



Professor Reza Ansari

See:

<http://staff.guilan.ac.ir/ransari/?lg=1>

<http://staff.guilan.ac.ir/ransari/cv/391.pdf>

<http://65.54.113.26/Author/6825720/reza-ansari>

Department of Mechanical Engineering
The University of Guilan, Rasht, Iran

Education and Career:

2004-2008 Ph.D. Mechanical Engineering, University of Guilan

2006-2007 Academic visitor, Wollongong University, New South Wales, Australia

Research Interests:

Mathematical modeling and analysis of mechanical behavior of engineering structures, Dynamics and vibrations, Buckling analysis, Probabilistic analysis, Non-conventional materials (Composite.FGM materials), Smart structures, Optimum design using multi objective based on genetic algorithm, Computational nanomechanics

Selected Publications:

M. Hemmatnezhad, G. H. Rahimi, and R. Ansari, "On the free vibrations of grid-stiffened composite cylindrical

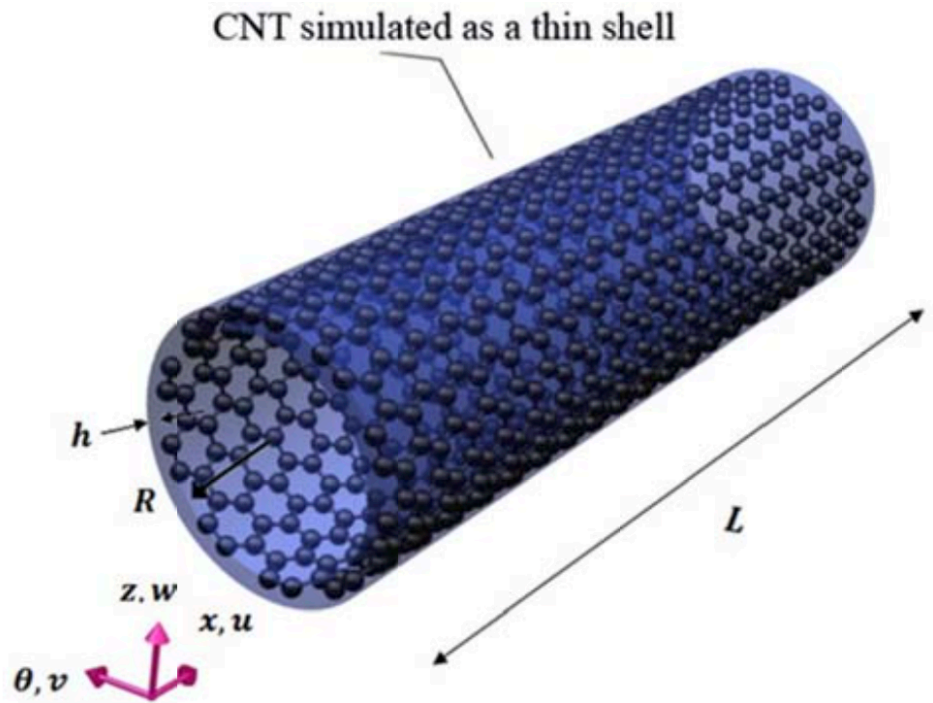


Fig. 1. Schematic of a CNT treated as an elastic shell

From: R. Ansari and B. Arash, "Nonlocal Flügge Shell Model for Vibrations of Double-Walled Carbon Nanotubes With Different Boundary Conditions", Journal of Applied Mechanics, Vol. 80, No. 2, 021008, January 2013

shells,” *Acta Mechanica*, vol. 225, no. 2, pp. 609–623, 2014.

G. H. Rahimi, M. Hemmatnezhad and R. Ansari, “Prediction of Vibrational Behavior of Grid-Stiffened Cylindrical Shells”, *Advances in Acoustics and Vibration*, Vol. 2014 (2014), Article ID 242573, 10 pages

R. Ansari and B. Arash, “Nonlocal Flügge Shell Model for Vibrations of Double-Walled Carbon Nanotubes With Different Boundary Conditions”, *Journal of Applied Mechanics*, Vol. 80, No. 2, 021008, January 2013

Ansari, R.; Shahabodini, A.; Rouhi, H.; Alipour, A., “Thermal Buckling Analysis of Multi-Walled Carbon Nanotubes Through a Nonlocal Shell Theory Incorporating Interatomic Potentials”, *Journal of Thermal Stresses*, Vol. 36, Nos. 1, 2, January 2013 , pp. 56-70(15)

Milad Hemmatnezhad and Reza Ansari, “Finite element formulation for the free vibration analysis of embedded double-walled carbon nanotubes based on nonlocal Timoshenko beam theory”, *Journal of Theoretical and Applied Physics*, Vol. 7, No. 6, December 2013

Ansari R, Hemmatnezhad M: Nonlinear finite element analysis for vibrations of double-walled carbon nanotubes. *Nonlinear Dynam* 2012, 67:373–383.

Elham Kazemi, Mansour Darvizeh, Abolfazl Darvizeh and Reza Ansari, “An investigation of the buckling behavior of composite elliptical cylindrical shells with piezoelectric layers under axial compression”, *Acta Mech*, 2012, (no volume number or page numbers given)

R. Ansari and H. Rouhi, “Nonlocal Flügge shell model for thermal buckling of multi-walled carbon nanotubes with layerwise boundary conditions”, *Journal of Thermal Stresses*, Vol. 35, pp. 326-341, 2012

R. Ansari, R. Gholami and S. Sahmani, “Prediction of compressive post-buckling behavior of single-walled carbon nanotubes in thermal environments”, *Appl Phys A, Materials Science & Processing*, Springer, December 2012

Hessam Rouhi and Reza Ansari, “Nonlocal Analytical Flügge Shell Model for Axial Buckling of Double-Walled Carbon Nanotubes with Different End Conditions”, *Nano*, Vol. 7, No. 3, 1250018 (10 pages), June 2012

Ansari R, Sahmani S: Small scale effect on vibrational response of single-walled carbon nanotubes with different boundary conditions based on nonlocal beam models. *Commun. Nonlinear. Sci* 2012,17(4):1965–1979.

Ansari R, Gholami R, Sahmani S: On the dynamic stability of embedded single-walled carbon nanotubes including thermal environment effects. *Scientia Iranica* 2012,19(3):919–925.

Reza Ansari, Reza Rajabiehfard and Behrouz Arash, “Thermal buckling of multiwalled carbon nanotubes using a semi-analytical finite element approach”, *Journal of Thermal Stresses*, Vol. 34, No. 8, 2011

Ansari R, Hemmatnezhad M: Nonlinear vibrations of embedded multi-walled carbon nanotubes using a variational approach. *Math. Comput. Model* 2011, 53:927–938.

Ansari R, Ramezannezhad H: Nonlocal Timoshenko beam model for the large-amplitude vibrations of embedded multiwalled carbon nanotubes including thermal effects. *Physica E* 2011,43(6):1171–1178.

R. Ansari, F. Alisafaei, P. Ghaedi, Dynamic analysis of multi-layered filament-wound composite pipes subjected to cyclic internal pressure and cyclic temperature, *Journal of Composite Structures*, Vol. 92, No. 5, pp 1100-1109, April 2010

Ansari R, Hemmatnezhad M, Ramezannezhad H: Application of HPM to the nonlinear vibrations of multiwalled carbon nanotubes. *Numer. Meth. Partial Differential Equations* 2010, 26:490–500.

M. Hemmatnezhad, R. Ansari, and M. Darvizeh, “Prediction of vibrational behavior of composite cylindrical shells under various boundary conditions,” *Applied Composite Materials*, vol. 17, no. 2, pp. 225–241, 2010.

R. Ansari, B. Motevalli, "The effects of geometrical parameters on force distributions and mechanics of carbon nanotubes: A critical study", *Commun Nonlinear Sci Numer Simulat* 14 (2009) 4246–4263.

R. Ansari and M. Darvizeh, Prediction of dynamic behaviour of FGM shells under arbitrary boundary conditions, *Journal of Composite Structures*, 85, 284-292 (2008).

Ansari, R., Darvizeh, M., Hemmatnezhad, M.: Vibration analysis of FGM cylindrical shells under various boundary conditions. *JAST*. 5(3), 129-138 (2008).

A. Arjangpay, M. Darvizeh, R. Ansari & Gh. Zarepour, Axial buckling analysis of an isotropic cylindrical shell using the meshless local Petrov-Galerkin method, Department of Mechanical Engineering, University of Guilan, Rasht, Iran.

H. Haftchenari, M. Darvizeh, A. Darvizeh, R. Ansari, and C. B. Sharma, “Dynamic analysis of composite cylindrical shells using differential quadrature method (DQM),” *Composite Structures*, vol. 78, no. 2, pp. 292–298, 2007.