

Professor Leslie Banks-Sills holds the Diane and Arthur Belfer Chair of Mechanics and Biomechanics at Tel Aviv University since November 2006. She serves on the editorial boards of Engineering Fracture Mechanics, International Journal of Fracture, International Journal of Structural Integrity and Strain. She has consulted for various organizations in Israel, as well as for NASA, regarding problems of fracture in structures.

Professor Banks-Sills completed a B.A. degree in mathematics at Queens College of the City University of New York in 1965, an M.Sc. degree in engineering mechanics from the University of Michigan in 1973 and a Ph.D. degree in engineering from Harvard University in 1977. After carrying out a post-doctorate at Brown University, she joined the Faculty of Engineering at Tel Aviv University in 1979. From 1993 through 1997, and again from 2001 through 2005, she served as Chairman of the Department of Mechanics, Materials and Structures. She is Director of the Dreszer Fracture Mechanics Laboratory at Tel Aviv University.

She was a visiting scientist at Wright Patterson Air Force Base in the U.S. and the Research Center in Karlsruhe, Germany. The prestigious Mary Shepard B. Upson Visiting Professorship at Cornell University was awarded to her in 1997. Since 2001, she is an Adjunct Professor in the School of Civil and Environmental Engineering at Cornell University. She held the Lise Meitner Chair at Lund University, Sweden, from July, 2006 until December, 2006. Since 2009, she is a Guest Professor in the Division of Solid Mechanics at Lund University. She was a Fellow of the Japan Society for the Promotion of Science at Kyoto University in 2009-2010.

Professor Banks-Sills is a member of the following scientific societies: Sigma Xi, The Scientific Research Society of North America, The American Society of Mechanical Engineers, American Academy of Mechanics, American Society of Testing and Materials, The Society of Experimental Mechanics, The New York Academy of Sciences, European Structural Integrity Society and European Society for Experimental Mechanics.

She received the Teaching Excellence Award in Mechanical Engineering, Tel Aviv University (1995-1996) and the Teaching Excellence Award, Faculty of Engineering, Tel Aviv University (1998-1999). She was elected as an Honorary Fellow of the International Congress of Fracture in 2005 and served on the Executive Board of this organization. The Technion in Haifa awarded her the Hanin Prize for her contributions to aeronautical engineering in 2006. She is the recipient of the 2006 Honorary Membership to ESIS (European Society of Structural Integrity) for her outstanding original technical contributions to fracture mechanics and good service to the international fracture mechanics community. She was elected as a Fellow of the American Academy of Mechanics in 2008. In 2006, she was elected one of two Vice Presidents of ESIS and is currently the President (2010-2014). In addition, she is a Vice President of EURASEM (European Society of Experimental Mechanics) since 2008.

Her research interests include the use of analytical, numerical and experimental methods to treat fracture problems which include homogeneous materials, bonds, interfaces and composites. In particular, recently she and her group have been examining the propagation of cracks in piezoelectric materials, delamination of cross-ply and woven composites and the effect of carbon nano-tubes in polymer materials.

She has participated in over 60 international conferences and been on the scientific committees of many of them. She has guided over 40 Master's, Ph.D. and post-doctoral students many of whom hold key positions in academia and industry. She has published over 90 papers in international journals and edited the book *Advances in Mathematical Modeling and Experimental Methods for Materials and Structures, The Jacob Aboudi Volume*, Springer, The Netherlands (2010) with Dr. Rivka Gilat.