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Mechanical Engineering Department
Amirkabir University of Technology, Tehran, Iran

Education:

B.Sc.(Hons): Production Engineering, Leeds Polytechnic 1984
M.Phil.: Mechanical Engineering, Leeds Polytechnic 1987
Ph.D.: Mechanical Engineering, Lancaster University 1990

Research Interests:

Application of Dynamic Relaxation (DR) to plate and shell problems; Design and Analysis of composite structures with elastic and viscoelastic behaviour; Structures made of Shape Memory Alloys and Functionally Graded Materials; FRP strengthening of concrete structures; Nanomechanics and Nanostructures

Work Experience:

Sept.84-Aug.90 Undertook various part-time posts as a Teaching Assistant at Leeds Polytechnic in computing tutorial and at Lancaster University in Engineering Laboratories.
Sept.90-Feb.91 Lecturer, Mechanical Engineering Department, Amirkabir University of Technology (Tehran Polytechnic), Tehran.
Feb.91-Sept.02 Assistant Professor, Mechanical Engineering Department, Amirkabir University of Technology (Tehran Polytechnic) Tehran.

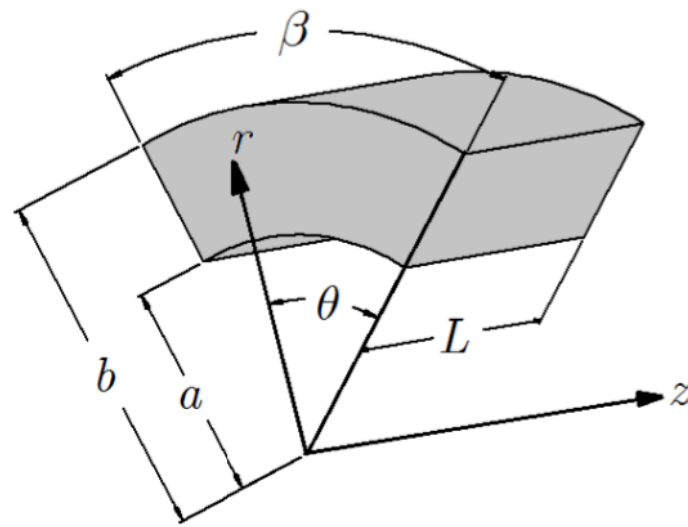


Figure 1: Geometry of the cylindrical panel

From: H. Zafarmand, M. Salehi and K. Asemi, "Three dimensional free vibration and transient analysis of two directional functionally graded thick cylindrical panels under impact loading", Latin American Journal of Solids and Structures, 2014, p205, DOI: 10.1590/1679-78251099

Feb.92-Nov.93 At the same time Assistant Professor at the Department of Aeronautical Engineering, Air University, Tehran. Taught Statics and Strength of Materials.

Jun.92-Sept.93 Consultant, Iran Khodro Manufacturing Company, Tehran, Iran.

Sept.02-Dec.14 Associate Professor, Mechanical Engineering Department, Amirkabir University of Technology (Tehran Polytechnic) Tehran.

Jan.2015-Date Professor, Mechanical Engineering Department, Amirkabir University of Technology. Teach the following subjects at undergraduate level: Statics, Dynamics, Strength of Materials, Mechanics of Composite Materials, Technical English Language, Strength of Materials Laboratory. At postgraduate level: Experimental Stress Analysis, Theory of Elasticity and Continuum Mechanics.

Selected Publications:

Book: Bavi, O. and Salehi, M. 'Genetic Algorithms and Optimization of Composite Structures, 2nd Edition, Abed Publications, Tehran, Iran, (2010), (in Persian).

Journal Articles:

- 1 Turvey, G.J. and Salehi, M., "DR Large Deflection Analysis of Sector Plates", Computers and Structures, Vol. 34, No.1, 101-112, (1990).
- 2 Turvey, G.J. and Salehi, M., "Computer-Generated Elasto-Plastic Design Data For Pressure Loaded Circular Plates", Computers and Structures, Vol. 41, No. 6, 1329-1340,(1991).
- 3 Salehi, M. and Turvey, G.J., "Elastic Large Deflection Response of Annular Sector Plates- A Comparison of DR Finite-Difference, Finite- Element and Other Numerical Solutions", Computers and Structures, Vol. 40, No. 5, 1267-1278, (1991).
- 4 Salehi, M. and Shahidi, A. G., "Large Deflection Analysis of Sector Mindlin Plates", Computers and Structures, Vol. 52, No. 5, pp. 987-998, (1994).
- 5 Turvey, G.J. and Salehi, M., "Circular Plates With One Diametral Stiffener- An Elastic Large Deflection Analysis", Computers and Structures, Vol. 63, No. 4, 775-783,(1997).
- 6 Turvey, G.J. and Salehi, M., "Elastic Large Deflection Analysis of Stiffened Annular Plates", International Journal of Mechanical Sciences, Vol. 40, No. 1, 51-70, (1998).
- 7 Turvey, G.J. and Salehi, M., "Large Deflection Analysis of Eccentrically Stiffened Sector Plates", Computers and Structures, Vol. 68, 191-205, (1998).
- 8 Turvey, G.J. and Salehi, M., "Elasto-Plastic Response of Uniformly Loaded Sector Plates: Full-Section Yield Model Predictions and Spread of Plasticity", Computers and Structures, Vol. 79, 2335-2348,(2001).
- 9 Salehi, M. and Salehi-Sadeh M., "Geometrically Non-Linear Analysis of Axisymmetric Tapered Circular Plates", International Journal of Engineering Sciences, Vol. 14, No.3, 101-118, (2003).
- 10 Salehi, M. and Sobhani, A.R., "Elastic Linear and Nonlinear Analysis of Fiber-Reinforced Symmetrically Laminated Sector Mindlin Plates" Composite Structures, Vol. 65, Issue 1, 65-79, (2004).
- 11 Salehi, M. and Aghaei, H. "Dynamic Relaxation large deflection analysis of circular viscoelastic plates", Computers and Structures, 83, 1878-1890, (2005).
- 12 Turvey, G.J. and Salehi, M., "Annular sector plates: Comparison of full-section and layer yield predictions", Computers and Structures, 83, 2431-2441, (2005).
- 13 Salehi, M. and Ansari, F., "Viscoelastic Buckling of Euler-Bernoulli and Timoshenko

- Beams Under Time Variant General Loading Condition", Iranian Polymer Journal, 15(3), pp 183-193, (2006)
- 14 Gharib, A., Salehi, M. and Fazeli, S. "Deflection control of functionally graded material beams with bonded piezoelectric sensors and actuators", International Journal, Materials Science and Engineering: A, 498, 110-114, (2008)
 - 15 Salehi, M., Bakhtiari-Nejad, F and Besharati, A."Time-Domain Analysis Of Sandwich Shell With Passive Constrained Viscoelastic Layer" Scientia Iranica, Vol. 15, No. 5, 637-643, (2008).
 - 16 Turvey, G.J., Salehi, M. "Elasto-Plastic Large Deflection Response of Pressure Loaded Circular Plates Stiffened by a Single Diametral Stiffener, International Journal of Thin-Walled Structures, 46, 991-1002, (2008).
 - 17 Falahatgar, S.R., Salehi, M. and Aghdam, M.M. "Nonlinear Viscoelastic Response of Unidirectional Fibre-Reinforced Composites in Off-Axis Loading", International Journal of Reinforced Plastics and Composites, Vol. 28, Bo. 15, pp. 1793-1811, (2009).
 - 18 Falahatgar, S.R. and Salehi, M., "Dynamic Relaxation Nonlinear Viscoelastic Analysis of Annular Sector Composite Plate", Journal of Composite Materials, 43(3), 257-275 (2009).
 - 19 B. Behjat, M. Salehi*, M. Sadighi, A. Armin And M. Abbasi, "Static, Dynamic and Free Vibration Analysis of Functionally Graded Piezoelectric Panels Using Finite Element Method" J. Intelligent Materials Systems and Structures, Vol. 20, pp. 1635-1646, (2009).
 - 20 Yazdchi, K., Salehi, M. and Shokrieh, M.M. "Analytical and numerical techniques to predict the interfacial stresses of wavy carbon nanotube/polymer composites", J. Mechanics of Composite Materials, 45(2), 207-212, (2009).
 - 21 Salehi, M. and Falahatgar, S.R. "Geometrically non-linear analysis of unsymmetrical fiber- reinforced laminated annular sector composite plates", Transaction B: Mechanical Engineering, Scientia Iranica, 17(3), 205-216, (2010).
 - 22 Falahatgar, S.R., Salehi, M and Aghdam, M.M. "Micro- to- Macro analysis of nonlinear viscoelastic composite plate using DR method" Applied Composite Materials, 17, 427-440, (2010).
 - 23 Behjat, B., Salehi, M., Armin, A., Sadighi, M. And Abbasi, M. "Static and dynamic analysis of functionally graded piezoelectric plates under mechanical and electrical loading", Scientia Iranica, Trans. B: Mechanical Engineering, 18(4), pp. 986-994, August (2011).
 - 24 Asemi, K., Salehi, M., Akhlaghi, M. 'Elastic solution of two-dimensional functionally graded thick truncated cone with finite length under hydrostatic combined loads', Acta Mechanica, DOI 10.1007/s00707-010-0380-z, (2010).
 - 25 Asemi, K., Akhlaghi, M., Salehi, M., Hosseini zad, S.K. 'Analysis of functionally graded thick truncated cone with finite length under hydrostatic internal pressure', Archive of Applied Mechanics, DOI: 10.1007/s00419-010-0472-1, (2010).
 - 26 Akbarzadeh, I., Attarha, M. J., Salehi, M., Sattari-Far, I., 'Numerical and Experimental Study on the Effect of Post-Weld Heat Treatment Parameters on the Relaxation of Welding Residual Stresses', Journal of Strain Analysis for Engineering Design, DOI:

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- 27 Akbarzadeh, I., Sattari-Far, I., Salehi, M., 'Numerical and Experimental Study of the Effect of Short-Term and Long-Term Creep Modeling in Stress Relaxation of a Multi-Pass Welded Austenitic Stainless Steel Pipe', *International Journal, Materials Science and Engineering: A*, 528, 2118-2127, (2011).
- 28 Asemi, K., Salehi, M., Akhlaghi, M., 'Dynamic analysis of a functionally graded thick truncated cone with finite length', *International Journal of Mechanics and Materials in Design*, 6(4), 367-378, (2011).
- 29 Asemi, K., Akhlaghi, M., Salehi, M., 'Dynamic analysis of thick short length FGM cylinders', *Meccanica*, DOI 10.1007/s11012-011-9527-9, (2011).
- 30 Falahatgar, S.R., Salehi, M., 'Nonlinear viscoelastic response of unidirectional polymeric laminated composite plates under bending loads', *Applied Composite Materials*, online, doi: 10.1007/s10443-011-9212-0, (2011).
- 31 Akbarzadeh, I., Sattari-Far, I., Salehi, M., 'A New Method for Determination of Combined Convection Coefficient for Welding Simulation', Accepted in *International Journal of Academic Research*.
- 33 Behzadpoor, H., Masoumi, S., Salehi, M. 'Micromechanical Analysis of nonlinear viscoelastic unidirectional fibre-reinforced composites', *Applied Mechanics and Materials*, Vols. 110-116, pp. 1166-1170, October (2011).
- 34 Masoumi, S., Salehi, M., Akhlaghi, M. 'Multiscale analysis of viscoelastic laminated composite plates using generalized differential quadrature', *Acta Mechanica*, Vol. 223, pp 2459-2476 (2012), DOI 10.1007/s00707-012-0710-4
- 35 Masoumi, Akhlaghi, M., S., Salehi, M. 'Multi-Scale Analysis of Viscoelastic-Viscoplastic Laminated Composite Plates Using Generalized Differential Quadrature Method', *Proceedings of The Institution of Mechanical Engineers Part C-Journal of Mechanical Engineering Science*, DOI:10.1177/0954406212464929.
- 36 Ashrafi, H., Asemi, K., Shariyat, M., Salehi, M. 'Two-Dimensional Modeling of Heterogeneous Structures Using Graded Finite Element and Boundary Element Methods', *Meccanica*, DOI 10.1007/s11012-012-9623-5, (2012).
- 37 Falahatgar, S.R. and Salehi, M. 'Dynamic Relaxation Nonlinear Viscoelastic Bending Analysis of Higher Order Annular Sector Plates', *International Journal for Computational Methods in Engineering Science and Mechanics*, Accepted for publication, doi: 10.1080/15502287.2013.784379, (2013).
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- 40 Timouri Shandi,J, Ahmadi Najafabadi, M., Salehi, M., ‘Tribological Behavior of Sheet Metal Forming Process Using Acoustic Emission Characteristics, Tribology Letters, Vol. 51, No. 2, pp. 1-15, (2013).
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- 44 Bahri, A., Salehi, M., Akhlaghi, M., ‘Using a pseudo-functionally graded interlayer in order to improve the static and dynamic behavior of wind turbine blade T-bolt root joints’, Composite Interfaces, Vol. ??, No. ??, pp. 1-22, (2014).
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- 46 Asemi, K., Salehi, M., Akhlaghi, M., ‘Three-dimensional natural frequency analysis of anisotropic functionally graded annular sector plates resting on elastic foundations’, Sci Eng Compos Mater, Vol. ??, No. ??, pp. ??, (2014)
- 47 Asemi, K., Jedari Salami, S., Salehi, M., Sadighi, M., ‘Dynamic and Static analysis of FGM Skew plates with 3D Elasticity based Graded Finite element Modeling’, Latin American Journal of Solids and structures, Vol. 11, No. 1, pp. 504-533, (2014).
- 48 Zafarmand, H., Salehi, M., Asemi, K., ‘Three dimensional free vibration and transient analysis of two directional functionally graded thick cylindrical panels under impact loading’, Latin American Journal of Solids and structures, Vol. x, No. x, pp. x-x, (201x).
- 49 Asemi, K., Abedi, M., Akhlaghi, M., Salehi, M., ‘Natural frequency analysis of two dimensional functionally graded thick truncated cone’, Caspian Journal of Applied Sciences Research, Vol. 3, No. 4, pp. 30-43, (2014).
- 50 Maleki Moghadam, R., Hosseini, S. A., Salehi, M., ‘The influence of Stone–Thrower–Wales defect on vibrational characteristics of single-walled carbon nanotubes incorporating Timoshenko beam element’, Physica E, Vol. 62, No. 1, pp. 80-89, (2014).
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- 53 Salehi, S. H., Salehi, M., 'Finite element study for conical indentation of elastoplastic micropolar material', *International Journal of Solids and Structures*, Vol. 51, No. 1, pp. 3987-3995, (2014).
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- 60 Assadi, A., Salehi, M., Akhlaghi, M., 'Orientation dependent size effects in single crystalline anisotropic nanoplates with regard to surface energy', *Physics Letters A*, Vol. 379, No. 1, pp. 1437-1444, (2015).
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- 63 Bahri, A., Salehi, M., Akhlaghi M, 'Using a pseudo-functionally graded interlayer in order to improve the static and dynamic behavior of wind turbine blade T-bolt root joints', *Composite Interfaces*, (2014).