

Structural Mechanics and Materials
College Emerging Area of Research

Selected Publications

- Guerrieri, M, & Fragomeni, S (2013) **An experimental investigation into the influence of specimen size, loading conditions, in-situ pore pressures and temperatures on the spalling of large scale concrete walls when exposed to a hydrocarbon fire**, *Fire Spalling 2013: Third International Workshop on Concrete Spalling due to Fire Exposure*, 25-27 Sep 2013 Paris.
- Ngo, T., Fragomeni, S., Mendis, P. & Ta, B. (2013). **Testing of normal- and high-strength concrete walls subjected to both standard and hydrocarbon fires**. *Aci Structural Journal*, 110, 503-510.
- Guan, H., van Staden, R., Chai, G. W. & Sii, H. B. (2013). **Three-dimensional finite element analysis of doweled joints in concrete pavements**. *Advanced Materials Research*, 723, 245-257.
- Yoo, T.-M., Doh, J.-H., Guan, H. & Fragomeni, S. (2013). **Experimental behaviour of high-strength concrete deep beams with web openings**. *The Structural Design of Tall and Special Buildings*, 22, 655-676.
- Al-deen, S., Ranzi, G. & Vrcelj, Z. (2012). **Long-term experiments of composite beams and connections**. *Magazine of concrete research*, 64, 849-861.
- Atanackovic, T., Novakovic, B. & Vrcelj, Z. (2012). **Application of ponyagin's principle to bi-modal buckling optimization of micro and nano rods**. *International Journal of Stability and Dynamics*, 12, 11.
- Tran, D., Venkatesan, S. and Fragomeni, S. (2012). **Damage detection in a timber bridge model** *Proceedings of the 22nd ACMSM Conference, Sydney, NSW*, 11-14 Dec 2012, 939-945.
- Chai, G., van Staden, R., Chowdhury, S. H. & Loo, Y.-C. (2012). **A study of the effects of pavement ageing on binder deterioration**. *International Journal of Pavement Engineering*, 1-8.
- Doh, J. H., Yoo, T. M., Miller, D., Guan, H. & Fragomeni, S. (2012). **Investigation into the behaviour of deep beam with web openings by finite element**. *Computers and Concrete*, 10, 609-630.
- Guerrieri, M, and Fragomeni, S. (2012) Influence of insitu pore pressures and temperatures on spalling of reinforced concrete walls subjected to fire, *Proceedings of the 22nd ACMSM Conference, Sydney, NSW*, 11-14 Dec 2012, pp 543-546.
- Al-deen, S., Ranzi, G. & Vrcelj, Z. (2011). **Full-scale long-term and ultimate experiments of simply-supported composite beams with steel deck**. *Journal of Constructional Steel Research*, 67, 1658-1676.
- Al-deen, S., Ranzi, G. & Vrcelj, Z. (2011). **Full-scale long-term experiments of simply supported composite beams with solid slabs**. *Journal of Constructional Steel Research*, 67, 308-321.
- Al-deen, S., Ranzi, G. & Vrcelj, Z. (2011). **Shrinkage effects on the flexural stiffness of composite beams with solid concrete slabs: An experimental study**. *Engineering Structures*, 33, 1302-1315.
- Galhena, I., Fragomeni, S., Gamage, N. & Ngo, T. (2011). **Overview of recent experimental research in blast loading on concrete panel systems**. *Proceedings of the 25th Conference of the Concrete Institute of Australia*. Perth, Australia.
- Gamage, P., Venkatesan, S. & Dissanayake, R. (2011) **Seismic drift demand on multi-storey buildings in sri lanka due to long-distant earthquakes**. 2011. International Conference on Structural Engineering and Construction Management.
- Guan, H., Van Staden, R. C., Johnson, N. W. & Loo, Y.-C. (2011). **Dynamic modelling and simulation of dental implant insertion process—a finite element study**. *Finite Elements in Analysis and Design*, 47, 886-897.
- Prusty, G. B., Russell, C., Ford, R., Ben-Naim, D., Ho, S., Vrcelj, Z., Marcus, N., McCarthy, T., Goldfinch, T. & Ojeda, R. (Year) Published. **Adaptive tutorials to target threshold concepts in mechanics-a community of practice approach**. The 22nd Annual Conference for the Australasian Association for Engineering Education, 2011. 305-311.
- Ranjith, S., Setunge, S., Gravina, R. & Venkatesan, S. (2011). **Deterioration prediction of timber bridge elements using the markov chain**. *Journal of Performance of Constructed Facilities*, 27, 319-325.