

## *Professor Tarun Kant*

### Papers in Proceedings of Seminars, Symposia and Conferences

1. Ramesh, C.K. and Kant, T. (1973). Influence of anisotropy and other time dependent properties on fibre reinforced plastic (FRP) pressure vessels - a status report, *Proc. National Seminar on Materials Science and Technology*, The Institution of Engineers (India), Madras, India, 18-20 February.
2. Ramesh, C.K., Kant, T. and Jadhav, V.B. (1973). Elastic analysis of cylindrical pressure vessels with various end closures, in *Proc. Symposium on Nuclear Science and Technology*, Bhabha Atomic Research Centre, Bombay, India, 13-17 March.
3. Ramesh, C.K., Kant, T. and Samant, L.N. (1973). Thermal creep in prestressed concrete nuclear pressure vessels, in *Proc. Symposium on Nuclear Science and Technology*, Bhabha Atomic Research Centre, Bombay, India, 13-17 March.
4. Ramesh, C.K. and Kant, T. (1974). Teaching project management - lineage, literature and limitations, in *Proc. IFAC International Symposium on Systems Engineering Education in Developing Nations*, The Institution of Engineers (India), New Delhi, India, 4-7 November.
5. Ramesh, C.K., Buragohain, D.N., Gurujee, C.S., Kant, T. and Belkune, R.M. (1975). Automated design of structural engineering systems - role, rigour and relevance, in *Proc. Tenth Annual Convention*, The Computer Society of India, Ahmedabad, India, January.
6. Kant, T. and Ramesh, C.K. (1975). A unified method of analysis for beams, plates and shells, in *Proc. Symposium on Structural Mechanics*, Bhabha Atomic Research Centre, Bombay, India, 20-22 March.
7. Kant, T. and Ramesh, C.K. (1976). Analysis of thick orthotropic shells, in *Proc. IASS World Congress on Space Enclosures*, Montreal, Canada, 4-9 July, pp. 401-409.
8. Kant, T. and Parekh, H.V. (1977). Computer aided design of concrete footings, in *Proc. International Conference on Computer Applications in Developing Countries*, Asian Institute of Technology, Bangkok, Thailand, 22-25 August, pp. 1045-1058.
9. Kant, T. and Ramesh, C.K. (1978). On construction of higher-order linear elastic shell theories for composite pressure vessel design, in *Proc. Third International Symposium on Newer Fibres and Composites*, SASMIRA, Bombay, India, 20-24 February.
10. Sherief, N.A., Ramesh, C.K. and Kant, T. (1978). A finite element application to composite pressure vessels, in *Proc. Third International Symposium on Newer Fibres and Composites*, SASMIRA, Bombay, India, 20-24 February.
11. Kant, T. (1978). Stress analysis of pressure vessels, in *Proc. Seminar on Design and Fabrication of Chemical Equipments*, Chemical Engineering Association, Indian Institute of Technology, Bombay, India, 17 March.
12. Kant, T., Bairagi, N.K. and Malvadkar, C.B. (1979). Teaching of a first course in solid mechanics, in *Proc. Seminar on Teaching of Physics, Engineering Mechanics and Solid Mechanics to Undergraduate Engineering Students*, Curriculum Development Programme, Indian Institute of Technology, Bombay, India, 15 September.
13. Kant, T. (1980). A stable wiggle-free numerical solution of the advection-diffusion equation by segmentation method, in *Proc. International Conference on Boundary and Interior Layers-Computational and Asymptotic Methods (BAIL 1)*, Trinity College, Dublin, Ireland, 3-6 June.
14. Kant, T. (1981). On numerical integration of heat conduction / conduction-convection equation, in *Numerical Methods in Thermal Problems* by R. W. Lewis, K. Morgan and B. A. Schrefler (editors), Pineridge Press, Swansea, U. K.
15. Kant, T. (1981). Thermoelasticity of thick laminated orthotropic shells, in *Trans. Sixth International Conference on Structural Mechanics in Reactor Technology (SMIRT-6)*, Paper M 11/6, North-Holland Publishing Company, Amsterdam, Netherlands.

16. Kant, T. (1982). On finite element discretization of a higher-order shell theory, in *Mathematics of Finite Elements and Applications IV* by J. R. Whiteman (editor), Academic Press, London, pp. 209-217.
17. Kant, T. (1982). On evaluation of two thick plate theories - finite element solutions, in *Mathematics of Finite Elements and Applications IV* by J. R. Whiteman (editor), Academic Press, London, p. 527.
18. Kant, T. (1983). An appraisal of computational techniques for transient heat conduction equation, in *Trans. Seventh International Conference on Structural Mechanics in Reactor Technology (SMIRT-7)*, Chicago, U.S.A., Paper B 2/5, North-Holland Publishing Company, Amsterdam, The Netherlands.
19. Kant, T. (1984). The use of reinforced composites in commercial aircrafts, in *Proc. Seminar on Flight Safety*, The Aeronautical Society of India (Bombay Branch), Bombay, India, 11 & 12 May.
20. Kant, T. and Kulkarni, P.B. (1985). A  $C^0$  continuous linear beam / bilinear plate flexure element, in *Trans. Eighth International Conference on Structural Mechanics in Reactor Technology (SMIRT-8)*, Brussels, Belgium, Paper B 9/6, North-Holland Publishing Company, Amsterdam, The Netherlands.
21. Kant, T. and Sahani, N.P. (1985). Fibre reinforced plates - some studies with 9-noded Lagrangian / Heterosis element, in *Trans. Eighth International Conference on Structural Mechanics in Reactor Technology (SMIRT-8)*, Brussels, Belgium, Paper B 8/7, North-Holland Publishing Company, Amsterdam, The Netherlands.
22. Kumar, R.R., Rajaiah, K., Belkune, R.M. and Kant, T. (1985). An accurate finite element for stress concentration problems in shells, in *Finite Elements in Computational Mechanics* by T. Kant (editor), Pergamon Press, Oxford, England.
23. Kant, T. (1986). Two shear deformable theories vis-a-vis two discrete methods, in *Computational Mechanics '86: Theory and Applications* by G. Yagawa and S. N. Atluri (editors), Springer-Verlag, Tokyo.
24. Kant, T. and Pandya, B.N. (1987). Finite element evaluation of interlaminar stresses based on first and higher-order theories, Invited Lecture, in *Proc. Workshop-cum-Seminar on Delaminations in Composites*, Indian Institute of Science, Bangalore, India, 19 & 20 March, pp. 85-103.
25. Kant, T. and Galagali, J.T. (1987). Finite element elasto-plastic analysis of axisymmetric structures by parilinear and other two dimensional elements, Paper J 9/5, in *Trans. Ninth International Conference on Structural Mechanics in Reactor Technology (SMIRT-9)*, Lausanne, Switzerland, 17-21 August, A. A. Balkema, Rotterdam, The Netherlands, pp. 315-324.
26. Kant, T., Mallikarjuna and Pandya, B.N. (1987). Recent developments in mechanics of fibre reinforced composite plates, in *Proc. 32nd Congress of The Indian Society of Theoretical and Applied Mechanics (32nd ISTAM)*, Indian Institute of Technology, Bombay, India, 17-20 December.
27. Kant, T. (1987). A higher-order general shell theory, in *Proc. 32nd Congress of The Indian Society of Theoretical and Applied Mechanics (32nd ISTAM)*, IIT-Bombay, India, 17-20 December.
28. Kant, T. and Pandya, B.N. (1988). Finite element stress analysis of unsymmetric laminated composite plates based on a refined higher order theory, in *Composite Materials and Structures* by K. A. V. Pandalai and S. K. Malhotra (editors), Tata McGraw-Hill, New Delhi, pp.373-380.
29. Kant, T. and Mallikarjuna (1988). Finite element evaluations for transient dynamics of sandwich plates, in *Proc. Seminar on Finite Element Applications for Practical Problems and ASKA Users' Conference*, National Aeronautical Laboratory, Bangalore, India, 28 & 29 January, pp. VI 3.1-12.
30. Mallikarjuna and Kant, T. (1988). On transient response of laminated composite plates based on a higher-order theory, in *Proc. 3rd International Conference on Recent Advances in Structural Dynamics*, Southampton, U.K., 18-22 July.
31. Kant, T. (1988). Finite element models of plates and shells, Invited Lecture, in *Proc. Advanced Study Institute (NSF)*, Indian Institute of Technology, Madras, India, 1-10 August.

32. Kant, T. (1988). Micro-mechanics of FRP composite material structures, Invited Keynote Lecture, in *Proc. 40th Annual General Meeting, The Aeronautical Society of India*, Indian Institute of Technology, Madras, India, 19-21 December.
33. Kant, T. and Mallikarjuna (1989). Impulse response of anisotropic composite plates with a higher-order theory and finite element discretization, Invited Paper B/0070, in *Trans. Tenth International Conference on Structural Mechanics in Reactor Technology (SMIRT-10)*, Anaheim, U.S.A., 14-18 August., A. H. Hadjian, Editor, Published by The American Association for Structural Mechanics in Reactor Technology, Los Angeles, pp. 209-220.
34. Kant, T. and Mallikarjuna (1989). On the transient response of fibre reinforced composite laminates - some new results, in *Proc. Seminar on Science and Technology of composites, Adhesives and Sealants*, Bangalore, India, 28-30 September, pp. 257-263.
35. Kant, T. and Manjunatha, B.S. (1989). On estimation of interlaminar stresses in a FRC laminate with a refined theory and  $C^0$  finite elements, in *Engineering Software*, edited by C.V. Ramakrishnan, A. Varadarajan and C.S. Desai, in *Proc., Int. Conf. on Engineering Software (ICENSOFT)*, New Delhi, 4-7 December, Narosa Publishing House, New Delhi, 1989, pp. 799-806.
36. Kant, T. and Mallikarjuna (1989). A software system for elasto-statics/dynamics of FRC laminates, in *Engineering Software*, edited by C.V. Ramakrishnan, A. Varadarajan and C.S. Desai, in *Proc., Int. Conf. on Engineering Software (ICENSOFT)*, New Delhi, 4-7 December, Narosa Publishing House, New Delhi, 1989, pp. 597-603.
37. Singh, R.K., Kant, T. and Kakodkar, A. (1989). Studies on shell-fluid interaction problems, in *Engineering Software*, edited by C. V. Ramakrishnan, A. Varadarajan and C. S. Desai, in *Proc., Int. Conf. on Engineering Software (ICENSOFT)*, New Delhi, 4-7 December 1989, Narosa Publishing House, New Delhi, 1989, pp. 865-871.
38. Kant, T. and Mallikarjuna (1990). On importance of transverse shear deformation effects in macro-mechanics of composites, in *Proc. Int. Conf. on Advances in Composite Materials (ICACM 90)*, Bombay, 15-18 January.
39. Kant, T. and Mallikarjuna (1990). Some advances in dynamics of composite laminates with refined theories, in *Proc. National Seminar on Aero Structures (NASAS 1990)*, NAL-Bangalore, 4 & 5 April.
40. Singh, R.K., Kant, T. and Kakodkar, A. (1990). Optimum partitioning schemes for fluid structure interaction problems, in *Advances in Structural Testing, Analysis and Design*, edited by V. S. Arunachalam, et al., in *Proc., International Conference on Structural Testing, Analysis and Design (ICSTAD)*, Bangalore, 29 July - 3 August 1990, Tata McGraw-Hill, New Delhi, 1990, pp.954-959.
41. Kant, T. and Manjunatha, B.S. (1990). A new approach for the evaluation of transverse stresses in composite and sandwich laminates, in *Advances in Structural Testing, Analysis and Design*, edited by V. S. Arunachalam, et al., in *Proc., Int. Conf. on Structural Testing, Analysis and Design (ICSTAD)*, Bangalore, 29 July- 3 August 1990, Tata McGraw-Hill, New Delhi, 1990, pp.87-92.
42. Kant, T. and Menon, M.P. (1990). Refined multilayered composite cylindrical shell elements, in *Advances in Structural Testing, Analysis and Design*, edited by V. S. Arunachalam, et al., *Proc., Int. Conf. on Structural Testing, Analysis and Design (ICSTAD)*, 29 July- 3 August 1990, Tata McGraw-Hill, New Delhi, 1990, pp.533-538.
43. Kant, T. (1990). Vibration of fibre reinforced composite laminates: recent developments, Invited Lecture, in *Proc. First International Conference on Vibration Problems of Mathematical Elasticity and Physics*, held at A.C. College, Jalpaiguri-735 101, India, 20-23 October 1990.
44. Kant, T. (1991). An appraisal of recent developments in computational mechanics of fibre reinforced laminated composite material systems under static and dynamic conditions, Paper 5a-2, in *Proc. International Aerospace Congress 1991*, World Congress Centre, Melbourne, Australia, 12-16 May 1991.
45. Mallikarjuna and Kant, T. (1991). A refined theory with the superparametric element for laminated composite-sandwich shells, in *Proc. Eighth International Conference on Composite Materials (ICCM-91)*, Stanford University, California, U.S.A., 14-19 July 1991.
46. Singh, R.K., Kant, T. and Kakodkar, A. (1991). Coupled shell dynamic analysis with 2D degenerate shell elements, Paper B 12/2, in *Trans. Eleventh International Conference on Structural Mechanics in Reactor Technology (SMIRT-11)*, Tokyo, Japan, 18-23 August 1991.

47. Singh, R.K., Kant, T. and Kakodkar, A. (1991). Transient analysis of submerged coupled cylindrical tubes, Paper J 06/2, in *Trans. Eleventh International Conference on Structural Mechanics in Reactor Technology (SMiRT-11)*, Tokyo, Japan, 18-23 August 1991.
48. Mallikarjuna and Kant, T. (1991). Dynamics of composite structures using a first order shear deformation theory with the superparametric element, in *Trans. Eleventh International Conference on Structural Mechanics in Reactor Technology (SMiRT-11)*, Tokyo, Japan, 18-23 August 1991.
49. Kant, T., Manjunatha, B.S., Menon, M.P. and Kommineni, J.R. (1991). Refined higher order laminate theories: a historical perspective, in *Proc. Thirty Sixth Congress of The Indian Society of Theoretical and Applied Mechanics*, held at the Indian Institute of Technology Bombay, 19-22 December 1991.
50. Kant, T. and Menon, M.P. (1992). Fibre reinforced composite shells: elastostatics and free vibration with refined theories and finite elements, in *Proc. The Second International Symposium on Composite Materials and Structures*, held at Beijing, China, 3-7 August 1992.
51. Kant, T. and Kommineni, J.R. (1992). An unified large deflection elasto-statics and -dynamics of composite laminates, in *Proc. International Conference on Computational Methods in Engineering*, Singapore, 11-13 November 1992.
52. Kommineni, J.R. and Kant, T. (1992). Higher order  $C^0$  finite element models for linear and non-linear analysis of composite laminates, in *Proc. National Conference on Composites: Science & Technology*, Indian Institute of Technology, Bombay, 17-18 September 1992.
53. Kant, T. and Kommineni, J.R. (1992). An unified large deflection transient and pseudo-transient elastic and in-elastic analyses of composite and sandwich shells with a refined theory, in *Proc. International Symposium on Advances in Aerospace Science and Engineering*, Vol. 2, Indian Institute of Science, Bangalore, 12-15 December 1992.
54. Patil, H. and Kant, T. (1994). Buckling loads of a symmetric sandwich / laminated plate using  $C^0$  finite element formulation based on a higher order shear deformation theory, in *Proc. Third Regional Conference on Computer Applications in Civil Engineering (RCCACE'94)*, 2-4 August 1994, University Teknologi Malaysia, Johor Bahru.
55. Kant, T., Shah, M.S. and Ramesh, K.S. (1994). Composite materials analysis on parallel supercomputer, in *Proc. Second Conference on Indian Transputer User Group (ITUG'94)*, 8-10 December 1994, University of Hyderabad, Hyderabad-500 134.
56. Kant, T. (1994). Recent advances in computational mechanics of multilayered fibre reinforced composite laminates, in *Computational Structural Mechanics* by P. K. Sinha and S. Parthan (editors), in *Proc. National Seminar on Aero Structures-94 (NASAS-94)*, 8-9 December 1994, IIT-Kharagpur, Allied Publishers, New Delhi, 1994, pp.441-452.
57. Patil, H., Sreedhar, J. and Kant, T. (1995). Critical load of a sandwich column with a higher-order theory, in *Proc. National Conference on Civil Engineering Materials and Structures (NC-CEMS'95)*, 19-21 January 1995, University College of Engineering, Osmania University, Hyderabad-500 007, pp. 221-225.
58. Patil, H. S., Kant, T. and Sreedhar, J. (1995). Buckling loads of a sandwich / laminated plate using a higher order theory, in *Proc. International Conference on Stability of Structures (ICSS-95)*, 7-9 June 1995, PSG College of Technology, Coimbatore-641 004, pp. 543-549.
59. Patil, H. S. and Kant, T. (1995). Uniaxial / biaxial buckling loads of multilayered plates using a  $C^0$  based higher-order theory, in *Proc. International Conference on Mechanics of Solids and Materials Engineering*, 5-7 June 1995, Singapore.
60. S.Kale, Kant, T. and Desai, Y. (1995). Numerical modelling of reinforced concrete in plates and shells, in *Proc. Symposium on BRNS Projects*, Bhabha Atomic Research Centre, Bombay, July 1995.
61. Kant, T. and Shah, M.S. (1995). Finite element analysis of structures of composite materials on parallel supercomputer, in *Proc. International Conference on High Performance Computing*, 27-30 December 1995, New Delhi.

62. Kale, S. Kant, T. and Desai, Y. (1996). Inelastic finite element analysis of reinforced concrete thick plates and shells using a higher order shear deformation theory, Keynote lecture, in *Proc. First National Conference on Computer Aided Structural Analysis & Design (NC-CASAD'96)*, 3-5 January 1996, Hyderabad.
63. Kant, T., Khare, R.K. and Gupta, J.P.K. (1996). A higher-order facet quadrilateral finite element formulation for general composite shells, in *Proc. First National Conference on Computer Aided Structural Analysis & Design (NC-CASAD'96)*, 3-5 January 1996, Hyderabad.
64. Kale, S., Kant, T. and Desai, Y. (1996). Improved material nonlinear behaviour of plates and shells, in *Proc. TPDM-96*, 24-25 July 1996, Board of Research in Nuclear Sciences, Bhabha Atomic Research Centre, Bombay.
65. Kant, T. (1996). An appraisal of analytical and computational models for composite laminates - A personal view, Invited Lecture, in *Proc. The Third Asian-Pacific Conference on Computational Mechanics (APCOM'96)*, C.K. Choi, C.B. Yun and D.G. Lee (editors), 16-18 September 1996, Seoul, Korea.
66. Kale, S., Kant, T. and Y. Desai (1996). An improved layered model for elastoplastic analysis of reinforced concrete plates and shells, in *Proc. The Third Asian-Pacific Conference on Computational Mechanics (APCOM'96)*, C.K. Choi, C.B. Yun and D.G. Lee (editors), 16-18 September 1996, Seoul, Korea.
67. H.S. Patil, Sreedhar, J. and Kant, T. (1996). Buckling analysis of laminated/sandwich plates using a higher-order theory, in *Proc. The Third Asian-Pacific Conference on Computational Mechanics (APCOM'96)*, C.K. Choi, C.B. Yun and D.G. Lee (editors), 16-18 September 1996, Seoul, Korea, pp. 503-508.
68. Kant, T. and Srivastava, A.K. (1997). Nonlinear analytical models for composite laminates, in *Proc. Structural Engineering Convention 1997*, 12-14 February 1997, IIT-Madras, Tata McGraw-Hill, New Delhi, pp. 73-86.
69. Kant, T., Ramana, V.P.V., Dutta, P.K., Mukherjee, A. and Desai, Y. (1997). Construction applications of fiber reinforced polymer composites: a survey, in *Proc. Seventh International Offshore and Polar Engineering Conference (ISOPE-97)*, 25-30 May 1997, Honolulu, Hawaii, USA, pp. 657-663.
70. Kant, T. (1997). Mechanics of composite laminates, in *Proc. 42nd ISTAM Congress*, Karunesh Memorial Lecture, 28-31 December 1997, Surat.
71. Kale, S., Kant, T. and Desai, Y. (1998). Improved material nonlinear behaviour of plates and shells, in *Proc. Technical Programme Discussion Meeting on BRNS Projects*, 2-3 November 1998, BARC-Mumbai.
72. Kant, T. and Swaminathan, K. (1998). Comparison of shear deformation theories for the bending analysis of laminated composite plates, in *Proc. International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM98)*, 1-5 December 1998, IIT-Kharagpur.
73. Kant, T. and Babu, C.S. (1998). Stability behaviour of laminated composite plates using refined higher-order finite element models, in *Proc. International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM98)*, 1-5 December 1998, IIT-Kharagpur.
74. Kale, S., Kant, T. and Desai, Y. (1998). A higher order theory based layered formulation for reinforced concrete structures, in *Proc. International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM98)*, 1-5 December 1998, IIT-Kharagpur.
75. Kant, T. (1998). An assessment of a few higher-order laminate theories, in *Proc. 43rd ISTAM Congress*, Invited Lecture, 16-19 December 1998, PSG College of Technology, Coimbatore.
76. Kant, T. (1999). Composite materials' computational mechanics today, in *Computational Mechanics for the Next Millennium*, Edited by C.M. Wang, K.H. Lee and K.K. Ang, Elsevier, Singapore, pp. 237-242. (Proc. APCOM'99: Fourth Asia-Pacific Conference on Computational Mechanics, 15-18 December 1999).
77. Kant, T. and Swaminathan, K. (1999). Few higher order displacement models for stretching-bending behaviour of sandwiches, in *Computational Mechanics for the Next Millennium*, Edited by C.M. Wang, K.H. Lee and K.K. Ang, Elsevier, Singapore, pp. 261-266. (Proc. APCOM'99: Fourth Asia-Pacific Conference on Computational Mechanics, 15-18 December 1999).

78. Kant, T. and Babu, C.S. (1999). On thermo-mechanical buckling of sandwich panels with higher-order theories, in *Computational Mechanics for the Next Millennium*, Edited by C.M. Wang, K.H. Lee and K.K. Ang, Elsevier, Singapore, pp. 285-290. (Proc. APCOM'99: Fourth Asia-Pacific Conference on Computational Mechanics, 15-18 December 1999).
79. Kant, T., Tripathi, G. and Singh, R.K. (1999). Evaluation of different analysis methods for aseismic design of liquid storage rectangular tanks, in *Computational Mechanics for the Next Millennium*, Edited by C.M. Wang, K.H. Lee and K.K. Ang, Elsevier, Singapore, pp. 1373-1378. (Proc. APCOM'99: Fourth Asia-Pacific Conference on Computational Mechanics, 15-18 December 1999).
80. Kant, T. (1999). Mechanics of layered composites-last four decades of developments, Presidential Lecture, in *Proc. 44th Congress of Indian Society of Theoretical and Applied Mechanics*, Regional Engineering College, Warangal, 22-25 December 1999.
81. Kant, T. (2000). Composite mechanics in the last 40 years, Invited Lecture, in *Proc. SEC-2000: 2nd Structural Engineering Convention*, IIT-Bombay, 5-8 January 2000.
82. Chitnis, M.R., Desai, Y.M. and Kant, T. (2000). Wave propagation through fiber reinforced laminated composite plates, in *Advances in Structural Engineering*, Y. Desai, T. Kant and A. Mukherjee (Editors), in Proc. SEC-2000: 2nd Structural Engineering Convention, 5-8 January 2000, IIT-Bombay, Quest Publications, Mumbai, pp. 23-28.
83. Patil, H.S. and Kant, T. (2000). Elastic buckling of symmetric sandwich laminates using a higher-order theory, in *Advances in Structural Engineering*, Y. Desai, T. Kant and A. Mukherjee (Editors), in Proc. SEC-2000: 2nd Structural Engineering Convention, 5-8 January 2000, IIT-Bombay, Quest Publications, Mumbai, pp. 95-100.
84. Ramana, V.P.V., Kant, T., Dutta, P.K., Morton, S.E., Mukherjee, A. and Desai, Y.M. (2000). Experimental investigations on flexural behaviour of reinforced concrete beams strengthened with CFRPC laminates, in *Advances in Structural Engineering*, Y. Desai, T. Kant and A. Mukherjee (Editors), Proc. SEC-2000: 2nd Structural Engineering Convention, 5-8 January 2000, IIT-Bombay, Quest Publications, Mumbai, pp. 125-130.
85. Shah, M.S. and Kant, T. (2000). Higher-order shear deformation theories for the stress analysis of composite shell structures on parallel machines, in *Advances in Structural Engineering*, Y. Desai, T. Kant and A. Mukherjee (Editors), Proc. SEC-2000: 2nd Structural Engineering Convention, 5-8 January 2000, IIT-Bombay, Quest Publications, Mumbai, pp. 159-164.
86. Kant, T. (2000). On developments in mechanics of polymer composites in the last three decades, Invited lecture, in *Proc. Seventh Annual International Conference on Composites Engineering (ICCE7)*, Adam's Mark Hotel, Denver, Colorado, U.S.A., 2-8 July 2000.
87. Kant, T. and Desai, Y.M. (2000). An improved degenerate element for elasto-plastic response of reinforced concrete plates and shells, in *Advances in Computational Engineering and Sciences*, S.N. Atluri and F.W. Brust (Editors), Proc. International Conference on Computational Engineering and Sciences (ICES'2K), Los Angeles, USA, 21-25 August 2000, Tech Science Press, Palmdale, 2000, pp. 464-469.
88. Kant, T. and Swaminathan, K. (2000). Basic composite mechanics-recent results, in *High Temperature Fibre Composite Materials*, V.K. Srivastava (Editor), in Proc. Indo-German Workshop on High Temperature Fibre Composite Materials, 11-15 September 2000, BHU-Varanasi, Allied Publishers, New Delhi, 2000, pp. 147-161.
89. Chitnis, M.R., Desai, Y.M. and Kant, T. (2000). Guided waves in laminated composite plates, in *Proc. First International Conference on Vibration Engineering and Technology of Machinery*, Indian Institute of Science, Bangalore, October 2000, Paper No. CP089.
90. Kant, T. (2000). Segmentation numerical integration technique for plates and shells, Presidential Lecture, in *Proc. 45th Congress of Indian Society of Theoretical and Applied Mechanics (ISTAM 2000)*, Mepco Schlenk Engineering College, Sivakasi, 26-29 December 2000.
91. Kant, T. and Gadgil, M.G. (2001). Segmentation method in mechanics of polymer composites, Invited Keynote Lecture, in *Proc. International Conference on Civil Engineering (ICCE-2001)*, Indian Institute of Science, Bangalore, 23-25 July 2001.

92. Chitnis, M.R., Desai, Y.M. and Kant, T. (2001), Wave propagation in laminated composite plates using higher order theories, in *Proc. Structural Engineering Convention (SEC-2001)*, Indian Institute of Technology Roorkee, 29-31 October 2001.
93. Kant, T. (2001), Structural mechanics of beams, plates and shells-an overview of research, Invited Lecture, in *Proc. 46th Congress of the Indian Society of Theoretical and Applied Mechanics-An International Meet (46th ISTAM)*, Regional Engineering College Hamirpur (H.P), 19-22 December 2001.
94. Kant, T. (2002), Reflections on shell theories, Plenary Lecture, in *Advances in Civil Engineering*, J.N. Bandyopadhyay and D. Nagesh Kumar (Editors), in *Proc. International Conference (ACE-2002)*, Indian Institute of Technology Kharagpur, 3-5 January 2002, Allied Publishers, New Delhi, pp. 757-769.
95. Kulkarni, S.C., Desai, Y.M. and Kant, T. (2002), Development of GUI based software package for elastic-plastic static and dynamic analysis of piping systems, in *Proc. Technical Programme Discussion Meeting of BRNS Projects (TPDM-2002)*, Board of Research in Nuclear Sciences, Bhabha Atomic Research Centre Mumbai, 14-16 February 2002.
96. Kant, T. (2002), Computational mechanics of isotropic and composite plates and shells, Invited Lecture, in *Proc. International Workshop on Computational Mechanics and Optimisation (IWCMO 2002)*, Department of Aerospace Engineering, Indian Institute of Technology Kharagpur, 4-10 October 2002.
97. Kant, T. (2002), Computational techniques for transient dynamic analysis, Invited Lecture, in *Proc. International Workshop on Computational Mechanics and Optimisation (IWCMO 2002)*, Department of Aerospace Engineering, Indian Institute of Technology Kharagpur, 4-10 October 2002.
98. Kant, T., Desai, Y.M. and Kulkarni, S.C. (2003), An improved nonlinear three dimensional plate and shell element, in *Proc. 8th International Conference on Impact Mechanics and Plasticity (IMPLAST-2003)*, New Delhi, 17-18 March.
99. Kulkarni, S.C., Desai, Y.M., Kant, T., Reddy, G.R., Prasad, P., Vaze, K.K. and Khushawaha H.S. (2003), Ratchetting failure of piping components subjected to seismic loading- experimental and numerical studies, in *Proc. National Seminar on Seismic Design of Nuclear Power Plants*, Chennai, 21-22 February.
100. Singh, R.K., Singh, R.K. and Kant, T. (2003), A comparison of plasticity theories with first order shear deformation and higher order shear deformation kinematics for reinforced concrete shells, in *Proc. 8th International Conference on Impact Mechanics and Plasticity (IMPLAST-2003)*, New Delhi, 17-18 March.
101. Kant, T. (2003), Analytical models for thermal stress evaluations in composite and sandwich laminates, in *Thermal Stresses '03*, L. Librescu and P. Marzocca (Editors), in *Proc. 5th International Congress on Thermal Stresses and Related Topics (Thermal Stresses '03)*, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA, 8-11 June, pp. MA-10-1-1:4.
102. Kant, T. (2003), Advances in Analytical and Computational Solid and Structural Mechanics, Invited Talk, in *Proc. Structural Engineering Convention – 2003 (SEC-2003)*, Indian Institute of Technology Kharagpur, 12-14 Decemner.
103. Kant, T. (2003), Progress in mechanics of laminated composites, Invited Talk, in *Proc. 48th Congress of the Indian Society of Theoretical and Applied Mechanics – An International Meet (48th ISTAM)*, Birla Institute of Technology, Mesra (Ranchi), 18-21 December.
104. Desai, Y.M., Kant, T., Kulkarni, S.C., Reddy, G.R., Vaze, K.K., Kushwaha, H.S., Gupta, C. and Chakravarthy, J.K. (2004), Development of GUI based software package for elasto-plastic static and dynamic analysis of piping systems, in *Proc. Technical Programme Discussion Meeting of BRNS Projects (TPDM-2004)*, Board of Research in Nuclear Sciences, Bhabha Atomic Research Centre, Mumbai, 2 February 2004.
105. Kant, T. (2004), On two-dimensional modeling of fibre reinforced composite laminates, in *Proc. Fifteenth Mid-Year Meeting of the Indian Academy of Sciences*, Bangalore, 2-3 July 2004.
106. Kant, T. (2004), On two-dimensional modeling of fibre reinforced composite laminates, in *Proc. National Conference on Structural Engineering and Mechanics (SEM-04)*, Birla Institute of Technology and Science, Pilani-333 031 (Rajasthan), 24-25 September 2004.

107. Pendhari, S.S., Kalani, M. and Kant, T. (2004), Fiber reinforced polymer composites for rehabilitation of structures, in *Proc. Seminar on Coastal Area Construction Management*, K.S. Mukhopadhyay, D. Chaturvedi and Seema Ambastha (Editors), Chief Engineer (Navy) Mumbai, 1-2 November 2004, pp. 218-224.
108. Kant, T. and Subbaiah, C.V. (2004), Analytical and computational mechanics of functionally graded beams, plates and shells, Invited Talk, in *Proc. International Congress on Computational Mechanics and Simulation (ICCMS-04)*, N.G.R. Iyengar and Ashwini Kumar (Editors), Indian Institute of Technology Kanpur and Indian Association for Computational Mechanics, 9-12 December 2004, pp.86-95.
109. Singh, Rajesh K., Singh, R.K. and Kant, T. (2004), Nonlinear finite element analysis of deep reinforced concrete beams using various plasticity and shear deformation kinematics theories, in *Proc. International Congress on Computational Mechanics and Simulation (ICCMS-04)*, N.G.R. Iyengar and Ashwini Kumar (Editors), Indian Institute of Technology Kanpur and Indian Association for Computational Mechanics, 9-12 December 2004, pp. 294-299.
110. Kant, T. (2004), Thermomechanics of polymer composites, Invited Presentation, in *Proc. Recent Advances in Composite Materials*, Department of Mechanical Engineering, Banaras Hindu University, Varanasi-221 005, 17-19 December 2004.
111. Rao, M.K., Desai, Y.M. and Kant, T. (2004), A comparison of displacement and mixed models for elasto-statics of composite plates, Keynote Talk, in *Proc. Third International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM 2004)*, S.K. Bhattacharyya and Somnath Ghosh (Editors), Department of Aerospace Engineering, Indian Institute of Technology Kharagpur, 28-30 December 2004, p. 37.
112. Singh, Rajesh K., Singh, R.K., Kant, T., Jain, R.C., Ramanujam, S., Ghosh, A.K. and Kushwaha, H.S. (2004), Shear failure in beams with second order shear deformation and 3D plasticity theory, in *Proc. Third International Conference on Theoretical, Applied, Computational and Experimental Mechanics (ICTACEM 2004)*, S.K. Bhattacharyya and Somnath Ghosh (Editors), Department of Aerospace Engineering, Indian Institute of Technology Kharagpur, 28-30 December 2004, p. 481.
113. Pendhari, S.S., Kant, T. and Desai, Y.M. (2005), Modelling of reinforced concrete beams strengthened with composites, in *Proc. International Conference on Structural and Road Transportation Engineering (START 2005)*, J.N. Bandyopadhyay and Bhargab Maitra (Editors), Department of Civil Engineering, Indian Institute of Technology Kharagpur, 3-5 January 2005, Elite Publishing House Pvt Ltd, New Delhi, p. 79.
114. Kant, T. and Subbaiah, C.V. (2005), A précis on computational mechanics of functionally graded beams, plates and shells, in *Proc. Third MIT Conference on Computational Fluid and Solid Mechanics*, K.J. Bathe (Editor), Massachusetts Institute of Technology, Cambridge, MA 02139, USA, 14-17 June 2005, p. 179.
115. Kant, T. (2005), A novel and an accurate finite element-numerical integration technique for evaluation of interlaminar stresses in laminates, Invited Talk, in *Proc. International Conference on Computational and Experimental Engineering and Sciences (ICCES'05)*, Indian Institute of Technology Madras, Chennai-600 036, 1-6 December 2005.
116. Kant, T., Pendhari, S., Desai, P., Gadgil, M. and Desai, Y. (2005), On a semi-discretization method for three dimensional boundary value problems, Invited Talk, in *Proc. Structural Engineering Convention-2005 (SEC-2005)*, J.M. Chandra Kishen and D. Roy (Editors), Indian Institute of Science, Bangalore-560 012, 14-16 December 2005, p. 267.
117. Kant, T., Pendhari, S., Desai, P. and Desai, Y.M. (2006), On a novel partial discretization methodology in anisotropic elasticity, in *Proc. Seventh World Congress on Computational Mechanics (WCCM VII)*, Los Angeles, California, 16-22 July 2006.
118. Kant, T. (2006), A large deflection higher order theory for laminated composite and sandwich plates, Invited Talk, in *Proc. Indo-Russian Workshop on Problems in Nonlinear Mechanics of Solids with Large Deformation*, N.K. Gupta and V.N. Kukudzhanov (Coordinators), Department of Applied Mechanics, Indian Institute of Technology Delhi, 22-24 November 2006, pp. 115-119.
119. Kant, T. and Pendhari, S.S. (2006), Keynote Lecture, in *Proc. Second International Congress on Computational Mechanics and Simulation (ICCMS-06)*, D. Maity and S. K. Dwivedy (Convenors), Indian Institute of Technology Guwahati, 8-10 December 2006.



120. Kant, T., Desai, Y.M. and Pendhari, S.S. (2006), Analysis of laminates under cylindrical bending using numerical integration, in *Proc. Second International Congress on Computational Mechanics and Simulation (ICCMS-06)*, D. Maity and S.K. Dwivedy (Convenors), Indian Institute of Technology Guwahati, 8-10 December 2006.
121. Kant, T. and Desai, P. (2006), A numerical integration technique for elastic analysis of thick orthotropic axisymmetric circular cylinders of finite length, in *Proc. Second International Congress on Computational Mechanics and Simulation (ICCMS-06)*, D. Maity and S.K. Dwivedy (Convenors), Indian Institute of Technology Guwahati, 8-10 December 2006.
122. Garg, A.K., Khare, R.K. and Kant, T. (2006), Free vibration of laminated folded plates using a shear deformable finite element model, in *Proc. Second International Congress on Computational Mechanics and Simulation (ICCMS-06)*, D. Maity and S.K. Dwivedy (Convenors), Indian Institute of Technology Guwahati, 8-10 December 2006.
123. Singh, Rajesh K., Singh, R.K. and Kant, T. (2006), Nonlinear analysis of reinforced concrete structures using fracture and damage mechanics constitutive models, in *Proc. Second International Congress on Computational Mechanics and Simulation (ICCMS-06)*, D. Maity and S.K. Dwivedy (Convenors), Indian Institute of Technology Guwahati, 8-10 December 2006.
124. Kant, T. and Pendhari, S.S. (2007), An unified and general dimensional reduction procedure in anisotropic elasticity, Keynote Lecture, in *Proc. International Conference on Civil Engineering in the New Millennium: Opportunities and Challenges*, Department of Civil Engineering, Bengal Engineering and Science University, Shibpur, Howrah-711 103, 11-14 January 2007.
125. Kant, T. and Pendhari, S.S. (2007), Layered composite mechanics-a status report, in *Proc. National Conference on Emerging Technology and Developments in Civil Engineering*, Department of Civil Engineering, Government College of Engineering, Amravati-440 604, 22-23 March 2007, pp. IL 1-24.
126. Kant, T. and Pendhari, S.S. (2007), Partial finite element discretization in elastostatics – a new concept, in *Proc. 21<sup>st</sup> Canadian Congress of Applied Mechanics (CANCAM 2007)*, Department of Mechanical & Industrial Engineering, Ryerson University, Toronto, Ontario, Canada, 3-7 June 2007.
127. Kant, T. (2007), A recent advance in computational mechanics of laminated composites, Keynote Lecture, in *Proc. International Conference on Recent Developments in Structural Engineering (RDSE-2007)*, H.R. Dhananjaya and A. Krishnamoorthy (Editors), Department of Civil Engineering, Manipal Institute of Technology, Manipal-576 104, 30 August – 1 September 2007, pp. 16-30.
128. Desai, P. and Kant, T. (2007), Thermoelastic solutions for finite length functionally graded axisymmetric orthotropic cylinders, in *Proc. International Conference on Recent Developments in Structural Engineering (RDSE-2007)*, H.R. Dhananjaya and A. Krishnamoorthy (Editors), Department of Civil Engineering, Manipal Institute of Technology, Manipal-576 104, 30 August – 1 September 2007, p.185.
129. Kant, T. and Pendhari, S.S. (2008), A partial discretization in elastostatics for layered media, in *Proc. International Conference on Multiscale Modeling and Simulation (ICMMS-08)*, Indian Institute of Science, Bangalore-560 012, 2-4 January 2008.
130. Kant, T. (2008), Macro-thermo-mechanics of polymer composite laminates, Keynote Lecture, in *Proc. National Conference on Emerging Trends in Civil Engineering for Infrastructure Development*, National Institute of Technology Raipur, 15-16 February 2008.
131. Kant, T. and Desai, P. (2008), A higher-order linear laminated composite shell theory, Invited Lecture, in *Proc. Indo-Russian Workshop on Solid Mechanics*, Birla Institute of Technology, Panaji, Goa, 11-12 November 2008.
132. Shah, M., Khare, R.K. and Kant, T. (2008), Transient analysis of FRP composite structures using higher-order flat facet elements on parallel computers, in *Proc. Indo-Russian Workshop on Solid Mechanics*, Birla Institute of Technology, Panaji, Goa, 11-12 November 2008.
133. Kant, T. and Shiyekar, S.M. (2008), Stress analysis of functionally graded plates with a higher order theory, in *Proc. IUTAM Symposium on Multi-functional Material Structures and Systems*, Indian Institute of Science, Bangalore-560 012, 10-13 December 2008.

134. Kant, T., Pendhari, S.S. and Shiyekar, S.M. (2008), Advances in computational mechanics: state-of-the-art review, Keynote Lecture, in *Proc. Sixth Structural Engineering Convention (SEC-2008)*, Structural Engineering Research Centre Madras, Chennai-600 113, 18-20 December 2008.
135. Kant, T. and Desai, P. (2009), Electro-thermo-mechanical elasticity of laminated piezoelectric finite length cylinders, in *Proc. 8<sup>th</sup> International Congress on Thermal Stresses (Thermal Stresses 2009)*, University of Illinois at Urbana-Champaign, Illinois, USA, 1-4 June 2009.
136. Kant, T. and Shiyekar, S.M. (2009), Effect of thermal gradient on the stress analysis of laminated composites with a higher order theory, in *Proc. 8<sup>th</sup> International Congress on Thermal Stresses (Thermal Stresses 2009)*, University of Illinois at Urbana-Champaign, Illinois, USA, 1-4 June 2009.
137. Kant, T., Pendhari, S.S. and Shiyekar, S.M. (2009), Review and assessment of various smeared single layer theories for modeling of composite laminates, Invited Talk, in *Proc. 10<sup>th</sup> US National Congress on Computational Mechanics (USNCCM-10)*, Columbus, Ohio, USA, 16-19 July 2009.
138. Desai, P. and Kant, T. (2009), An exact stress analysis of a functionally graded sphere under mechanical load, in *Proc. 3<sup>rd</sup> International Congress on Computational Mechanics & Simulation (ICCMS09)*, Indian Institute of Technology Bombay, 1-5 December 2009.
139. Kant, T. (2009), A novel partial discretization methodology in elastostatics, Keynote Lecture, in *Proc. International Conference on Advances in Mechanical and Building Sciences in the 3<sup>rd</sup> millennium (ICAMB-2009)*, VIT University, Vellore, 14-16 December 2009.
140. Kant, T. (2011), Computational mechanics in the last five decades – a personal view, Invited Lecture, in *Proc. 23<sup>rd</sup> Canadian Congress of Applied Mechanics (CANCAM'11)*, The University of British Columbia (UBC), Vancouver, BC, Canada, 5-9 June 2011.
141. Desai, P. and Kant, T. (2011), Analysis of cylindrical shells based on four shell theories by segmentation method, in *Proc. 21<sup>st</sup> International Conference on Structural Mechanics in Reactor Technology (SMIRT21)*, New Delhi, India, 6-11 November 2011, pp. 57-58.
142. Singh, R.K., Singh, R.K. and Kant, T. (2011), Nonlinear analysis of reinforced concrete structures using fracture and damage mechanics constitutive models, *Proc. 21<sup>st</sup> International Conference on Structural Mechanics in Reactor Technology (SMIRT21)*, New Delhi, India, 6-11 November 2011, pp. 253-254.
143. Jha, D.K., Kant, T. and Singh, R.K. (2011), On development and evaluation of theories based upon Reissner's mixed variational theorem for deformation and stress analysis of FGM structures, *Proc. 21<sup>st</sup> International Conference on Structural Mechanics in Reactor Technology (SMIRT21)*, New Delhi, India, 6-11 November 2011, pp. 18 -19 .
144. Kant, T., Jha, D.K. and Singh, R.K. (2012), Vibrations of functionally graded plates, Plenary Lecture, in *Proc. 4<sup>th</sup> International Conference on Structural Stability and Dynamics*, Jaipur, India, 4-6 January 2012, pp. 534-537.
145. Kant, T. (2012), Estimation of interlaminar stresses in laminated composites, Invited Lecture, *Proc. Workshop on Recent Advances in Aerospace Structures (WORAAS)* (in honour of Professor B. Dattaguru at his 70<sup>th</sup> birth day), Indian Institute of Science, Bangalore, 22 June 2012.
146. Kant, T. (2012), A higher order shear and normal deformation theory for cylindrical bending of laminates with actuators and sensors, Keynote Lecture, in *Proc. Workshop on Structural Health Monitoring and Rehabilitation*, Birla Institute of Technology, Pilani, India, 19-20 September 2012, pp. 1-15.

