Symposium on Biomedical Engineering
Chair: Fernando Jorge Monteiro
Location: B024
Time for oral presentation: 10 min + 5 min discussion

Session I (27th.June, 10:30h-13:00h) | Moderated by Fernando Jorge Monteiro
- Tomé Albuquerque, Jorge Belinha and Renato Natal Jorge. The numerical analysis of chitosan tubes for peripheral nerve regenerating using distinct discretization techniques #39
- Eva Carvalho, Marco Araújo, Cristina Barrias and Ana Pêgo. Towards the development of biologically relevant platforms to study glial cell mechanotransduction: an alginate-based approach #27
- Ana Patricia Spencer, Victoria Leiro and Ana Paula Pêgo. Biodegradable dendrimer as nucleic acid delivery vector in neuronal cells #51
- Maria Inês Barbosa, Jorge Belinha and Renato Natal Jorge. A new algorithm to predict blood clot formation using meshless methods #15
- Raquel Sousa, Jorge Belinha, Vânia Oliveira, António Oliveira and Renato Natal. Structural Simulation of Proximal Femoral Tumors using Meshless Methods #18
- Ana Guerra, Jorge Belinha and Renato Natal Jorge. Numerical analysis of capillary formation due to vascular endothelial growth factor diffusion #25
- M. Beatriz F. Moutinho, M. M. A. Peyroteo, Jorge Belinha and Renato M. Natal Jorge. Bone remodelling response due to the insertion of a dental implant using meshless methods #34

Session II (27th.June, 14:30h-17:00h) | Moderated by Pedro Martins
- Elena Gabriela Deliu, Jorge Belinha and Renato Natal Jorge. Studying Dental Restorations with Resin-Based Composite using Meshless Methods #37
- A. C. S. Veiga, J. Belinha and R. M. Natal Jorge. Using Meshless Methods to Study the Structural Behaviour of Hepatitis Virus #45
- Carla Santos, Jorge Belinha, Fernanda Gentil, Marco Parente and Renato Natal Jorge. Computational simulation of the vestibular rehabilitation using a realistic cupula structure #108
- Marco Marques, Jorge Belinha, António Fonseca Oliveira, M.C. Manzanares Céspedes and Renato Natal Jorge. Mechanical Characterization of Trabecular Bone Tissue Using a new 3D Homogenization Technique #111
- Carlos Rodrigues, Miguel Correia, João Abrantes, Jurandir Nadal and Marco Aurélio Benedetti Rodrigues. Assessment of the relation of force development with body weight at different standard maximum vertical jump #134
- Bárbara Malafaya, Marco Marques, Isaac Ferreira, Margarida Machado, Gabriela Caldas, Jorge Belinha, Jorge Lino and Renato Natal Jorge. Development of PLA-based Stent using Fused Deposition Modeling #50
- Madalena M. A. Peyroteo, Jorge Belinha, Renato Natal Jorge and Joaquim A.C.F. Leite Moreira. Mathematical modelling of sarcomere dynamics to study heart failure with preserved ejection fraction (HFPEF) #35
Poster Session (28th June, 10:30h-11:30h)

- Maria Carolina Fornari, Andreia Sofia Pinheiro de Sousa, Marcos Duarte and João Manuel Ribeiro da Silva Tavares. Posturography in quiet standing: state-of-the-art and a stroke case study. #78
- Suellen Moraes, Sofia Lima, Salette Reis, João Pedro Araújo, Célia Sousa and Cláudia Nunes. In the Trail of a New Doxorubicin Nanoformulation Loading Magnetic Nanoparticles. #317
- João Jordão, Susana Novais, Susana Silva and Orlando Frazão. A brief review of fiber optic based Raman spectroscopy for cancer detection. #324