

Professor Hornsen Tzou (H.S. Tzou)



Hornsen Tzou, Piezoelectric Shells, Sensing, Energy Harvesting, and Distributed Control (2nd Edition), Springer series: Solid Mechanics and its Applications, Vol. 247, 2019, 456 pages

See:

https://www.deconf.org/conference/CAVNC/1174s6795.html https://www.researchgate.net/profile/Hornsen_Tzou

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Biography:

Hornsen (HS) TZOU is the Director of Interdisciplinary Research Institute of Aeronautics and Astronautics in College of Aerospace Engineering at Nanjing University of Aeronautics and Astronautics (NUAA) (09/2015-...), the 1st--round Fellow and National Professor of the Thousand-Talent Program of China (2008), an ASME Fellow (1996), Professor Emeritus at the University of Kentucky, and a Chair-Professor (03/2016-06/2019) at Zhejiang University. He joined Zhejiang University (09/2009-12/2015) after nearly 30-year service at the University of Kentucky (UK) (Dept. of Mechanical Engineering). He earned his M.S. and Ph.D. from the School of Mechanical Engineering at Purdue University in 1979 and 1983 respectively. He was among the pioneers in "smart structures and structronic systems." His research and teaching interests encompass smart structures and structronic systems, precision mechatronics, hybrid multi-functional piezo/photo/flexo /megneto/electro/elastic structures, design and micro-actuation of biomedical devices and tools, dynamics and

distributed sensing/control of discrete and distributed systems (shells, plates, etc.), nonlinear joint/contact dynamics and control, electromechanics, opto-thermopiezoelectric devices and systems, etc. He was invited and worked at IBM (CAD/CAM and Printer R&D), Wright Laboratory (Flight Dynamics Lab), the Institute of Space and Astronautical Science (ISAS) (Kanagawa, Japan), Tohoku University (Sendai, Japan), the Otto-von-Guericke University of Magdeburg and German Aerospace Research Establishment (DLR) (Braunschweig, Germany), Amway Research R&D (IRI/ASEE Fellow, 1988), Tokyo Institute of Technology (Japan) (2001 Chair of International Cooperation), NASA Levis, Harbin Institute of Technology (China), National Taiwan University (NSC Chair Professor, 2006-07), etc. He directed the StrucTronics and Design Lab (founded by NSF, JPL, ARO, NASA, AFOSR, Pratt-Whitney, IBM, Ford, industries, etc. since 1985) at UK. Dr. Tzou has won six paper awards (including ASME and AIAA Best-Paper Awards), six ASME Service Awards and three NASA Class-1 New Technology Disclosure Awards (2001, 2003 and 2009). He has authored and co-authored over 500 technical publications and was named "One of the Most Cited Authors" by the Journal of Sound of Vibration in 11/2006, "2011 top-ten cited paper" in Journal of Intelligent Material Systems and Structures, 2014, 2016, 2017 and 2018 one of "the most cited researchers in Mechanical Engineering" in China (Elsevier), etc. He authored Piezoelectric Shells (Sensing, Energy Harvesting and Distributed Control) (two editions) and Design of Smart Structures, Devices and Structronic Systems (two editions) and edited seven other books. He was Chair (07/2012-11/2014) and Deputy (11/2008-06/2012) of the ASME Board on Technical Knowledge Dissemination (BTKD), Executive Member of Technical Communities Operating Board (TCOB) and Chair of ASME Interdisciplinary Councils (11/2008-06/2012), a founding member of the ASME Adaptive Structures and Material Systems Committee, the General Chair of the 2007 ASME International Design Technical Conferences and Computers & Information in Engineering Conference (IDETC/CIE), the Conference Chair of the 21st Mechanical Vibration and Sound Conference, Co-chair of the 23 International Conference on Adaptive Structures Technologies, etc.

Selected Papers:

Books:

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Journal articles, etc.:

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