

Session title: **Bio-inspired heuristic for intelligent manufacturing system - BIMS**

Organisers:

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Short presentation: In the context of intelligent manufacturing systems, production scheduling is very important because of its direct link to product delivery, inventory levels, and machine utilization. In the literature there are many kinds of scheduling problems, which are NP-hard combinatorial or integer continuous optimization problems. In intelligent manufacturing system, it is widely accepted that traditional optimization methods are not a good way to answer those problems. Consequently, several new intelligent optimization algorithms are suggested to solve manufacturing scheduling problems. However, creating efficient optimizations in IMS is still a challenging topic.

The aim of this session is to present recent advances on algorithms and techniques that can find optimal or near-optimal solutions in various manufacturing scheduling problems.

Authors are invited to submit original contributions on heuristic and intelligent methods for scheduling problems in intelligent manufacturing systems, including but not limited to:

- Evolutionary Computation
- Swarm Intelligence
- Artificial Neural Networks
- Fuzzy Techniques

Keywords: Bio-inspired heuristic, Intelligent Manufacturing System, Manufacturing scheduling problems

Important dates:

- Full Paper Submission: May 22, 2014
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- Final Paper Submission: September 8, 2014