



fig. 16. Variation of bending and twisting moments along a post-buckled compression panel.

The middle and right-most images are from: G.A.O. Davies and D. Hitchings, “Analytical Qualification of Composite Structures”, RTO AVT Symposium on “Reduction of Military Vehicle Acquisition Time and Cost through Advanced Modeling and Virtual Simulation”, Paris, France, April 2002, published in RTO-MP-089, March 2003, Accession Number: ADP014169, Handle / proxy Url : <http://handle.dtic.mil/100.2/ADP014169>

Professor Dennis Hitchings

See:

<https://www.researchgate.net/scientific-contributions/D-Hitchings-72131040>

Department of Aeronautical Engineering, Imperial College London, UK

Selected Publications:

Books:

F.L. Matthews, G.A.O. Davies, D. Hitchings and C. Soutis, Finite Element Modelling of Composite Materials and Structures, Elsevier Science, 2000, 214 pages

B. G. Falzon and D. Hitchings, An Introduction to Modelling Buckling and Collapse", Sept. 2006, NAFEMS, 136 pages

Journal Articles, etc.:

Hitchings D, Kamoulakos A, Davies GAO. Linear statics benchmarks. National Agency for Finite Element Methods & Standards, Glasgow, UK, 1987.

G. Davies, D. Hitchings, and G. Zhou, “Impact damage and residual strengths of woven fabric glass/polyester laminates,” Composites Part A, vol. 27, no. 12, pp. 1147–1156, 1996.

Zhang, X., Davies, G.A.O. And Hitchings, D. Impact damage with compressive preload and post-impact compression of carbon composite plates, Int J Impact Engng, 1999, 22, pp 485-509.

Davies, G.A.O., Hitchings, D. And Wang, J. Prediction of threshold impact energy for onset of delamination in quasi-isotropic carbon/epoxy composite laminates under low-velocity impact, Compos Sci Technol, 2000, 60, (1), pp 1-7.

Mespoulet, S., Hodgkinson, J.M., Matthews, F.L., Hitchings, D. And Robinson, P. Design development and implementation of test methods for through thickness properties of laminated composites, Plastics, Rubber and Composites, 2000, 29, (9), pp 496-502.

Besant T, Davies GAO, Hitchings D. Finite element modelling of low velocity impact of composite sandwich panels. Composites Part A: applied science and manufacturing, 2001; 32: 1189–1196.

G.A.O. Davies and D. Hitchings, “Analytical Qualification of Composite Structures”, RTO AVT Symposium on “Reduction of Military Vehicle Acquisition Time and Cost through Advanced Modeling and Virtual

Simulation”, Paris, France, April 2002, published in RTO-MP-089, March 2003, Accession Number: ADP014169, Handle / proxy Url : <http://handle.dtic.mil/100.2/ADP014169>

B.G. Falzon and D. Hitchings, “Mode switching in postbuckling composite aerostructures”, Conference: Structural Stability and Dynamics – The Second International Conference, DOI: [10.1142/9789812776228_0065](https://doi.org/10.1142/9789812776228_0065), January 2003

Davies, G.A.O. And Hitchings, D. The separate roles of fibre damage and delamination in compression-after-impact strength of composite structures, 5th Euromech solid mechanics conference, 2003, Thessaloniki, Greece.

B. G. Falzon and D. Hitchings, “Composite Structures, Vol. 60, No. 4, June 2003, pp. 447-453

Davies, G.A.O, Hitchings, D., Besant, T., Clarke, A. And Morgan, C. Compression after impact strength of composite sandwich panels, Compos Struct, 2004, 63, (1), pp 1-9.

Davies, G.A.O., Hitchings, D. And Ankersen, J. Predicting delamination in modern aerospace composite structures, to be published in Compos Sci Technol, 2004.

Davies, G.A.O., D. Hitchings and J. Ankersen, 2006. Predicting delamination and debonding in modern aerospace composite structures. Comp. Sci. Technol., 66: 846-854.