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PROFESSIONAL PREPARATION

Ph.D. in Structural Engineering, Cornell University, January, 1981

M.S. in Civil Engineering, University of Kentucky, August, 1976

B.S. in Civil Engineering, University of Kentucky, May, 1974

APPOINTMENTS

7/05 – Present: Chair, Dept. of Civil Engrg., University of Kentucky, Lexington, KY

7/92 – Present: Professor of Civil Engrg., University of Kentucky, Lexington, KY

7/85 – 6/92: Assoc. Prof. of Civil Engrg., University of Kentucky, Lexington, KY

1/80 – 6/85: Assist. Prof. of Civil Engrg., University of Kentucky, Lexington, KY

HONORS AND AWARDS

2007 Distinguished Alumni Award, Elizabethtown Community & Technical College

Raymond-Blythe Civil Engineering Professorship, July 1, 2002 – June 30, 2005

Outstanding Educator, Kentucky Section ASCE, 2000 and 2003

Gilliam Award for Outstanding Professional Service, Kentucky Section ASCE, 2000

Member of Chi Epsilon

Kentucky Bureau of Highways Scholarship, 6/71-5/74

SIGNIFICANT PUBLICATIONS¹

1. Ren, W.-R., Blandford, G.E. and Harik, I.E. (2004), “Roebing Suspension Bridge: I. FE Model and Free Vibration Response,” *Journal of Bridge Engineering*, ASCE, **9**(2), 110-118.
2. Ren, W.-R., Harik, I.E., Blandford, G.E., Lenett, M. and Baseheart, T.M. (2004), “Roebing Suspension Bridge: II. Ambient Testing and Live Load Response,” *Journal of Bridge Engineering*, ASCE, **9**(2), 119-126.
3. Blandford, G.E. (2002), *Dynamic Response of Lattice Towers and Guyed Masts: Chapter 3 – Dynamic Analysis*, ASCE, Murty K.S. Madugula (Editor), 58-109 of the 266 pp.
4. Blandford, G.E., Tauchert, T.R. and Du, Y. (1999), “Self-Strained Piezothermoelastic Composite Beam Analysis Using First-Order Shear Deformation Theory,” *Composites Part B: Engineering Journal*, **60**, 51-63.
5. Penn, L.S., Blandford, G.E., Jump, J.B. and Greenfield, M.J. (1999), “Use of the Free Vibration Spectrum to Detect Delamination Thick Composites,” *Journal of Composite Materials*, **33**(1), 54-72.

¹ Graduate student co-authors are underlined.

6. Xiao, W.-M. and Blandford, G.E. (1998), "Layerwise Composite Plate Analysis Using an Element Template Methodology", *Journal of Engineering Mechanics*, ASCE, **124**(5), 587-590.
7. Blandford, G.E. (1997), "A Review of Progressive Failure Analysis for Truss Structures", *Journal of Structural Engineering*, ASCE, **123**(2), 122-129.
8. Gupta, P., Wang, S.T. and Blandford, G.E. (1996), "Lateral-Torsional Buckling of Non-Prismatic I-Beams", *Journal of Structural Engineering*, ASCE, **122**(7), 748-755.
9. Blandford, G.E. (1996), "Large Deformation Analysis of Inelastic Space Truss Structures", *Journal of Structural Engineering*, ASCE, **122**(4), 407-415.
10. Blandford, G.E. (1996), "Progressive Failure Analysis of Inelastic Space Truss Structures", *Computers and Structures*, **58**(5), 981-990.
11. Chen, H. and Blandford, G.E. (1995), "FE Model for Thin-Walled Space Frame Flexible Connection Behavior", *Journal of Structural Engineering*, ASCE, **121**(10), 1514-1521.
12. Blandford, G.E. (1994), "Stability Analysis of Thin-Walled Space Frames", *Computers and Structures*, **53**, 839-847.
13. Jonnalagadda, K.D., Blandford, G.E. and Tauchert, T.R. (1994), "Piezothermoelastic Composite Plate Analysis Using First-Order Shear Deformation Theory", *Computers and Structures*, **51**(1), 79-89.
14. Chandramouli, S., Wang, S.T. and Blandford, G.E. (1994), "Stability Response of Flexibly Connected Cold-Formed Steel Space Frames", *Thin-Walled Structures*, **18**, 333-346.
15. Jonnalagadda, K.D., Tauchert, T.R. and Blandford, G.E. (1993), "High-Order Thermoelastic Composite Plate Theories: An Analytic Comparison", *Journal of Thermal Stresses*, **16**(3), 265-284.
16. Chen, H. and Blandford, G.E. (1993), "Work-Increment-Control Method for Nonlinear Analysis", *International Journal for Numerical Methods in Engineering*, **36**, 909-930.
17. Blandford, G.E. and Ormsbee, L. (1993), "A Diffusion Wave Finite Element Model for Channel Networks", *Journal of Hydrology*, **142**, 99-120.
18. Chen, H. and Blandford, G.E. (1991), "Thin-Walled Space Frames: I. Large Deformation Analysis Theory", *Journal of Structural Engineering*, ASCE, **117**(8), 2499-2520.
19. Chen, H. and Blandford, G.E. (1991), "Thin-Walled Space Frames: II. Algorithmic Details and Applications", *Journal of Structural Engineering*, ASCE, **117**(8), 2521-2539.
20. Blandford, G.E. and Meadows, M.E. (1990), "Finite Element Simulation of Nonlinear Kinematic Surface Runoff", *Journal of Hydrology*, **119**, 335-356.
21. Blandford, G.E. (1990), "Thin-Walled Space Frame Analysis with Geometric and Flexible Connection Nonlinearities", *Computers and Structures*, **35**(5), 609-617.
22. Chen, H. and Blandford, G.E. (1989), "A C^0 Finite Element Formulation for Thin-Walled Beams", *International Journal for Numerical Methods in Engineering*, **28**, 2239-2255.
23. Hardin, B.O. and Blandford, G.E. (1989), "Elasticity of Particulate Materials", *Journal of Geotechnical Engineering*, ASCE, **115**(6), 788-805.

24. Blandford, G.E., Tauchert, T.R. and Leigh, D.C. (1989), "Nonlinear Analysis of Axisymmetric Layered Pressure Vessels: Part 1 - Theory", *Journal of Pressure Vessel Technology*, ASME, **111**(2), 113-119.
25. Leigh, D.C., Tauchert, T.R. and Blandford, G.E. (1989), "Nonlinear Analysis of Axisymmetric Layered Pressure Vessels: Part 2 - Steady State Applications", *Journal of Pressure Vessel Technology*, ASME, **111**(2), 120-123.
26. Hill, C.D., Blandford, G.E. and Wang, S.T. (1989), "Post-Buckling Analysis of Steel Space Trusses", *Journal of Structural Engineering*, ASCE, **115**(4), 900-919.
27. Blandford, G.E. (1988), "Static Analysis of Flexibly Connected Thin-Walled Plane Frames", *Computers and Structures*, **28**(1), 105-113.
28. Turner, L.W., Blandford, G.E., Loewer, O.J. and Taul, K.L. (1987), "A Finite Element Model of Heat Transfer in the Bovine; Part 1: Theory", *TRANSACTIONS of the ASAE*, **30**(3), 768-774.
29. Blandford, G.E. and Glass, G.C., "Static/Dynamic Analysis of Locally Buckled Frames", *Journal of Structural Engineering*, ASCE, Vol. 113, No. 2, February 1987, pp. 263 - 280.
30. Blandford, G.E. and Tauchert, T.R. (1985), "Nonlinear Thermoelastic Analysis of Layered Structures", *Finite Elements in Analysis and Design*, **1**(3), 271-285.
31. Blandford, G.E. and Tauchert, T.R. (1985), "Thermoelastic Analysis of Layered Structures with Imperfect Thermal Contact", *Computers and Structures*, **21**(6), 1283-1291.
32. Ingrassia, A.R., Blandford, G.E. and Liggett, J.A. (1983), "Automatic Modeling of Mixed-Mode Fatigue and Quasi-Static Crack Propagation Using the Boundary Element Method", *Fracture Mechanics: Fourteenth Symposium - Volume I; Theory and Analysis*, ASTM STP 791, J.C. Lewis and G. Sines, Editors, American Society for Testing and Materials, I-407-I-426.
33. Blandford, G.E., Ingrassia, A.R. and Liggett, J.A. (1981), "Two-Dimensional Stress Intensity Factor Computations Using the Boundary Element Method", *International Journal for Numerical Methods in Engineering*, **17**, 387-404.
34. Wang, S.T. and Blandford, G.E. (1976), "Comparison of Boundary Integral Equation and FE Method", *Journal of the Structures Division*, ASCE, **102**(ST9), 1939-1947.

THESES AND DISSERTATIONS

1. Balasubramanian Datchanamourty, *Nonlinear Static, Buckling and Dynamic Analysis of Laminated Piezothermoelastic Composite Plate Using Reissner-Mindlin Theory Based on a Mixed Hierarchic Finite Element Formulation*, Ph.D., Civil Engineering, May 2008, (Director).
2. Laura Schweri, *Flexibility-Based Geometric Nonlinear Analysis of Two-Dimensional Frame Structures Composed of Nonprismatic Members*, Master of Science Thesis, Civil Engineering, May 2002 (Director).
3. Yu Du, *Piezothermoelastic Composite Beam Analysis Using First-Order Shear Deformation Theory*, Master of Science, Engineering Mechanics, December 1996 (Co-Director).

4. Hongwei Jiang, *Optimal Design of Laminated Plates*, Master of Science, Engineering Mechanics, August 1996 (Co-Director).
5. Wei-men Xiao, *Large Deformation Layerwise Analysis of Piezothermoelastic Composite Plates Using an Element Template Methodology and Serendipity Hierarchical Finite Elements*, Ph.D., Civil Engineering, May 1996 (Director).
6. Xiaoyao Shao, *Deformation Behavior and Postbuckling Analysis of Laminated Beams*, Master of Science, Engineering Mechanics, August 1995 (Co-Director).
7. Krishna D. Jonnalagadda, *Analytic Solutions for Smart Composite Plate Structures*, Master of Science, Engineering Mechanics, May 1993 (Co-Director).
8. Sundar Chandramouli, *Stability Analysis of Flexibly Connected Space Frame Structures Composed of Cold-Formed Steel Members*, Master of Science, Civil Engineering, August 1992 (Co-Director).
9. Hatest Singh, *Transient Analysis of Axisymmetric Layered Pressure Vessels Subjected to Cool Down Unloading*, Master of Science, Engineering Mechanics, December 1991 (Co-Director).
10. Hong Chen, *Nonlinear Space Frame Analysis Including Flexible Connection and Bifurcation Behavior*, Ph. D., Civil Engineering, August 1990 (Director).
11. Christopher David Hill, *An Updated Lagrangian Formulation for the Inelastic and Geometric Nonlinear Analysis of Steel Space Trusses*, Master of Science, Civil Engineering, December 1987 (Co-Director).
12. Daniel Frederick Schertler, *Effects of Semi-Rigid Connections on Space Frame Behavior*, Master of Science, Civil Engineering, December 1987 (Co-Director).
13. Ivan Gonsalvas, *Finite Element Analysis of Nonlinear Transient Heat Conduction and Thermoelasticity in Layered Structures - A Polar Coordinate Analysis*, Master of Science, Engineering Mechanics, August 1986 (Co-Director).
14. Larry W. Turner, *Modeling Thermoregulation and Heat Transfer Within the Beef Animal*, Ph. D., Agricultural Engineering, December 1984 (Co-Director).
15. Nathaniel Peters II, *Finite Element Simulation of Overland Flow*, Master of Science, Civil Engineering, May 1983 (Director).