



BIOGRAPHY

UNITED STATES AIR FORCE

Dr. B.-L. (“Les”) LEE

Dr. Lee has been a Program Manager for Mechanics of Multifunctional Materials and Microsystems at the Air Force Office of Scientific Research (AFOSR) in Arlington, VA for 18 years. His technical specialty is the mechanics and materials science. He joined AFOSR following 12 years on the faculty of Department of Engineering Science & Mechanics at the Pennsylvania State University. At Penn State, he taught the courses on “engineering mechanics” and “advanced composites manufacturing” and performed the sponsored research in the areas of nanocomposites, penetration failure mechanics, fatigue behavior, and manufacturing science. Prior to his academic career, he had 10 years' industrial research experience and 3 years' government research experience dealing with a broad range of composite materials. He received Master Degree in Mechanical Engineering and Doctoral Degree in Materials Science Engineering from Massachusetts Institute of Technology.



His primary responsibilities at AFOSR include the establishment of science base for (i) the integration of newly emerging functional materials and devices into aerospace structures and (ii) the utilization of new design paradigm for multi-functionality to resolve the issues of reliability/survivability/maintainability of the future aerospace platforms. Under his leadership, AFOSR Program on Mechanics of Multifunctional Materials and Microsystems established a number of milestones for engineering materials community covering multi-disciplinary research works on the subjects of: “self-healing materials,” “neurological system-inspired sensory network,” “self-sustaining structures with integrated power sources,” “reconfigurable load-bearing antenna systems,” “reconfigurable multifunctional materials,” “bio-molecular sensory materials,” “avian-inspired fly-by-feel morphing wing air vehicles” and “neuromorphic network for multifunctional intelligent systems.”

EDUCATION

1976 Sc.D., Materials Science and Engineering, Massachusetts Institute of Technology, Cambridge, MA
1973 S.M., Mechanical Engineering, Massachusetts Institute of Technology, Cambridge, MA

PROFESSIONAL/SCIENTIFIC/HONORARY AFFILIATIONS

- Chair, The 1st Gordon Research Conference on “Multifunctional Materials and Structures” (2016)
- Adjunct Professor of Engineering, Johns Hopkins University (2014-2017)
- Journal of Composite Materials, Editor for North America
- US Council Member for the US-Japan Conference on Composite Materials
- Best Symposium Award for the 1st Int'l Symposium on “Advances in Elastomer Composites” at the 152nd Meeting of ACS Rubber Division Meeting (1997)
- Certificate of Appreciation 'for significant contributions to the understanding of processing science in toughened LaRC-RP46 composite matrix resins' from NASA-Langley Research Center, Hampton, VA (1991)