Chairman	**Guagliano M. - Berto F.**
Topic	*Advanced Surfaces and Materials for Superior Properties*
Objectives	The topics of the Symposium include, but are not limited to, the following: • Fatigue and crack propagation in advanced metallic materials • Influence of advanced manufacturing techniques signature on microstructure • Fatigue behavior of lattice and advanced surface structures • Residual stress measurement in advanced metallic materials • Smart implants for biomedical applications - New generation of prosthetics (complex reticular shapes and multi-material, functionally graded structures) • Characterization of mechanical properties of advanced metallic materials • Development of shock absorbing protection made of crushable materials (lattice cellular structure) using advanced manufacturing techniques • Development of one single part integrating waveguide filter, bends, couplers, supporting structures made by advanced manufacturing techniques • Development of embedded thermal functions in structural parts using advanced manufacturing techniques