

Vita: Dr. Wing Kam Liu, Walter P. Murphy Professor of Mechanical Engineering at Northwestern University, Chair of the ASME K&C Nanotechnology Council, and Co-Director of the NSF Summer Institute on Nano Mechanics, Nano Materials and Nano/Micro Manufacturing, received his B.S. from the University of Illinois at Chicago; his M.S. and Ph.D. both from Caltech. He is a world leader in multiscale simulation-based engineering and science and has applied a spectrum of atomistic, quantum, and continuum strategies towards the understanding and design of nano-materials, biological processes, and recently the use of nano-materials for diagnostic and therapeutic applications. The impact of his research contributions is attested by the large number of citations to his work (as of January 2010, over 8,000 according to Institute for Scientific Information (ISI) with an H-factor of 43; over 10,000 according to Google). In 2001, He was cited by the ISI as “one of the most highly cited, influential researchers in Engineering, and an original member highly cited researchers database”. Selected honors include the Robert Henry Thurston Lecture Award, the Gustus L. Larson Memorial Award, the Dedicated Service Award, the Pi Tau Sigma Gold Medal and the Melville Medal, (all from ASME); the John von Neumann Medal and the Computational Structural Mechanics Award from the US Association of Computational Mechanics (USACM); and the Computational Mechanics Awards of the International Association of Computational Mechanics (IACM) and the Japanese Society of Mechanical Engineers. Liu chaired the ASME Applied Mechanics Division and is past president of USACM. He is the editor of two International Journals and honorary editor of two journals and has been a consultant for more than 20 organizations. Liu has written three books; the Meshfree Particle Methods book sets the standard in the field, the Finite element book becomes a classic, and the Nano Mechanics and Materials book received a very favorable review by Nanotoday (Nov, 2006). Liu is a Fellow of ASME, ASCE, USACM, AAM, and IACM.