



Professor Kok Keng Ang

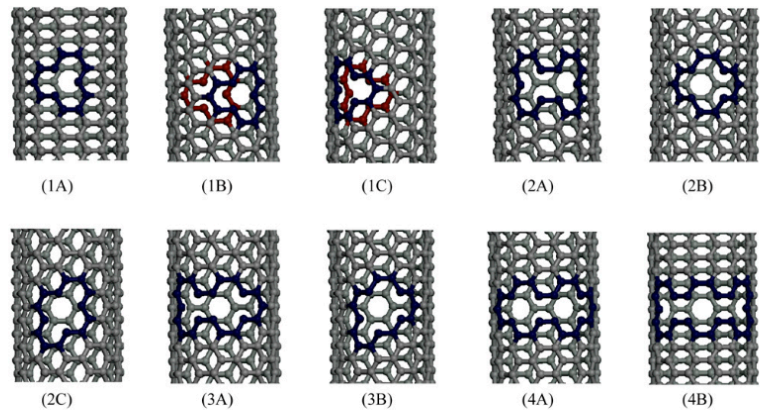


Figure 1. Vacancy clusters studied in this paper (1A—monovacancy, 1B—symmetrically distributed two monovacancies, 1C—asymmetrically distributed two monovacancies, 2A, 2B—two possible symmetric bivacancies, 2C—asymmetric bivacancy, 3A—symmetric trivacancy, 3B—asymmetric trivacancy, 4A, 4B—two possible symmetric vacancies with four missing atoms).

From: Kulathunga, T, K K Ang and J N Reddy, "Molecular dynamics analysis on buckling of defective carbon nanotubes". *Journal of Physics Condensed Matter*, (2010)

See:

<http://www.eng.nus.edu.sg/cee/people/ceeangkk/>

https://www.researchgate.net/profile/KK_Ang

http://137.132.5.169/index.php?option=com_content&id=62&tmpl=component&task=preview

Dept. of Civil and Environmental Engineering
National University of Singapore

Biography:

K.K. Ang is an Associate Professor in the Department of Civil and Environmental Engineering at the National University of Singapore. He received his B.Eng degree from the University of Singapore, M.Eng from the National University of Singapore and PhD from the University of New South Wales, Australia. He has been a staff member of the Department of Civil Engineering at the National University of Singapore since March 1987. Professor Ang is actively involved in the use of IT for enhanced teaching and learning, and is presently the Director of the Centre for IT and Applications (CITA Engineering) at the Faculty of Engineering. He was the first recipient of the inaugural NUS Teaching Excellence Award for Use of IT in Teaching and the Faculty Teaching Excellence Award for Innovative Teaching in 1998. He also received the Department of Civil Engineering Teaching Commendation Awards in 1997/98 and 1998/99. Professor Ang has taught courses in Computing, Structural Mechanics, Structural Steel Design, Structural Analysis and Finite Element Methods. His research interests include structural stability and vibration, shape and vibration control of smart adaptive structures, analysis and design of very large floating structures, computational mechanics, finite element method and meshless methods, and have published about 60 technical papers in these areas in various international journals and conferences. He won the IES/IstructE Best Structural Paper Award in 1994 for his work on development of buckling formulas and design charts for straight members and plates. Professor Ang has been involved in the organizations of various international conferences. He was the Honorary Secretary of the 4th Asia-Pacific Conference on Computational Mechanics held in Singapore in December 1999 and is currently the Honorary Secretary of the 2nd International Conference on Structural Stability and Dynamics to be held in Singapore in December 2002. Professor Ang is a Singapore registered professional engineer since 1991 and has been involved in consulting jobs for the local industries. He is also a member of the Institution of Engineers,

Singapore, and is currently serving as an elected council member of the Singapore Structural Steel Society. His hobbies are playing with computers, traveling and watching movies.

Education, etc.:

BEng (1st Class), University of Singapore, Singapore, 1977

MEng, National University of Singapore, Singapore, 1980

PhD, The University of New South Wales, Australia, 1987

PEng, Professional Engineers Board, Singapore, 1991

Honors and Awards:

National Day Long Service Medal, 9 Aug 2007

NUS Quality Service Award, 2003

NUS Teaching Excellence Award (Use of IT in Teaching) 1997/1998 for outstanding contributions to the educational programs at NUS through innovative use of IT in teaching and learning.

Teaching Commendation Award 1997/1998, 1998/1999, 2001/2002, 2004/2005, 2007/2008

Faculty Innovative Teaching Award (Silver) 2001/2002 in recognition of innovative contribution in e-education.

Engineering Educator Award 2002/2003.

Research Interests:

Structural Stability and Vibration, Composite Structures, Computational Mechanics, Finite Element Method, Smart and Adaptive Structures

Selected Publications:

Ahmed K. S., Ang K. K., A Pull-out Model for Perfectly Bonded Carbon Nanotube in Polymer Composite, 2012. Journal of Mechanics of Material and Structures

KULATHUNGA, T, K K Ang and J N Reddy, "Molecular dynamics analysis on buckling of defective carbon nanotubes". Journal of Physics Condensed Matter, (2010). (United Kingdom)

Kulathunga, D.D.T.K.; Ang, K.K.; Reddy, J.N. Accurate modeling of buckling of single- and double-walled carbon nanotubes based on shell theories. J. Phys. Condens. Matter 2009, 21, 435301

LUONG, V H, K K Ang and C M Wang, "Vibration analysis of axisymmetric multi layer liquid filled cylindrical containers using RD finite element method". International Journal of Offshore and Polar Engineering, 18, no. 1 (2008): 43 49. (United States)

Y.Q. Ma, C.M. Wang, K.K. Ang, Buckling of super ellipsoidal shells under uniform pressure, Thin-Walled Structures, 46, 6, 584–591, 2008

MA, Y and K K Ang, "Solid shell element based on relative displacement concept". Journal of Engineering Mechanics ASCE, 134, no. 11 (2008): 952 960. (United States).

KULATHUNGA, T, K K Ang and J N Reddy, "Accurate modeling of buckling of single and double walled carbon nanotubes based on shell theories". Journal of Physics Condensed Matter, 21, no. 43 (2009): 435301. (United Kingdom)

C.M. Wang, Y.Q. Ma, Y.Y. Zhang and K.K. Ang, "Buckling of double-walled carbon nanotubes modeled by solid shell elements", Journal of Applied Physics, Vol. 99, No. 11, pp. 114317 – 114317-12, June 2006

C.G. Koh, K.K. Ang and P.F. Chan, Dynamic analysis of shell structures with application to blast resistant doors", Shock and Vibration, Vol. 10, pp 269-279, 2003

Balendra, T., Ang, K. K., Paramasivam, P. and Lee, S. L., "Seismic design of flexible cylindrical liquid storage tanks", Earthquake Engineering & Structural Dynamics, Vol. 10, No. 3, May/June 1982, pp. 477–496

