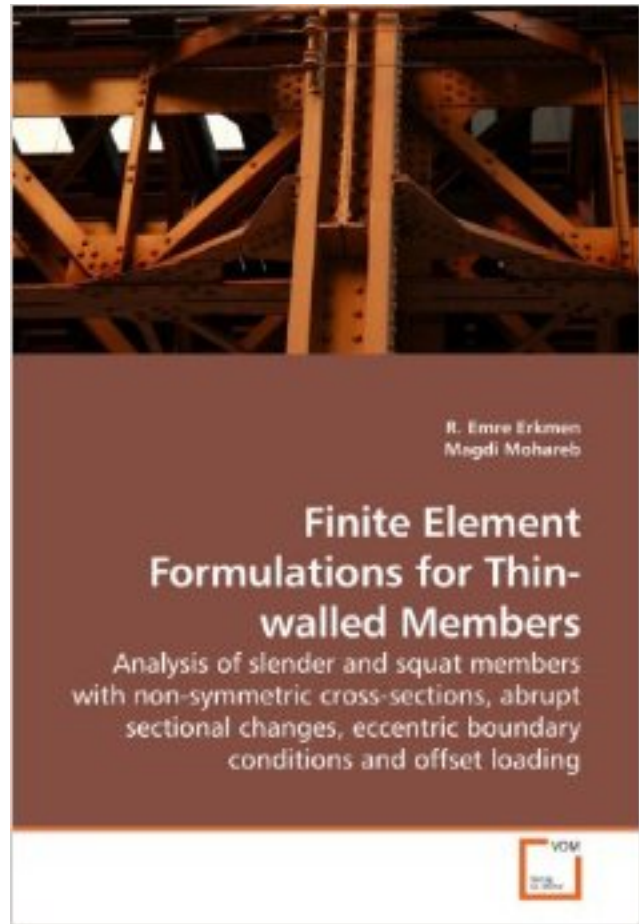




Professor Magdi Emile Mohareb



Erkmen, RE and Mohareb, M (2009) Finite Element Formulations for Thin Walled Members, VDM Publishing, Saarbrücken, Germany, 344 pp

See:

<https://engineering.uottawa.ca/civil/people/mohareb-magdi>
<http://engineering.uottawa.ca/downloads/pdf/MoharebSupervisionPapers.pdf>
https://www.researchgate.net/profile/Magdi_Mohareb
<https://scholar.google.com/citations?user=09JkIAUAAA&hl=en>

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University of Ottawa

Biography:

Dr. Mohareb received a Bachelor in Civil Engineering from Cairo University, Egypt in 1986, an MSc in Civil Engineering from Texas Tech University, USA, and a PhD in Structural Engineering from the University of Alberta in 1995. In 1995-1999, he worked as a consultant in Centre for Engineering Research and Colt Engineering, Edmonton, Canada where he conducted research and design for oil, gas, petrochemical and pipeline companies in Canada, the USA, and Norway. He joined the University of Ottawa as an assistant professor in 2000, was promoted to the rank of associate professor in 2004, and became full professor in 2010. Dr. Mohareb has co-authored a book and authored/co-authored over 50 refereed publications in the areas of

buckling of steel pipelines, lateral torsional buckling of steel structures, and finite element analysis. He is a member of Professional Engineers Ontario (PEO) since 2006, Association of Professional Engineers Geologists and Geophysicists of Alberta (APEGGA) since 1996, the Honor Society of Tau Beta Pi (1989), the Honor Society of Phi Kappa Phi (1990), American Society of Civil Engineers (since 1999), Structural Engineers Institute (since 2000), Canadian Society of Civil Engineering (since 2003), and PEO Academic Requirement Committee since 2010. He is presently serving as associate editor of the Open Construction and Building Technology Journal and served as Member of the Scientific Committee of International Conference on Advances in Civil Engineering (ACE) 2010, Karadeniz Technical University, Turkey. He was listed in Who's Who in computational Science and Engineering, 2004-2005. Dr. Mohareb acted as a peer reviewer for several journals including the ASCE Journal of Engineering Mechanics, Thin Walled Structures, International Journal for Pressure Vessels and Piping, Structural Engineering and Mechanics, International Journal of Mechanical Sciences, Canadian Journal of Civil Engineering, Journal of Pressure Vessel Technology, and served as peer reviewer for grant applications including NSERC discovery, NSERC CRD, CANMET MTL, and Qatar National Research Fund (QNRF).

Research Interests:

Structural Engineering, Lateral Buckling of steel members and plane frames, Stability of oil and gas pipelines, Development of finite elements for the analysis of steel members and pipeline, Development of Interaction relations for steel sections, Full-scale testing of oil and gas pipelines and steel structures.

Selected Publications:

BOOK: Erkmen, RE and Mohareb, M (2009) Finite Element Formulations for Thin Walled Members, VDM Publishing, Saarbrücken, Germany, (344 pp)

Journal Papers:

- J1. Wu, L. and Mohareb, M. (2011), Finite Element Formulation for Shear Deformable Thin-Walled Beams, Canadian Journal of Civil Engineering, accepted for publication
- J2. Wu, L. and Mohareb, M. (2011), Buckling Formulation for Shear Deformable Thin-Walled Members- I. Variational Principle and Analytical Solutions, Thin-walled Structures, 49(1), pp. 197-207.
- J3. Wu, L. and Mohareb, M. (2011), Buckling Formulation for Shear Deformable Thin-Walled Members- II. Finite Element Formulation, Thin-walled Structures, 49(1), pp. 208-222.
- J4. Nowzartash, F. and Mohareb, M., (2010), Upper Bound Plastic Interaction Relations for Elliptical Hollow Sections, ASCE, Journal of Engineering Mechanics, 136(8), pp. 1015-1027
- J5. Weicker, K., Salahifar, R., and Mohareb, M., (2010), Shell Analysis for Thin-Walled Pipes- Part I- Field Equations and Solution, International Journal of Pressure Vessels and Piping, 87(7), pp. 402-413
- J6. Weicker, K., Salahifar, R., and Mohareb, M., (2010), Shell Analysis for Thin-Walled Pipes- Part II- Finite Element Formulation, International Journal of Pressure Vessels and Piping, 87(7), pp. 414-423
- J7. Salahifar, R. and Mohareb, M. (2010), Analysis of Circular Cylindrical Shells under Harmonic Forces, Thin-walled Structures, 48(7), pp. 528-539
- J8. Nowzartash, F. and Mohareb, M. (2010), Plastic Interaction Relations for Semi-Elliptical Hollow Sections, Thin-walled structures, 48(1), pp. 42-54
- J9. Erkmen R. E., and Mohareb, M., and Bradford, M., A. (2009), Formulation for Torsional Buckling of Columns based on Complementary Energy, ASCE, Journal of Engineering Mechanics, 135(12), pp. 1420-1426
- J10. Nowzartash, F. and Mohareb, M. (2009), Plastic Interaction Relations for Elliptical Hollow Sections, Thin-walled structures, 47(6-7), pp. 681-691
- J11. Ozkan, I. and Mohareb, M. (2009), Moment Resistance of Steel Pipes Subjected to Combined Loads, International Journal of Pressure Vessels and Piping, 86(4), pp. 252-264

- J12. Ozkan, I. and Mohareb, M. (2009) "Testing and Analysis of Steel Pipes under Bending, Tension and Internal Pressure", ASCE, Journal of Structural Engineering, 135(2), pp. 187-197
- J13. Erkmen, R. E. and Mohareb, M., (2008), Buckling Analysis of Thin-walled Open Members - A Complementary Energy Variational Principle", Thin-walled structures, 46(6), pp. 602-617
- J14. Erkmen, R. E. and Mohareb, M., (2008), Buckling Analysis of Thin-walled Open Members - A Finite Element Formulation", Thin-walled structures, 46(6), pp 618-636
- J15. Zhang C., Bao, X., Ozkan, I., Mohareb, M., Ravet, F., and Zou, L., (2008), "Novel Signal Processing for Distributed Brillouin Fiber Sensors for the Prediction of Pipe Buckling", Optical Fiber Technology, 14(2), pp. 109-113
- J16. Erkmen, R. E. and Mohareb, M. (2006), "Torsion Analysis of Thin-Walled Beams Including Shear Deformation Effects", Thin-walled structures, 44(10), pp. 1096-1108
- J17. Erkmen, R. E. and Mohareb, M. (2006), "Non-orthogonal solution for thin-walled members – A finite element formulation", Canadian Journal of Civil Engineering, 33(4), pp. 421-439
- J18. Erkmen, R. E. and Mohareb, M. (2006), "Non-orthogonal solution for thin-walled members – Applications and modeling considerations", Canadian Journal of Civil Engineering, 33(4), pp. 440-450
- J19. Nowzartash, F. and Mohareb, M. (2005), "Planar Bending of Sandwich Beams with Transverse Loads off the centroidal axis", ASCE, Journal of Engineering Mechanics, 131(4), pp. 385-396
- J20. Nowzartash, F., and Mohareb, M. (2004), "An Elasto-Plastic Finite Element for Pipelines", International Journal of Pressure Vessels and Piping, 81(12), pp. 919-930
- J21. Mohareb, M. and Ozkan, I. (2004) "Interaction Relations for Square Hollow Structural Sections – A Lower Bound Solution", ASCE, Journal of Structural Engineering, 130(9), pp. 1381-1391
- J22. Zinoviev, I. and Mohareb, M. (2004) "Analysis and Design of Laterally Unsupported frames for out-of-plane stability", Canadian Journal of Civil Engineering, 31(3), pp. 440-452
- J23. Ozkan, I. and Mohareb, M. (2003) "Experimental Investigation of Pipe Sections under Bending, Twist, and Shear", ASCE, Journal of Structural Engineering, 129(10), pp. 1350-1357
- J24. Mohareb, M. and Nowzartash, F. (2003) "Exact Finite Element for Warping Torsion of Open Steel Sections", ASCE, Journal of Structural Engineering, 129(2), pp. 215-223
- J25. Mohareb, M. (2003) "Plastic Resistance of Pipe Sections: Upper Bound Solution", American Society of Civil Engineers, Journal of Structural Engineering, 129(1), pp. 41-48
- J26. Mohareb, M., (2002) "Plastic Interaction Relations for Pipe Sections", ASCE, Journal of Engineering Mechanics, 128(1), pp 112-120.
- J27. Mohareb, M., (2001) "Exact yield hyper-surface for thin pipe sections", International Journal of Pressure Vessels and Piping, 78(7), pp 507-514.
- J28. Mohareb, M., Kulak, G. L., Elwi, A., and Murray, D. W. (2001), "Testing and Analysis of Steel Pipe Segments", ASCE, Journal of Transportation Engineering, 127(5), pp 408-417.
- J29. Mohareb, M. and Murray, D. W. (1999), "Mobilization of Fully Plastic Moment Capacity for Pressurized Pipes Subjected to Axial Loading", ASCE, Journal of Offshore Mechanics and Arctic Engineering, Vol. 121, November, pp 237-241.
- J30. Girija Vallabhan, C. V., Das, Y. C., Mohareb, M., Mehmet, A. and Bailey J. R., (1993), "Analysis of Laminated Glass Units", ASCE, Journal of Structural Engineering, Vol. 119 (5), pp 1572-1585.