Composites Mechanics Engineer

**Position Description:** Performs scientific and engineering research on the mechanical performance of composite materials to include the experimental investigation, analysis and interpretation of behavior in extreme thermal environments. Develops research areas and approaches relevant to future Air Force material property needs with an emphasis on prediction of material behavior in mission relevant conditions. Partners to provide experimental data to validate thermomechanical models and predict material properties. Conducts research on theories, principles, practical concepts, and methods for experimental mechanical testing of composite materials coupons and representative subcomponents and subelements. Applies expertise in mechanics and materials science to develop experimental test methods that provide physics-based understanding relevant to mission conditions and material screening. Understands the science of composite materials (polymeric and/or ceramic), identifies basic and applied research opportunities and resources, proposes and executes laboratory research and contracted activities with external partners. Actively pursues mutually beneficial collaborations with other researchers within the Air Force, the Department of Defense, other government agencies, academia, or industry. As a technical peer, reviews and provides feedback on proposed research activities. Provides timely and periodic updates to team members and management on technical activities, challenges, and accomplishments. Disseminates technical findings to the S&E community through technical reports, peer reviewed journal papers, conferences and seminars. Actively pursues further developmental training to grow technical and leadership competencies.

**Position Information:** This position is for a U.S. civilian position within the Air Force Research Laboratory, Materials and Manufacturing Directorate, Composite Materials Branch. Candidates should have an advanced degree in a relevant engineering field at the M.S. or Ph.D. level. The position is restricted to U.S. citizens only. Candidates may send resumes to: Dr. Jennifer Fielding, jennifer.fielding@us.af.mil, or Dr. Jeff Baur, jeffery.baur@us.af.mil.