

The AVS Senior Technical Experts Program (STEP)

Michael Gorelik, Ph.D., PMP

Chief Scientific and Technical Advisor – Fatigue and Damage Tolerance



Dr. Michael Gorelik has nearly 30 years of experience in the areas of fatigue and damage tolerance (F&DT), probabilistic methods, advanced manufacturing, and health monitoring. He applies this expertise to the development of regulations and standards, certification of aerospace products, assessment of new technologies, training and education, and coordination of R&D programs and consortia. Dr. Gorelik supports evaluation of new technologies and research in the areas of advanced F&DT methods, Additive Manufacturing, Computational Materials, and Health Monitoring.

Prior to joining the FAA, Dr. Gorelik was an Engineering Fellow at Honeywell Aerospace, working in the areas of life prediction and structural integrity. He has authored or co-authored over 60 peer-reviewed papers and conference presentations, and one patent. Dr. Gorelik currently serves as Chairman of the ASME IGTT's Structures and Dynamics Committee, and is a member of the America Makes Governance Board. He also supports the ARAC Working Group on F&DT of Airplane Structures, and co-chairs the MMPDS Emerging Technologies Task Group (ETTG). Dr. Gorelik earned B.S. and M.S. degrees in Engineering Mechanics from St. Petersburg Polytechnic Institute, Russia, along with an MBA from the Arizona State University. He earned a Ph.D. in Engineering Mechanics, with a minor in Materials Engineering, from the University of Illinois at Chicago. He is a recipient of the R&D 100 Award, the NASA *Turning Goals Into Reality* Award, and two Honeywell Technical Achievement Awards.