Mini Symposium Proposal

Numerical and Computational Methods in Analysis and Design of Biomedical Devices

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Biomedical devices generally involve transport phenomena, basically elastic deformation and fluid-structure interactions promoting or interfering with other physical problems. Classical phenomena are blood flows in natural vessels, artificial blood pumps, knee and hip prostheses, devices for drug release, etc. Theoretical analysis of these problems is now possible due to high performance computational resources and numerical strategies. This session is devoted to give a scientific forum for these researchers involved in the engineering analysis and design of biomedical devices using numerical methods and advanced techniques, with emphasis on state of the art.