

Optimization and Prediction in Computational Mechanics via Artificial Intelligence

TRACK NUMBER 600

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Keywords: Optimization, Artificial intelligence, Computational Mechanics, Structural Mechanics, Structural Dynamics, System Dynamics.

ABSTRACT

In the design of mechanical systems, the role of an engineer is to find the best solution by considering problem requirements, security and cost of applications. To ensure the best balance between these necessities, the method called optimization is employed. In the process of time, world resources are decreasing and the importance of time is increasing. For that reason, optimization is a popular and improvable research area.

This mini-symposium aims to bring together all leading academicians working on the optimization of mechanical systems. The symposium is a multidisciplinary scientific meeting in order to discuss new original approaches and original applications of artificial intelligence methods. Thus, this mini-symposium will be a valuable source of information exchange between several disciplines related to mechanics. In addition to optimization studies, machine learning methods, which are used for the prediction of mechanic problems, are also included in the scope of the mini-symposium.