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## **Special Issue Information**

Dear Colleagues,

We are pleased to call for papers for a Special Issue on **Simulation and Optimization for Industry 4.0**.

This Special Issue is dedicated to solutions for Simulation, Optimization and discussions of measuring uncertainties in Industry 4.0, Stochastic Modeling, Uncertainty Quantification and analysis, modeling, design of systems in the presence of uncertainty.

The contributions cover the broad interdisciplinary spectrum of scientific Optimization uncertainties in Industry and present recent advances in theory, development of methods, and applications in practice.

The main topics of interest for this Special Issue include but are not limited to:

- Stochastic and optimization processes in energy;
- Optimization, Reliability and optimal safety factors;
- Stochastic Modeling and Uncertainty Quantification;
- Measuring uncertainties in Mechanics;
- Computational methods for the solution of problems in engineering;
- Mathematical models and their numerical solution in all areas of mechanics;
- Optimization and Uncertainties Solid/structural mechanics;
- Optimization and Uncertainties Fluid mechanics

- Optimization and Uncertainties Multiphysics systems;
- Systems of governed by differential equations possibly with multiscale features.
- Propagation of uncertainty across scales,
- Bayesian computation and machine learning techniques
- stochastic multiscale systems,
- Evolutionary computing-based uncertain optimization methods
- modern experiments and modeling approaches
- Applications of uncertainty quantification in all areas of physical sciences

# **Manuscript Submission Information**

Manuscripts should be submitted online at https://www.editorialmanager.com/ijsmdo/default.aspx

Submitted manuscripts should not have been submitted to any other journal. Please not that the journal's submission and peer-review system uses a plagiarism check tool.

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#### **Keywords**

Optimization, Reliability, Uncertainties, Fluid-structure Interaction, solid mechanics, Measuring uncertainties in Mechanics, Stochastic processes in energy.