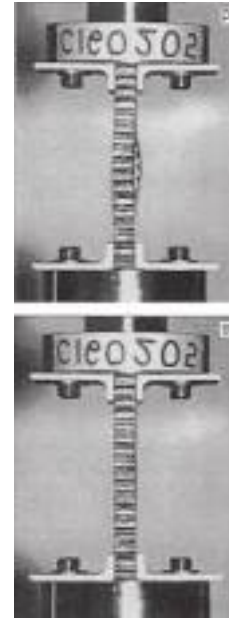




Professor Bhavani V. Sankar



From: Bhavani V. Sankar, "Finite element analysis of debonded sandwich beams under axial compression", *Journal of Sandwich Structures and Materials*, Vol. 3, No. 3, pp 197-219, July 2001

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Research Interests:

Composite materials and structures including impact- fracture- and micro-mechanics, textile composites, cellular materials and foams, sandwich construction, functionally graded materials, and integrated thermal protection systems.

Teaching Interests:

Aerospace structures, Mechanics of composite materials and structures, Fracture mechanics, Finite element analysis.

Selected Publications:

----Book: *Finite Element Analysis and Design*, Nam Ho Kim and Bhavani V. Sankar, John Wiley & Sons, Inc., New York, 2009.

Sankar, B.V. Contact law for transversely isotropic materials, *AIAA/ASME/ASCE/AHS 26th Structures, Structural Dynamics and Materials Conference*, Orlando FL, Part 1, 1985, pp 516-521.

Kwon, Y. S. and Sankar, B. V., "Indentation Damage in Graphite/Epoxy Laminates", American Society for Composites Sixth Technical Conference, Albany, NY, 1991, pp. 483-492.

Sankar, B.V. Scaling of low-velocity impact for symmetric composite laminates, J Reinf Plast and Compos, 1992, 11, (3), pp 296-309.

Kwon, Y.S., and Sankar, B.V., "Indentation-Flexure and Low-Velocity Impact Damage in Graphite Epoxy Laminates," Journal of Composites Technology and Research, Vol. 15, No. 2, 1993, pp. 101– 111.

Sharma SK, Sankar BV, Effect of through-the-thickness stitching on impact and Interlaminar fracture properties of textile graphite/epoxy laminates (NASA CR 195042). Washington (DC): National Aeronautic and Space Administration,1995.

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"Structural Optimization of a Hat Stiffened Panel By Response Surface Techniques", Proceedings of the 38th Structures, Structural Dynamics, and Materials Conference, AIAA 97-1151, Kissimmee, Florida, April 7-10, 1997, pp. 2983-2993.

Ferri, R. and Sankar, B.V. Static indentation and low velocity impact tests on sandwich plates, AD, 55, Proc ASME Aerospace Division, ASME, 1997, pp 485-490.

Oung Park (1), Raphael T. Haftka (1), Bhavani V. Sankar (1), James H. Starnes, Jr. (2), and Somanath Nagendra (3)
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"Analytical-Experimental Correlation for a Stiffened Composite Panel Loaded in Axial Compression", 39th AIAA Structures, Structural Dynamics and Materials Conference, AIAA-98-1993, April 1998

Vitali, R., Haftka, R.T., and Sankar, B. V., "Correction Response Surface Approximations for Stress Intensity Factors of a Composite Stiffened Plate," Proceedings of the 39th AIAA/ ASME/ ASCE/ AHS/ ASC Structures, Structural Dynamics and Materials Conference, AIAA-98-2047, Long Beach California, April 1998, pp. 2917-2922.

Vitali, R., Haftka, R. T., and Sankar, B. V., "Correction Response Surface Design of Stiffened Composite Panel with a Crack," Proceedings of the AIAA/ ASME/ ASCE/ AHS/ ASC Structures, Structural Dynamics and Materials Conference, AIAA-99-1313, St. Louis, Missouri, 1999.

R. T. Haftka, R. Vitali, and B. V. Sankar (Aerospace Engineering, University of Florida, Gainesville, Florida), "Optimization of composite structures using response surface approximations", in Mechanics of composite materials and structures, edited by Carlos A. Mota Soares, Cristovao M. Mota Soares and Manuel J. M. Freitas, pp. 409-430, 1999 (published by Kluwer Academic Publishers, The Netherlands).

Bhavani V. Sankar, "Finite element analysis of debonded sandwich beams under axial compression", Journal of Sandwich Structures and Materials, Vol. 3, No. 3, pp 197-219, July 2001

Christian Gogu, Benjamin P. Smarslok, Raphael T. Haftka and Bhavani V. Sankar (Department of Mechanical and Aerospace Engineering, University of Florida, PO Box 116250, Gainesville, FL 32611-6250, USA), "Worst-case effects on thermal buckling of spatial variability in material properties", (publisher and date not given; however, the cover page contained the string: "SEND PAPER TO: asc2007.....". Does that mean the paper was to be presented at a meeting of the American Society of Composites in 2007?)

Bapanapalli, S.K., Martinez, O.M., Gogu, C., Sankar, B.V., Haftka, R.T., Blosser, M.L., "Analysis and Design of Corrugated Core Sandwich Panels for Thermal Protection Systems of Space Vehicles", AIAA Paper 2006-1942, 47th AIAA/ASME/ ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference, Newport, May 2006

Gogu, C., Bapanapalli, S.K., Haftka, R.T., Sankar, B.V., "Comparison of Materials for Integrated Thermal Protection Systems for Spacecraft Reentry", AIAA Paper 2007-1860, 3rd AIAA Multidisciplinary Design Optimization Specialist Conference, Honolulu, April 2007

Apetre, N. A. and Sankar, B. V. (2008). Analytical modelling of sandwich beams with functionally graded core. Journal of Sandwich Structures and Materials, 10(1), p. 53- 74.