

Michael Gorelik, Ph.D., PMP

Chief Scientist and Technical Advisor for Fatigue and Damage Tolerance



Dr. Michael Gorelik has more than 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 FAA, Dr. Gorelik was an Engineering Fellow at Honeywell Aerospace, working in the areas of life prediction and structural integrity, probabilistic methods, reliability, and risk assessment. He has authored and co-authored more than 60 peer-reviewed papers and conference presentations, and one patent.

Dr. Gorelik currently serves as the elected US National Delegate for ICAF (International Committee on Aeronautical Fatigue), and co-chairs the MMPDS Emerging Technologies Task Group (ETTG). He also serves on the public or government advisory boards for several major USG-funded research and development (R&D) programs, co-chairs an industry-government-academia steering group on computational materials, and manages a portfolio of the FAA R&D programs focused on continued airworthiness issues. He is a member of several ASME, ASTM and SAE committees and steering groups.

Dr. Gorelik earned his bachelor's and master's degrees in engineering mechanics from St. Petersburg Polytechnic University, Russia, along with an MBA from Arizona State University. He earned his doctorate in engineering mechanics and minor in materials engineering from the University of Illinois at Chicago, and completed post-doctoral studies in fracture mechanics. He is a recipient of the R&D 100 Award, the NASA Turning Goals into Reality (TGIR) Award, NASA NESC Group Achievement Award, and two corporate Honeywell Technical Achievement Awards.