



**Professor Zora Vrcelj**

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**Biography:**

Dr Vrcelj is an Associate Professor in Structural Engineering and a Group Leader of the Architectural Engineering and Building Discipline. Prior to joining Victoria University in 2012 she was an academic for 10 years within the School of Civil and Environmental Engineering at the University of New South Wales (UNSW). Dr Vrcelj led numerous teaching and learning innovations at UNSW, including the introduction of the new and very popular multidisciplinary Bachelor of Engineering Civil with Architecture program (the first in Australia). Dr Vrcelj's continuous efforts to improve students' learning experiences at UNSW were recognised by her success in attracting teaching and learning innovations grants (including ALTC grant and Universitas 21 Fellowship) and the Vice Chancellor's Teaching Excellence and Faculty High Achiever awards. Her primary research interests are in the areas of composite laminated plates, optimisation of nano- and micro- members, steel-concrete composite structures, structural stability and innovations in structural engineering education. Dr Vrcelj has published over 70 refereed technical publications and since 2010 has held a Visiting Professor position in Civil engineering at the University of Novi Sad, Serbia.

**Selected Publications:**

Sharifi, S and Gohari, S and Sharifiteshnizi, M and Vrcelj, Zora (2016) Numerical and experimental study on mechanical strength of internally pressurized laminated woven composite shells incorporated with surface-bounded sensors. *Composites Part B: Engineering*, 94. 224 - 237. ISSN 1359-8368

Zorica, D and Atanacković, TM and Vrcelj, Zora and Novaković, B (2016) Dynamic Stability of Axially Loaded Nonlocal Rod on Generalized Pasternak Foundation. *Journal of Engineering Mechanics*. ISSN 0733-9399

Gohari S, Sharifi S, Vrcelj Z, Yahya MY (2015) First-ply failure prediction of an unsymmetrical laminated ellipsoidal woven GFRP composite shell with incorporated surface-bounded sensors and internally pressurized Composites Part B: Engineering. *77*, 502-518.

Atanackovic TM, Novakovic BN, Vrcelj Z, Zorica D (2015) Rotating nano-rod with clamped ends *International Journal of Structural Stability and Dynamics*. 15(3).

Khezri M, Bradford MA, Vrcelj Z (2015) Application of RKP-FSM in the buckling and free vibration analysis of thin plates with abrupt thickness changes and internal supports *International Journal of Numerical Methods in Engineering*. DOI:10.1002/nme.4936.

Khezri M, Gharib M, Bradford MA, Vrcelj Z (2015) Analysis of thick and orthotropic rectangular laminated composite plates using a state-space based generalised RKP-FSM, *Composite Structures*, In press, DOI: 10.1016/j.compstruct.2015.07.035.

Sharifishourabi G, Alebrahim R, Sharifi S, Ayob A, Vrcelj Z, Yahya MY (2014) Mechanical properties of potentially-smart carbon/epoxy composites with asymmetrically embedded shape memory wires *Materials and Design*, 59, 486-493.

Zora Vrcelj and Mark Andrew Bradford, "A simple method for the inclusion of external and internal supports in the spline finite strip method (SFSM) of buckling analysis", *Computers & Structures*, Vol. 86, No. 6, March 2008, pp. 529-544, Special Issue: Civil-Comp,

Bradford, M.A. and Vrcelj, Z. (2004), "Elastic local buckling of thin-walled square tubes containing an elastic infill", *Proceedings of 4th International Conference on Thin-Walled Structures*, Loughborough, UK, 893-900.

Bradford, M.A., Roufegarinejad, A. and Vrcelj, Z. (2006), "Elastic buckling of thin-walled circular tubes containing an elastic infill", *International Journal of Structural Stability and Dynamics*, 6(4), 457-474.