Aims and scope

The ***International Journal for Simulation and Multidisciplinary Design Optimization*** is a peer-reviewed journal covering all aspects related to the simulation and multidisciplinary design optimization. It is devoted to publish original work related to advanced design methodologies, theoretical approaches, contemporary computers and their applications to different fields such as engineering software/hardware developments, science, computing techniques, aerospace, automobile, aeronautic, business, management, manufacturing,... etc. Front-edge research topics related to topology optimization, composite material design, numerical simulation of manufacturing process, advanced optimization algorithms, industrial applications of optimization methods are highly suggested.

The journal published and outstanding original research papers, critical reviews and short communications (contributions deserving priority in publication and report work that it technically sound, innovative and significantly unique in a length that does not exceed four printed pages).

The scope includes, but is not limited to original research contributions, reviews in the following topics:

- **Parameter identification & Surface Response** (all aspects of characterization and modeling of materials and structural behaviors, Artificial Neural Network, Parametric Programming, approximation methods,...etc.)
- **Optimization Strategies** (optimization methods that involve heuristic or Mathematics approaches, Control Theory, Linear & Nonlinear Programming, Stochastic Programming, Discrete & Dynamic Programming, Operational Research, Algorithms in Optimization based on nature behaviors,....etc.)
- **Structural Optimization** (sizing, shape and topology optimizations with or without external constraints for materials and structures)
- **Dynamic and Vibration** (cover modelling and simulation for dynamic and vibration analysis, shape and topology optimizations with or without external constraints for materials and structures)
- **Industrial Applications** (Applications Related to Optimization, Modelling for Engineering applications are very welcome. Authors should underline the technological, numerical or integration of the mentioned scopes.).