WARNER T. KOITER MEDAL

Professor C.T. Sun

School of Aeronautical and Astronautical Engineering
Purdue University

For pioneering research in composite structural mechanics and damage tolerant materials; and the creation of a worldwide generation of composite materials engineers, researchers, and university faculty

Professor CT Sun received a BS in Civil Engineering from National Taiwan University in 1962 and his MS and PhD in Theoretical and Applied Mechanics from Northwestern in 1965 and 1967, respectively. After continuing for one year as a post-doctoral fellow at Northwestern, he joined the Purdue University School of Aeronautics and Astronautics in 1968 as an assistant professor. He rose rapidly through the ranks, becoming professor in 1975. He is now the Neil Armstrong Distinguished Professor of Aeronautical and Astronautical Engineering.

Professor Sun is the most prolific academic contributor to the field of aerospace composite structural mechanics during the past four decades. The ISI Web of Knowledge lists more than 5000 citations to
Dr. Sun's archival publications that number more than 250. He is on the "ISI Highly Cited" list in Materials Science. Particularly notable are his contributions to the understanding of impact damage and failure of composite structures. In addition, he has made seminal contributions to structural dynamics, intelligent
materials and structures, viscoplasticity of polymers, and fracture mechanics. The subjects of his current research are an indicator of Professor's Sun's creative approach to applied mechanics. These include: piezoelectric sandwich structures, defect formation during composite processing, fatigue of bonded
joints, fracture of piezoelectric materials, self healing materials, and nanomechanics. These topics illustrate the breadth of Professor Sun's scholarship and clearly show that he is at the leading edge of applied mechanics.

Professor Sun has created a generation of composite materials engineers, researchers and university faculty. His widely adopted textbook: "Mechanics of Aircraft Structures," is now in its 2nd edition. He has produced over 80 doctoral and a comparable number of MS degree students, many of whom have been appointed to significant positions in academia, government, and the industry.

Professor Sun is a fellow of the AIAA, ASME, and the American Society of Composites. He has been the recipient of some of the highest awards in the field of applied mechanics including: IAA/ASME/ASCE/AHS Structures, Structural Dynamics and Materials Award 1997; Medal of Excellence in Composite Materials, 1995; Distinguished Research Award, American Society of Composites, 1995; and the ASTM Wayne W. Stinchcomb Memorial Award. He has served on editorial board of the Acta Mechanica Solida Sinica (1988- present), the International Journal of Nanotechnology (2004-present), Composites Science and Technology (1984-present), Journal of Composite Materials (1984-present), International Journal of Damage Mechanics (1991- present). Dr. Sun serves as a contributing editor of Mechanics of Composite
Materials and Structures (1994-present). He was the associate editor of the Journal of Astronautical Sciences (1983-1989) and the Journal of Applied Mechanics (1981-1984). For the last three decades, Professor Sun has been on the organizing committee of every major national and international conference that addressed the mechanics of composite materials.

The Warner T. Koiter Medal, established in 1996, is bestowed in recognition of distinguished contributions to the field of solid mechanics with special emphasis on the effective blending of theoretical and applied elements of the discipline, and on a high degree of leadership in the international solid mechanics community.