Professor Tarun Kant

PhD Theses Refereed

1. C CHANNAKESHAVA, Nonlinear finite element models for reinforced concrete, Department of Civil Engineering, IISc-Bangalore, 1988.

2. A D SAHASRABUDHE, An efficient three dimensional finite element analysis of simple and extended tube expansion chamber mufflers, Department of Mechanical Engineering, IISc-Bangalore, 1989.

3. C G NANDAKUMAR, Finite element buckling analysis of doubly curved subsea shells, Ocean Engineering Centre, IIT-Madras, 1990.

4. U B CHOUBEY, Behaviour of infilled frames under cyclic loads, Department of Civil Engineering, IIT-Delhi, 1990.

5. S SAVITHRI, Linear and nonlinear analysis of thick homogeneous and laminated plates, Department of Mathematics, IIT-Madras, 1990.

6. R GANESAN, Response, stability and catastrophes of stochastically parametered structural systems, Department of Civil Engineering, IISc-Bangalore, 1991.

7. HAMZEH SHAKIB, Elastic and inelastic behaviour of torsionally coupled system under random ground motion, Department of Applied Mechanics, IIT-Delhi, 1991.

8. M R YOGANANDA, The analysis of unreinforced brick masonry vaults, Department of Civil Engineering, IISc-Bangalore, 1991.

9. R SETHUNARAYANAN, Some studies on paraboloidal and hyperboloidal shells design of reflector antenna structures, Department of Applied Mechanics, IIT-Madras, 1992.

10. MOHAMMED AMEEN, Application of boundary integral equation methods in the analysis of concrete structures - plain and reinforced, Department of Civil Engineering, IISc-Bangalore,1992.

11. B SREEHARI KUMAR, Analysis of thick orthotropic and laminated circular cylindrical shells, Department of Civil Engineering, IISc-Bangalore, 1992.

12. MOHAMMAD REZA KHALILI, Analysis of the dynamic response of large orthotropic elastic plates to transverse impact and its application to fibre-reinforced plates, Department of Applied Mechanics, IIT-Delhi, 1992.

13. ASHOKE DEY, Analysis of doubly curved laminated composite shells by isoparametric finite element method, Department of Civil Engineering, IIT-Kharagpur, 1993.

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15. NISHANT KUMAR SHRIVASTAVA, Optimal stress locations and stress recovery procedures in finite element method, Department of Applied Mechanics, IIT-Delhi, 1994.

16. T C RAMESH, Studies on cylindrical and conical shells with applications in the analysis of railway wheels, Department of Applied Mechanics, IIT-Madras, 1994.

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Simulation of tension softening and size effect in quasi-brittle materials by lattice and fractal models, Department of Civil Engineering, IISc-Bangalore, 1997.

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24. P RAMA MOHAN, Development of robust higher order transverse deformable elements for composite laminates, Department of Aerospace Engineering, IISc-Bangalore, 1997.

25. VARIYAR SHARATKUMAR MADHAVAN, Estimation of residual stresses and distortions in weldments using a nine-nodded degenerated shell element, Department of Mechanical Engineering, IIT-Madras, 1999.

26. R K INGLE, Nonlinear analysis of raft/ slab subjected to impact loading, Visveswaraya Regional College of Engineering, Nagpur University, 1999.

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30. ARBIND KUMAR SINGH, Finite element analysis of damage coupled elastoplastic problems based on continuum damage mechanics, Department of Civil Engineering, IISc-Bangalore, 1999.

31. KRISHNA KANT PATHAK,
Gradientless shape optimization of concrete structures using artificial neural networks, Department of Applied Mechanics, IIT-Delhi, June 2000.

32. M PRADYUMNA, Influence of joint compliance on the behaviour of space structures, Department of Civil Engineering, IISc-Bangalore, 2001.

33. Md SHAJEDUL KARIM, Integration of some bivariate polynomials with rational denominators- an application to finite element method, Department of Mathematics, Bangalore University, December 2000.

34. MALOY KUMAR SINGHA, Thermo-mechanical stability and optimization of composite plates and shells, Department of Civil Engineering, IIT-Kharagpur, May 2001.

35. JOSHY P GEORGE, A new method for complete analysis of indeterminate beams, Department of Applied Mechanics, Walchand College of Engineering, Sangli, Shivaji University, Kolhapur, September 2000.

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37. JAYANTA PATHAK, Generation of design earthquake and damage detection using ANN,
Department of Civil Engineering, IIT-Roorkee, November 2001.

38. S BASIL GNANAPPA, Behaviour of multi-bay R.C. frames with various infills under cyclic loading,
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39. U VINU UNNITHAN, Adaptive nonlinear finite element analysis of plane problems in the distributed computing environment, Department of Civil Engineering, IIT-Madras, May 2002 (MS thesis)

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45. VINAY SHIVASHANKER PURANI, Structural engineering applications with augmented neural computing, Department of Applied Mechanics, MS University of Baroda, December 2002.

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49. MOHAMED HANEEF, Some studies on fastener joints in composite laminate structure, Department of Mechanical Engineering, University Visvesvaraya College of Engineering, Bangalore University, Bangalore-560 001, June 2003.

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55. RAJENDRA NARAYAN KHAPRE, Application of parallel computing in finite element analysis of two-dimensional small and large deformations, Birla Institute of Technology and Science, Pilani-333 031, March 2006.

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57. K. NALINNA, Optimal laminate sequence of hybrid composite thin-walled beams, plates and shells using evolution strategies and genetic algorithms, Department of Civil Engineering, PSG College of Technology, Coimbatore-641 004, Bharathiar University, Coimbatore-641 046, March 2006.

58. INDRANI GOGOI, Dynamic response of ageing concrete gravity dams with unbounded reservoir, Department of Civil Engineering, IIT Guwahati-, February 2006.

59. V. SIVAKUMAR, A nonlinear analysis of segment joint in solid rocket boosters, Department of Applied Mechanics, IIT Madras-600 036, May 2006.

60. A S SANTHI (Ms), Studies in beamless RC structural floor systems for medium floor plans, Department of Civil Engineering, IIT Roorkee-247 667, May 2006.

61. M V RENUKA DEVI (Ms), Fracture of plain concrete beams via fractals, Department of Civil Engineering, IISc Bangalore-560 012, 2007.

62. K M Mini (Ms.), Analysis and assessment of the behaviour of infilled frames using artificial neural networks, Department of Civil Engineering, Coimbatore Institute of Technology, Coimbatore-641 014, June 2006, Defended 7 March 2008

63. K. Gopikrishna, Wavelet basis FEM for solution of some transient problems in structural dynamics, Department of Earthquake Engineering, IIT Roorkee – 247 667, December 2007.

64. Mandira Bhattacharyya (Ms.), Theoretical and experimental studies of thermoelastic response of functionally graded beams, Department of Applied Mechanics, IIT Delhi – 110 016, August 2007.

65. Mohd Shariq, Studies in creep characteristics of concrete and reinforced concrete, Department of Civil Engineering, IIT Roorkee – 247 667, December 2007.

66. Shailendra Kumar, Bhaviour of fracture parameters for crack propagation in concrete, Department of Civil Engineering, IIT Kharagpur – 721 302, July 2009.

67. Sarat Kumar Panda, Static and dynamic instability analysis of plates and cylindrical shell panels, Department of Civil Engineering, IIT Kharagpur – 721 302, September 2009.

68. Biswanath Banerjee, New schemes for forward and inverse problems in computational mechanics and medical imaging, Department of Civil Engineering, IISc Bangalore, 2009.

69. Rupesh Daripa, Stability and dynamics of composite plates and cylindrical panels, Department of Applied Mechanics, IIT Delhi – 110 016, September 2009.

70. K.P. Beena, Improved spline finite strip for linear and post-buckling analysis of composite plates, Department of Civil Engineering, IIT Madras – 600 036.

71. R. Jerome, Finite element modeling of electro-elastic materials, Department of Mechanical Engineering, IIT Madras-600 036, May 2010.

72. Anindya Bhar, Finite element analysis of stiffened laminated composite and functionally graded plates using a higher-order shear deformation theory, Department of Ocean Engineering and Naval Architecture, IIT Kharagpur – 721 302.

73. Dipika Devi, Object-oriented non-linear finite element analysis framework for implementing modified cam clay model, Department of Civil Engineering, IIT Guwahati, Guwahati-781 039.

74. D. Sasikala, Nonsingular boundary element analysis for flexure of stiffened plates, Department of Civil Engineering, NIT Calicut, Kozhikode-673 601 (report sent in March 2013; Defence held on 7 June 2013).

75. Jayanta Kumar Nath, Global-local theories for smart piezolaminated plates and shells, Department of Applied Mechanics, IIT Delhi-110 016, July 2012 (report sent in March 2013).

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