

Langer Bio:

Kristina Langer is an aerospace engineer with the Air Force Research Laboratory at Wright-Patterson Air Force Base where she serves as the Technology Advisor for basic and applied research in aerospace structural integrity and advanced structural concepts. She received her PhD from Stanford University where she developed multi-scale models of dynamic crack propagation to explain experimentally-observed non-planar fracture in brittle materials. Kristina currently works in the area of engineered residual stress (ERS) for airframe fatigue life enhancement, with specific focus on developing modeling tools to enable cost-effective and timely deployment for residual stress solutions to fatigue challenges in the fielded Air Force fleet. She oversees the activities of the in-house ERS research team as well as an active USAF-sponsored international collaboration.