealand, 19 January 2011
- “Light ceiling panels may minimise quake damage”, Dominion Post, New Zealand, 26 January 2011
- “Unsafe Ceilings and storage facilities can be deadly”, Industrial Safety News, Vol.6(2), June 2011.
- Interview on “Performance of Buildings in Christchurch Earthquakes”, Channel 10 News, Australia, March 2011
- Interview on “Performance of Buildings in Christchurch Earthquakes”, Yomiuri Shinbun, Japan, March 2011
- “Feasibility of a road link between North and South Islands”, The Panel hosted by Jim Mora, Radio New Zealand, 26 January 2011
- Radio Interview on “Effects of earthquakes to people in Christchurch”, New South Wales, February 2011.

Invited presentations:

- 23 February 2011: “Seismic performance assessment of RC frame buildings with precast concrete floor systems” and “Structural/Earthquake Engineering Research at University of Canterbury”, Asian Institute of Technology (AIT), Thailand.
- 22 February 2011: “Lessons learnt from the September 2010 Canterbury Earthquake”, Engineering Institute of Thailand (EIT), Bangkok.
- 6 May 2010: “Interaction between ductile RC frames and precast-prestressed concrete floor in seismic loading” School of Engineering and Information Technology, Australian Defence Force Academy, University of New South Wales, Canberra, Australia.
- 21 April 2010: “Seismic performance of RC frames containing precast-prestressed concrete floor systems” Keynote speech in *Concrete in the tropics* workshop organized by Concrete Institute of Australia Queensland Chapter, James Cook University, Townsville, Queensland.
- 19 November 2009: “Performance Evaluation in Structural Design” Keynote Speech in Annual Conference for Malaysian Engineering Postgraduate Students, National University of Malaysia (UKM).
- 12 November 2009: “Earthquake resistant design for future: A journey towards Loss Optimisation Seismic Design (LOSD)” National University of Malaysia (UKM).
- 10 September 2009: “Interaction between ductile RC frames and precast-prestressed concrete floor in seismic loading” National University of Malaysia (UKM).
- 20 October 2008: “Seismic performance of RC frames containing precast-prestressed concrete floor systems” Tongji University, Shanghai, China.
- 3 March 2008: “Probabilistic performance assessment of a 10-story RC moment-frame building using SLAT (Seismic Loss Assessment Tool)” GNS Science, Lower Hutt, New Zealand.
- 5 March 2007: “Structural design for earthquake resistance: past, present and future”, Department of Civil and Environmental Engineering, Nanyang Technological University (NTU), Singapore.
- 8 January 2007: “Structural design for earthquake resistance: past, present and future”, Department of Civil Engineering, Indian Institute of Technology (IIT) Mumbai, India.
- 4 January 2007: “Structural design for earthquake resistance: past, present and future”, Civil Engineering and Applied Mechanics Department, S.G.S. Institute of Technology and Science, Indore, India.

- 2 January 2007: “Structural design for earthquake resistance: past, present and future”, Department of Civil Engineering, Indian Institute of Technology (IIT) Delhi, India.
- 27 December 2006: “Structural design for earthquake resistance: past, present and future”, Department of Civil Engineering, Indian Institute of Technology (IIT) Kanpur, India.
- 22 December 2006: “Structural design for earthquake resistance: past, present and future”, Department of Earthquake Engineering, Indian Institute of Technology (IIT) Roorkee, India.
- 18 October 2006: “Probabilistic risk assessment methodology framework for natural hazards” Institute of Geological and Nuclear Science (GNS), Wellington, New Zealand.
- 29 August 2006: “Multi-level seismic performance assessment and probabilistic loss estimation of structures” Canterbury Structural Group, University of Canterbury, New Zealand.
- 1 August 2006: “Probabilistic Seismic Risk and Financial Loss Estimation of Structures”, Department of Civil Engineering, National University of Singapore, Singapore.
- 29 April 2006: “Performance Based Earthquake Engineering: Assessment of Seismic Risk and Financial Loss”, Simpson Gumpertz and Heger (SGH) Inc., San Francisco, USA.
- 28 April 2006: “Performance Based Earthquake Engineering: Assessment of Seismic Risk and Financial Loss”, Department of Civil Engineering, University of Nevada, Reno, USA.
- 24 November 2005: “Performance Based Earthquake Engineering: Assessment of Seismic Risk and Financial Loss”, Department of Civil Engineering, Nanyang Technological University, Singapore.
- 20 January 2005: “Structural response to blast loading” School of Civil Engineering, Asian Institute of Technology, Thailand.
- 4 January 2005: “Response of non-seismic frames to high-speed excitations”, International conference on Structural and Road Transportation Engineering (START2005), Kharagpur, India.
- 8 March 2004: “Characteristics of Explosion-Induced Structural Response” Canterbury Structural Group, University of Canterbury, New Zealand.
- 5 March 2003: “Full-scale Beam-column joint response and structural damage assessment”, Focus Seminar on Protective Technology, Protective Technology Research Centre, Nanyang Technological University, Singapore.
- February 2003: “Enhancement of material models for post-peak response prediction of RC”, Department of Civil Engineering, University of Auckland, New Zealand.
- June 2000: “Analytical investigation on comparative performances of RC bridge piers designed by different Seismic Design Codes”, Japan-USA-NZ-Europe combined workshop on Comparative Performance of Seismic Design Codes for Concrete Structures, Tokyo.

Publications:***Books and Book Chapters:***

- B1. RP Dhakal. (2000). “*Enhanced fibre model in highly inelastic range and seismic performance assessment of reinforced concrete*”. University of Tokyo Press, Japan, 161 pages.
- B2. RP Dhakal and K Maekawa. (2001). “*Post-peak cyclic behavior and ductility of reinforced concrete columns*”. pp. 193-216 in *Modeling of Inelastic Behavior of RC Structures under Seismic Loads*, American Society of Civil Engineers (ASCE), USA (**Invited**).
- B3. P Moss and RP Dhakal (Eds) (2006). “*Progress in Mechanics of Structures and Materials*”. Balkema Publishers, Taylor & Francis Group, London, ISBN13 978-0-415-42692-3, 1060 pages.
- B4. RP Dhakal, RC Fenwick and A Walker (2008). “*Curvature ductility of reinforced concrete plastic hinges*”. VDM Publishers, Germany, ISBN 978-3-639-04184-2, 155 pages.
- B5. J Chang, RP Dhakal, PJ Moss and AH Buchanan (2008). “*Connections on hollow-core floor systems for enhanced fire performance*”. Chapter 8 in ACI Special Publication SP-255, *Designing Concrete Structures for Fire Safety*, Ed. VKR Kodur, American Concrete Institute, USA (**Invited**).
- B6. RP Dhakal (2010). “*Structural Design for Earthquake Resistance: Past, Present and Future*”, in *Structural and Geotechnical Engineering*, in *Encyclopaedia of Life Support Systems (EOLSS): Structural Engineering and Geomechanics*, developed under the auspices of the UNESCO, EOLSS Publishers, Oxford, UK, (<http://www.eolss.net>), 33 pages (**Invited**).
- B7. A Puthanpurayil, RP Dhakal, and AJ Carr (2012). “*Optimal Passive Damper Positioning Techniques: State-of-the-Art*”. In *Structural Seismic Design Optimization and Earthquake Engineering: Formulations and Applications*, 398 pages, IGI-Global, Eds. V Plevris, CC Mitropoulou and ND Lagaros.

Journal articles:

- J1. RP Dhakal, K Maekawa. (2001). “Geometrical nonlinearity on collapse of reinforced concrete piers”. *Journal of Materials, Concrete Structures & Pavements*, No. 676, Vol. 51, pp. 135-147.
- J2. RP Dhakal, K Maekawa. (2001). “Post-peak cyclic response analysis and energy dissipation capacity of RC columns”. *Journal of Materials, Concrete Structures & Pavements*, No. 676, Vol. 51, pp. 117-133.
- J3. RP Dhakal, K Maekawa. (2002). “Factors governing the post-peak hysteresis loops of reinforced concrete columns”. *Concrete Library International*, No. 39, pp. 183-202 (**Invited**).
- J4. RP Dhakal, K Maekawa. (2002). “Modeling for post-yield buckling of reinforcement”. *ASCE Journal of Structural Engineering*, Vol. 128, No. 9, pp. 1139-1147.
- J5. RP Dhakal, K Maekawa. (2002). “Reinforcement stability and fracture of cover concrete in RC members”. *ASCE Journal of Structural Engineering*, Vol. 128, No. 10, pp. 1253-1262.
- J6. RP Dhakal, K Maekawa. (2002). “Path-dependent cyclic stress-strain relationship of reinforcing bar including buckling”. *Engineering Structures*, Vol. 24, No. 11, pp. 1383-1396.
- J7. RP Dhakal, TC Pan. (2003). “Response characteristics of structures subjected to blasting induced ground motion”. *International Journal of Impact Engineering*, Vol. 28, Issue 8, pp. 813-828.
- J8. RP Dhakal, TC Pan. (2003). “Characteristics of high-speed cyclic test of beam-column joints”. *ACI Structural Journal*, Vol. 100, No. 2, pp. 188-196.
- J9. RP Dhakal, TC Pan, P Irawan, KC Tsai, KC Lin, CH Chen. (2005). “Experimental study on the dynamic response of gravity-designed reinforced concrete connections”. *Engineering Structures*, Vol. 27, pp. 75-87
- J10. RP Dhakal and TC Pan. (2006) “Cyclic behavior of interior beam-column connections in non-

- seismic RC frames at different loading rates”. *Structural Engineering and Mechanics*, Vol. 23, No 2, pp. 129-146.
- J11. RP Dhakal. (2006). “Post-peak response analysis of SFRC columns including spalling and buckling”. *Structural Engineering and Mechanics*, Vol. 22, No 3, pp. 311-330.
- J12. RP Dhakal, RK Khare and JB Mander. (2006) “Economic payback of improved detailing for concrete buildings with precast hollow-core floors”. *Bulletin of the New Zealand Society of Earthquake Engineering*, Vol. 39, No 2, pp. 106-119.
- J13. RP Dhakal and JB Mander. (2006) “Financial risk assessment methodology for natural hazards”. *Bulletin of the New Zealand Society of Earthquake Engineering*, Vol. 39, No 2, pp. 91-105.
- J14. RP Dhakal, JB Mander and N Mashiko. (2006). “Identification of critical ground motions for seismic performance assessment of structures”. *Earthquake Engineering and Structural Dynamics*, Vol. 35, Issue 8, pp. 989-1008 (**Awarded the Otto Glogau Award 2008**).
- J15. R Fenwick and RP Dhakal. (2007) “Material strains and relevance to seismic design”. *Journal of the Structural Engineering Society of New Zealand (SESOC)*, Vol. 20, No. 1, pp. 5-12.
- J16. R Fenwick and RP Dhakal. (2007) “Material strain limits for seismic design of concrete structures”. *Journal of the Structural Engineering Society of New Zealand (SESOC)*, Vol. 20, No. 1, pp. 14-28.
- J17. JB Mander, RP Dhakal, N Mashiko and K Solberg. (2007) “Incremental dynamic analysis applied to seismic financial risk assessment of bridges”. *Engineering Structures*, Vol. 29, No. 10, pp. 2662-2672.
- J18. RP Dhakal, JB Mander and N Mashiko. (2007) “Bi-directional pseudodynamic tests of bridge piers designed to different standards”. *ASCE Journal of Bridge Engineering*, Vol. 12, No. 3, pp. 284-295.
- J19. BA Bradley, RP Dhakal, M Cubrinovski, JB Mander and G MacRae. (2007) “Improved seismic hazard model with application to probabilistic seismic demand analysis”. *Earthquake Engineering and Structural Dynamics*, Vol. 36, No. 14, pp. 2211-2225.
- J20. RK Khare, RP Dhakal, JB Mander, NBA Yati and MM Maniyar. (2007) “Mitigation of seismic financial risk of reinforced concrete walls by using damage avoidance design”. *ISET Journal of Earthquake Technology* ISSN: 0972-0405, Vol. 44, No. 3-4, Paper No. 491, pp. 391-408.
- J21. RP Dhakal, S Singh and JB Mander. (2007) “Effectiveness of earthquake selection and scaling method in New Zealand”. *Bulletin of the New Zealand Society of Earthquake Engineering*, Vol. 40, No. 3, pp. 160-171.
- J22. J Bothara, JB Mander, RP Dhakal, RK Khare and M Maniyar. (2007) “Seismic performance and financial risk of masonry houses”. *ISET Journal of Earthquake Technology* ISSN: 0972-0405, Vol. 44, No. 3-4, Paper No. 493, pp. 421-444.
- J23. BA Bradley, RP Dhakal, JB Mander and L Li. (2008) “Experimental multi-level seismic performance assessment of 3D RC frame designed for damage avoidance”. *Earthquake Engineering and Structural Dynamics*, Vol. 37, No. 1, pp. 1-20.
- J24. KM Solberg, RP Dhakal, JB Mander and BA Bradley. (2008) “Computational and rapid expected annual loss estimation methodologies for structures”. *Earthquake Engineering and Structural Dynamics*, Vol. 37, No. 1, pp. 81-101.
- J25. KM Solberg, RP Dhakal, BA Bradley, JB Mander and L Li. (2008) “Seismic performance of damage-protected beam-column joints”. *ACI Structural Journal*, Vol. 105, No. 2, pp. 205-214.
- J26. GW Rodgers, JB Mander, JG Chase, RP Dhakal, NC Leach and CS Denmead. (2008) “Spectral Analysis and Design Approach for High Force-to-Volume Extrusion Damper-based Structural Energy Dissipation”. *Earthquake Engineering and Structural Dynamics*, Vol. 37, No. 2, pp. 207-223.
- J27. BHH Peng, G MacRae, W Walpole, PJ Moss, RP Dhakal, C Clifton and C Hyland. (2008) “Location of plastic hinges in axially loaded steel members”. *Journal of Construction Steel*

- Research*, Vol. 64, No. 3, pp. 344-351.
- J28. BHH Peng, G MacRae, W Walpole, PJ Moss, RP Dhakal, C Clifton and C Hyland. (2008) "Plastic hinge location under seismic actions in columns of steel frames". *Bulletin of the New Zealand Society of Earthquake Engineering*, Vol. 41, No. 1, pp. 1-9.
- J29. J Chang, AH Buchanan, RP Dhakal and PJ Moss (2008). "Hollowcore concrete slabs exposed to fire". *Fire and Materials*, Vol. 32, No. 6, pp. 321-331.
- J30. PJ Moss, RP Dhakal, AH Buchanan and G Wang (2008). "The fire behavior of multi-bay, two-way reinforced concrete slabs". *Engineering Structures*, Vol. 30, No. 12, pp. 3566-3573.
- J31. RP Dhakal and RC Fenwick. (2008) "Detailing of plastic hinges in seismic design of concrete structures". *ACI Structural Journal*, Vol. 135, No. 6, pp. 740-749.
- J32. GW Rodgers, KM Solberg, JG Chase, JB Mander, BA Bradley, RP Dhakal and L Li. (2008) "Performance of a damage-protected beam-column subassembly utilising external HF2V energy dissipation devices". *Earthquake Engineering and Structural Dynamics*, Vol. 37, No. 13, pp. 1549-1564.
- J33. BA Bradley, and RP Dhakal. (2008) "Error estimation of closed form solution for annual rate of structural collapse". *Earthquake Engineering and Structural Dynamics*, Vol. 37, No. 15, pp. 1721-1737.
- J34. L Li, JB Mander, and RP Dhakal. (2008) "Bi-directional cyclic loading experiment on a 3-D beam-column joint designed for damage avoidance". *ASCE Journal of Structural Engineering*, Vol. 134, No. 11, pp. 1733-1742.
- J35. J Chang, AH Buchanan, RP Dhakal, and PJ Moss. (2008) "Fire performance of hollowcore floor systems in New Zealand". *Journal of the NZ Structural Engineering Society (SESOC)*, Vol. 21, No. 1, pp. 5-17.
- J36. PJ Moss, RP Dhakal, MW Bong, and AH Buchanan. (2009) "Design of steel portal frame buildings for fire safety". *Journal of Constructional Steel Research*, Vol. 65, No. 5, pp. 1216-1224.
- J37. BA Bradley, M Cubrinovski, GA MacRae, and RP Dhakal. (2009) "Ground motion prediction equation for spectrum intensity from spectral acceleration relationship." *Bulletin of the Seismological Society of America*, Vol. 99, No. 1, pp. 277-285.
- J38. KM Solberg, N Mashiko, JB Mander and RP Dhakal. (2009) "Performance of a damage protected highway bridge pier subjected to bi-directional earthquake attack". *ASCE Journal of Structural Engineering*, Vol. 135, No. 5, pp. 469-478.
- J39. BA Bradley, M Cubrinovski, RP Dhakal and GA MacRae. (2009) "Intensity measures for the seismic response of pile foundations." *Soil Dynamics and Earthquake Engineering*, Vol. 29, No. 6, pp. 1046-1058.
- J40. AF Walker and RP Dhakal. (2009) "Assessment of material strain limits for defining plastic regions in concrete structures." *Bulletin of the New Zealand Society of Earthquake Engineering*, Vol. 42, No. 2, pp. 86-95.
- J41. BA Bradley, RP Dhakal, M Cubrinovski and GA MacRae. (2009) "Seismic loss estimation for efficient decision making". *Bulletin of the New Zealand Society of Earthquake Engineering*, Vol. 42, No. 2, pp. 96-110.
- J42. A Momtahan, RP Dhakal and A Rieder. (2009) "Effects of strain-ageing on New Zealand reinforcing steel bars." *Bulletin of the New Zealand Society of Earthquake Engineering*, Vol. 42, No. 3, pp. 179-186.
- J43. CM Ewing, C Guilin, RP Dhakal and JG Chase. (2009) "Spectral analysis of semi-actively controlled structures subjected to blast loading." *Structural Engineering and Mechanics*, Vol. 33, No. 1, pp. 79-93.
- J44. TJ Mander, GW Rodgers, JG Chase, JB Mander, GA MacRae and RP Dhakal. (2009) "Damage avoidance design steel beam-column moment connection using high-force-to-volume dissipaters". *ASCE Journal of Structural Engineering*, Vol. 135, No. 11, pp. 1390-1397.

- J45. M. Maniyar, RK Khare and RP Dhakal. (2009) “Probabilistic Seismic Performance Evaluation of Non Seismic RC Frame buildings”. *Structural Engineering and Mechanics*, Vol. 33, No. 6.
- J46. J Chang, PJ Moss, RP Dhakal and AH Buchanan. (2010) “Effect of aspect ratio on fire resistance of hollow core concrete floors.” *Journal of Fire Technology*, Vol. 46, No. 1, pp. 201-216 (**Invited**).
- J47. JK Bothara, RP Dhakal and JB Mander. (2010) “Seismic performance of an unreinforced masonry building: An experimental investigation”. *Earthquake Engineering and Structural Dynamics*, Vol. 39, No. 1, pp. 45-68.
- J48. BA Bradley, RP Dhakal, M Cubrinovski and GA MacRae. (2010) “Prediction of spatially distributed seismic demand in specific structures: Ground motion and structural response”. *Earthquake Engineering and Structural Dynamics*, Vol. 39, No. 5, pp. 501-520.
- J49. BA Bradley, RP Dhakal, M Cubrinovski and GA MacRae. (2010) “Prediction of spatially distributed seismic demand in specific structures: Structural response to loss estimation”. *Earthquake Engineering and Structural Dynamics*, Vol. 39, No. 6, pp. 591-613.
- J50. BA Bradley, M Cubrinovski, RP Dhakal and GA MacRae. (2010) “Probabilistic Seismic Performance and Loss Assessment of a Bridge-Foundation-Soil System”. *Soil Dynamics and Earthquake Engineering*, Vol. 30, No. 5, pp. 395-411.
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