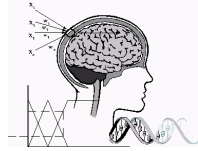




# International

Innovation in Knowledge Based and Intelligent  
Engineering Systems



## INVITED SESSION SUMMARY

**Title of Session:**

Nature Inspired Optimization Techniques for Engineering processes

**Name of Chair:**

Assoc. Prof. Mohamed Arezki Mellal, M'Hamed Bougara University, Algeria

**Name of Co-Chair:**

Prof. Abdellah Salhi, University of Essex, UK

**Details of Session:**

Optimization is very important in most engineering processes. The optimization methodology consists of large number of methods each of which adequate to solve one or more engineering problems such as setting machining parameters, optimizing the use of energy and power, scheduling operations, allocating equipment and facilities, controlling and testing, etc. In this context, the aim of this session is to bring together researchers and interested parties to share and exchange experiences regarding the development and application of nature inspired optimization techniques. Both theoretical contributions and papers on practical applications that highlight the potential, the limitations, the criticalities and difficulties of nature inspired optimization techniques in the industry, and the needs for further developments, are welcome.

Topics of interest include, but are not limited to:

- Nature inspired optimization techniques, such as: genetic algorithms, particle swarm optimization, cuckoo algorithms, ant colony optimization, artificial bee colony, plant propagation algorithm....
- Development of novel methods and hybrid approaches.
- Applications of such techniques in machining, manufacturing, maintenance, reliability, scheduling, allocation, design, control, diagnosis, signal and image processing, industrial robotics, energy, UAV and others.

Program Committee:

Jan Treur, *Vrije Universiteit Amsterdam, The Netherlands*

Jose Manuel Molina Lopez, *Universidad Carlos III de Madrid, Spain*

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Submission deadline: 30 January 2019.

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