



Professor Marcilio Alves

M. Alves and Norman Jones (Editors), Impact Loading of Lightweight Structures, WIT Press, 2005, 610 pages

See:
<http://www.bv.fapesp.br/en/pesquisador/635/marcilio-alves/>
https://www.researchgate.net/profile/Marcilio_Alves
<https://translate.google.com/translate?hl=en&sl=pt&u=https://uspdigital.usp.br/tycho/CurriculoLattesMostrar%3Fcodpub%3D17A0AF3ED061&prev=search>
<http://www.lajss.org/index.php/LAJSS/about/editorialTeam>

Structural Impact
University of São Paulo, Brazil

Biography:

Mechanical Engineer graduated from the Federal University of Santa Catarina in 1983, a master's degree from the same institution in 1987 and a PhD in Mechanical Engineering at the University of Liverpool Impact Research Centre in 1996. He is an associate professor with the thesis Habilitation, Impact Beams, University from Sao Paulo. Researcher 1D CNPq, has experience in coordinating large projects, including FAPESP thematic project on structural impact, FINEP project on collision ships, Embraer-FAPESP project on fault structures and FINEP project on failure and oil spill vessels. The sum of managed funds is only \$ 5 million and include scholarships, research projects and agreements with institutions abroad. Its production indicates a factor $H = 18$ (Google Scholar), with 41 articles in journals, 91 conferences and 13 chapters in conference books. He has supervised 6 doctoral students and 5 postdoctoral students, and the founder of the only group in Brazil dedicated to Structural Impact at the University of São Paulo, where it operates. It has ongoing collaboration with the University Liverpool, Technical University of Norway, Technical University of Munich, Bulgarian Academy of Science and the University of Gent, producing work with researchers from several countries. Provided consulting services to several companies such as Embraer, Whirlpool, Pirelli, Arcelor, Alston and FIA Foundation. He is the founder and chief editor of the Latin American Journal of Solids and Structures and initiator in Brazil the series of lectures in Solid Mechanics and has published three books of it. He restarted the

series of conferences Impact Loading of Lightweight Structures, now in its fifth version. He is founder and president 2016-2018 the International Society of Impact Engineering and is a member of the Editorial Board of the International Journal of Impact Engineering and the Journal of Theoretical and Applied Mechanics of Bulgaria. It is an alternate director of the Brazilian Association of Mechanical Sciences, former Secretary of its Mechanical Committee Solid and member of SAE Vehicle Safety Committee. informally advised the Ministry of Industry and Foreign Trade in the area of vehicle safety standards. Was invited member of the Inter-American Development Bank for the meeting of ministers of Latin America and the Caribbean on Regional Policy Dialogue, Vehicle Regulation Meeting in 2013 and is an observer at the United Nations in committee dedicated to vehicular safety standards [WP29]. He is an alternate member of the Advisory Committee of Engineering Mechanics, Naval and Oceanic and Aerospace (CA-MS) CNPq, period 2015-2018. It is the principal representative of the editors of the area of Exact Sciences by the Advisory Committee SciELO Brazil, during 2015-2017.

Research Interests:

Impact on structures; Experimental solid mechanics; Nonlinear finite element analysis; Solid mechanics

Selected Publications:

Book:

M. Alves and Norman Jones (Editors), Impact Loading of Lightweight Structures, WIT Press, 2005, 610 pages

Journal Articles:

Karagiozova D, Alves M, Jones N. Inertia effects in axisymmetrically deformed cylindrical shells under axial impact. *Int J Impact Eng* 2000;24:1083–115.

Alves, M and Karagiozova, D. 'Influence of the Axial Impact Velocity on the Buckling Behaviour of Circular Cylindrical Shells', proceedings 9th National Bulgarian Congress on Theoretical and Applied Mechanics (Ed. Y. Ivanov, A. Baltov and E. Manoach), Vol. 1, pp. 388-393, 2001.

D. Karagiozova and M.Alves. Transition from progressive buckling to global bending of circular shells under axial impact - Part I: Experimental and numerical observations, *Int J Solids and Structures*, 41:1565–1580, 2004.

D. Karagiozova and M. Alves. Transition from progressive buckling to global bending of circular shells under axial impact - Part II: Theoretical analysis, *Int J Solids and Structures*, 41:1581–1604, 2004.

Karagiozova, D., Alves, M. "Dynamic elastic-plastic buckling of structural elements: A review." *Applied Mechanics Reviews* 61, no. 4 (2008): 040803-1 – 040803-26.