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**Education:**

1997 PhD Texas A&M University, USA

1993 MS Texas A&M University, USA

1991 B.Tech IIT Kharagpur, India

**Research Interests:**

Solid mechanics; Adaptive finite element methods; Structural optimization

**Selected Publications:**

I. Babuska, T. Strouboulis, C. S. Upadhyay, S. K. Gangaraj, and K. Copps. Validation of a posteriori error estimators by numerical approach. International Journal for Numerical Methods in Engineering, 37:1073–1123, 1994.

P.M. Mohite and C.S. Upadhyay, “Local quality of smoothing based on a-posteriori error estimators for laminated plates under transverse loading”, Computers & Structures, Vol. 80, pp 1477-1488, 2001

P.M. Mohite and C.S. Upadhyay, “Focussed adaptivity for laminated plates”, Computers & Structures, Vol. 81, pp 287-298, 2003

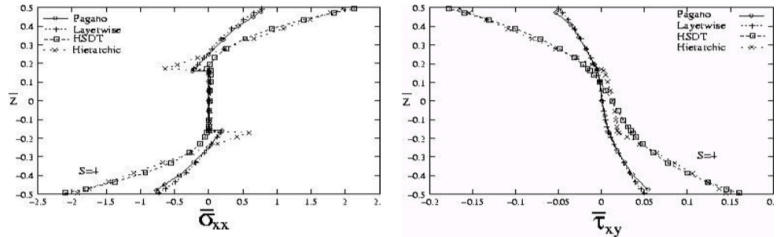
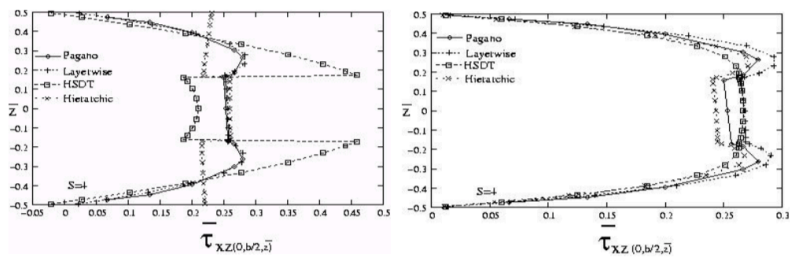


Fig. 3 [0/90/0] laminate; all edges simply supported, in-plane stresses.



Direct stresses

Equilibrium stresses

Fig. 4 [0/90/0] laminate; all edges simply supported, transverse stresses.

From: PM Mohite and CS. Upadhyay, “Reliable computation of local quantities of interest in composite laminated plates,” 46th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics & Materials Conference. Austin, Texas, 18-21 April, 2005.

PM Mohite and CS. Upadhyay, "Reliable computation of local quantities of interest in composite laminated plates," 46th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics & Materials Conference. Austin, Texas, 18-21 April, 2005.

P.M. Mohite and C.S. Upadhyay, "Accurate computation of critical local quantities in composite laminated plates under transverse loading", *Computers & Structures*, Vol. 84, pp 657-675, 2006

A.K. Onkar, C.S. Upadhyay and D. Yadov, "Stochastic finite element buckling analysis of laminated plates with circular cutout under uniaxial compression", *J. Appl. Mech.*, Vol. 74, No. 4, pp 798-809, September 2006

Onkar, A., Upadhyay, C. and Yadav, D. [2007] "Probabilistic failure of laminated composite plates using the stochastic finite element method", *Composite Structures* 77(1), 79-91.

Anil, V., Upadhyay, C.S. and Iyengar, N.G.R. 2007. Stability analysis of composite laminate with and without rectangular cutout under biaxial loading, *Composite Structures*, 80: 92-104.

V.L. Sateesh, C.S. Upadhyay and C. Venkatesan, "Layer-by-layer finite element analysis of smart composite plates", *Proceedings of the International Conference on Aerospace Science and Technology*, Bangalore, India, 26-28 June 2008

Sarvesh Chandra, C.S. Upadhyay, Imran Ahmad and Arindam Dey, "A finite element study of beam on reinforced granular beds with sand drains", *The 12th International Conference of International Association for Computer Methods and Advances in Geomechanics*, Goa, India, 1-6 October 2008

P.M. Mohite and C.S. Upadhyay, "A generalized adaptive finite element analysis of laminated plates", *Computers & Structures*, Vols. 112-113, pp 217-234, December 2012

V Murari, CS Upadhyay. Micromechanics based ply level material degradation model for unidirectional composites, *Composite Structures*, Vol. 94, 2012, 671-680.

V Murari, CS Upadhyay. Micromechanics Based Diffuse Damage Model for Unidirectional Composites, *Composite Structures*, Vol. 96, 2013, 419-432.