

Ariela Sofer

Candidate for INCOSE Director for Academic Affairs

My vision is for a future in which:

- Every engineering student - hence every engineering professional - acquires an understanding of the fundamentals of systems engineering.
- Every student - no matter what discipline - acquires an understanding in systems thinking.
- Systems engineering is a rigorous and highly respected academic discipline with a strong theoretical foundation.
- Systems engineering is an important academic discipline taught worldwide.
- The best and the brightest students and faculty gravitate to careers in systems engineering.
- Academia, industry and government collaborate to enhance and promote the research and practice of systems engineering.



As INCOSE Director of Academic Matters I would commit myself to advancing this vision. In doing so I will build on the work already done by INCOSE. Much progress has already been made, yet much more remains to be done. Means to advance these objectives include targeted activities within the Academic Council at the Symposium and the IW, expanding the Academic Council, holding special-focus Academic Forum meetings dedicated to one of these thrust areas, strong interaction with ABET and other international accreditation bodies, education proposals to relevant programs within NSF, activities within student divisions, mentoring activities for junior faculty, interaction with the INCOSE journal editors, collaboration and joint activities with other societies involved in systems engineering such as IISE, and more.

My hope is that my extensive experience as a leader in systems engineering education, my experience in serving on the boards of professional societies and other voluntary leadership roles, and my long relationship with INCOSE, combined with my commitment to achieving my vision will serve INCOSE well and help make systems engineering the dominant engineering profession it deserves to be.

Ariela Sofer

Ariela Sofer is a Professor of Systems Engineering and Operations Research (SEOR) at George Mason University, and (since January 2002) Chair of the SEOR Department. As chair, Ariela oversees BS and MS degree programs in systems engineering, a PhD program in systems engineering and operations research, as well as MS programs in operations research and data analytics engineering (predictive analytics track). She has also established on-site programs and distance programs (in both synchronous and asynchronous mode) as well as short courses in systems engineering to several industrial and government partners.

Dr. Sofer has served as co-chair of the 2006 INCOSE Academic Forum “Systems Engineering Knowledge & Skills in the Education of All Engineers.” She has also co-chaired conferences on model-based systems engineering, service oriented architectures, and optimization. She is a member of the editorial board of the SEBoK (Systems Engineering Body of Knowledge), and a member of the INCOSE Corporate Advisory Board. She is currently completing the last year of her term as Secretary of the Board of Trustees of the Institute of Industrial and Systems Engineers (IISE) and has previously served on the Board of the Institute for Operations Research and Management Science (INFORMS) as Vice President for Sections and Societies.

Dr. Sofer is coauthor of the textbook "Linear and Nonlinear Optimization", published by SIAM Books in 2008 (and an earlier edition “Linear and Nonlinear Programming,” McGraw Hill, 1996). She is also co-editor of three refereed volumes, and author or coauthor of close to 40 refereed publications. She has been PI or co-PI of over \$1M funding from NSF.