Professor Mohsen Asghari

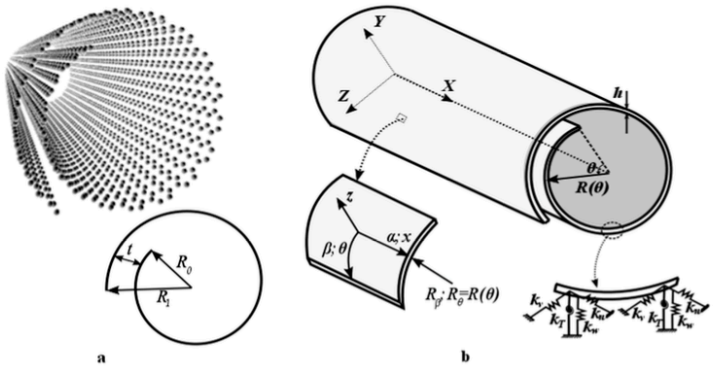

Figure 1. Geometry of a CNS: (**a**) atomistic model of CNS and its cross-section; (**b**) equivalent continuum shell model.

From: Amin Taraghi Osguei, Mohamad Taghi Ahmadian, Mohsen Asghari and Nicola Maria Pugno, "A shell model for free vibration analysis of carbon nanoscroll", Materials (MDPI), Vol. 10, p 387, 6 April 2017

See:
http://sharif.ir/~asghari/
https://www.researchgate.net/scientific-contributions/2120482651_Mohsen_Asghari

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Research Interests:
Nonlinear continuum mechanics, Finite deformation plasticity, Nonlinear finite element, Nano-mechanics, Applied mathematics

Selected Publications:
Famida Fallah, Ehsan Taati and Mohsen Asghari, "Decoupled stability equation for buckling analysis of FG and multilayered cylindrical shells based on the first-order shear deformation theory", Composites Part B: Engineering, Vol. 154, pp 225-241, 1 December 2018
Famida Fallah, Ehsan Taati, Mohsen Asghari and J.N. Reddy, "Standard and boundary layer perturbation approaches to predict nonlinear axisymmetric behavior of cylindrical shells", Composite Structures, Vol. 204, pp 855-8816, 15 November 2018
M. Nikfar and M. Asghari, "A novel model for analysis of multilayer graphene sheets taking into account the interlayer shear effect", Meccanica, Vol. 53, No. 11-12, pp 3061-3082, September 2018

Amin Taraghi Osguei, Mohamad Taghi Ahmadian, Mohsen Asghari and Nicola Maria Pugno, “A shell model for free vibration analysis of carbon nanoscroll”, Materials (MDPI), Vol. 10, p 387, 6 April 2017
A. Taraghi Osguei, M.T. Ahmadian, M. Asghari and N.M. Pugno, “Free vibration analysis of cylindrical panels with spiral cross section”, International Journal of Mechanical Sciences, Vol. 133, pp 376-386, November 2017
Kahrobaiyan, M., Asghari, M., Ahmadian, M.: A strain gradient Timoshenko beam element: application to MEMS. Acta Mech. 226, 505 (2015)
Jacob Rafati, Mohsen Asghari and Sachin Goyal, “Effects of DNA encapsulation on buckling instability of carbon nanotube based on nonlocal elasticity theory”, ASME Proceedings of the 10th International Conference on Multibody Systems, Nonlinear Dynamics and Control, Buffalo, New York, USA, August 17-20, 2014, Paper No. DETC2014-34430
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