

CONGRATULATIONS JANET L. GBUR & JOHN J. LEWANDOWSKI, PHD

NEW RESEARCH PUBLISHED

*FATIGUE AND FRACTURE OF WIRES AND CABLES
FOR BIOMEDICAL APPLICATIONS*



Janet L. Gbur, Doctoral Candidate, and John J. Lewandowski, PhD, Arthur P. Armington Professor of Engineering II in the Department of Materials Science and Engineering, have published a comprehensive review paper on the fatigue and fracture behavior of biomedical wires and cables, "Fatigue and Fracture of Wires and Cables for Biomedical Applications," in *International Materials Reviews*.

The article covers an overview of cable architecture and stress states experienced during testing with references to more detailed information, descriptions of the common materials systems and fatigue test methodologies, an overview of the effects of changes in material composition, microstructure, processing and test conditions on fracture and fatigue behavior of the wires/cables, fractography and suggestions for areas of future work.



About the FES Center

The Cleveland FES Center is a consortium of the Louis Stokes Cleveland VA Medical Center, MetroHealth Medical Center, Case Western Reserve University, and University Hospitals. With their support, researchers, engineers and clinicians collaborate together to develop innovative solutions that improve the quality of life of individuals with neurological or other muscular skeletal impairments. Through the use of neurostimulation and neuromodulation research and applications, the Cleveland FES Center leads the translation of this technology into clinical deployment.