Joao S. Soares, Ph.D.

Assistant Professor, Department of Mechanical and Nuclear Engineering at VCU College of Engineering
Richmond, VA, US
Engineered Tissue Multiscale Mechanics & Modeling Laboratory (ETM3)

Biography

Joao Silva Soares, Ph.D. joined VCU Mechanical and Nuclear Engineering as Assistant Professor on the Fall 2017 to form the Engineered Tissue Multiscale Mechanics and Modeling (ETM3) research group blending theory, experimentation, and simulation in mechanics and biomedical engineering. Dr. Soares obtained his Licenciatura degree in Aerospace Engineering at Instituto Superior Tecnico, Lisbon, Portugal in 2002, and his Ph.D. degree in Mechanical Engineering at Texas A&M University in 2008. Subsequently, Dr. Soares has conducted post-doctoral work at Milan Polytechnic, Stony Brook University, and at the University of Texas at Austin as Research Scientist with independent PI status. Dr. Soares has developed state-of-the-art frameworks for polymer degradation and erosion, shear induced platelet activation, and mechanically-conditioned tissue engineering. His work is published in 22 peer-reviewed publications and more than 50 conference proceedings.

Areas of Expertise

Functional tissue engineering, Engineered tissue vascular grafts, Growth and remodelling of soft tissues, Thrombogenicity of cardiovascular medical devices, Platelet activation, Drug delivery devices, Endovascular stents, Polymer degradation and erosion, Continuum mechanics and its application to non-linear materials

Affiliations

American Heart Association (AHA), Early Career Member, Biomedical Engineering Society (BMES), Early Career Member, American Society of Mechanical Engineering, Bioengineering Division (ASME-BED), Member

Education

Texas A&M University
Ph.D. Mechanical Engineering

Instituto Superior Tecnico of the Technical University of Lisbon, Portugal
Licenciatura Aerospace Engineering