Optimization and Computational Mechanics

Alfredo Canelas*, José Herskovits†, Sandro Mazorche** and Mario Tanaka Filho††

*UDELAR, Montevideo, Uruguay
acanelas@fing,edu.uy

† *Mechanical Engineering Program-COPPE, Federal University of Rio de Janeiro, Brazil*
jose@optimize.ufrj.br

**Dept. of Mathematics, Federal University of Juiz de Fora, Brazil
sandro.mazorche@ufjf.edu.br

††*Mathematical Program, Federal University of West of Pará, Santarém-PA, Brazil.*
tanakafi@gmail.com

WORDS: Optimal Design, Mechanical Optimization, Numerical Optimization Methods, Mathematical Programming Algorithms, Sensitivity Analysis.

ABSTRACT

The aim of this mini-symposium is to bring together engineers, applied mathematicians and computer scientists working on research, development and practical application of optimization methods for computational mechanics or developing basic techniques in this field.

Contributions on optimization algorithms as well as genetic or evolutionary techniques are also welcome. This is also the case of several CAD tools for geometric modeling, efficient analysis and reanalysis methods and sensitivity analysis involved in mechanical numerical design.