

Invited Session on “Theory and applications of AHP and ANP for decision making in manufacturing systems”

for MIM 2013 Manufacturing Modelling, Management, and Control

Invited session identification code 6s4c6

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<http://mim2013.org>

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Proposed by:

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Statement of scope

Since the beginning of the twenty-first century, global markets have changed rapidly and are becoming increasingly competitive. One common denominator is a clear trend toward a shift from mass production of standard products to the production of a greater variety of custom-made items with shrinking product-life. For this reason it is crucial to find a tradeoff between how to offer a wide variety of products that meet customer’s needs, while controlling production, inventory and logistic costs. The answers usually involve many separate disciplines and a combination of both tangible and intangible factors which have to be combined in a unifying approach able to support the decision making process.

In this context, Multicriteria Decision Making (MCDM) techniques play a fundamental role in the definition of appropriate models to face these kinds of problems and, in particular, as shown by an extensive available literature, the class of Analytic Hierarchy Process (AHP) and its generalization, Analytic Network Process (ANP) techniques can be successfully applied in this field.

The aim of this invited session is to host a selection of papers from researchers, academics, as well as practitioners providing significant insights into the use of AHP/ANP techniques to solve complex problems in the field of manufacturing planning, management, and control.

Reference topics include, but are not limited to:

- Total Quality Management;
- Risk Analysis;
- Logistics and Supply Chain Management;
- Business models for sustainable manufacturing systems;

- Purchasing and Supply management;
- Safety at workplace.

Submission

For author guidelines, please refer to www.ifac-control.org. All papers must be submitted electronically using Symposium Manuscript Management System (CMMS). All papers must be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper.

Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members.

The corresponding author submits the paper online (pdf format) as a special session paper.

The proceedings will be published by Elsevier on

<http://www.ifac-papersonline.net/cgi-bin/links/page.cgi>

and indexed in SCOPUS.

Several international journals are associated with the symposium for publication of special issues.

International Journal of Production Research will also select papers for a quick publication of extended versions.

<http://www.tandf.co.uk/journals/titles/00207543.asp/>

For author guidelines, please refer to <http://www.mim2013.org>.

Select: Paper Submission > Paper Format.

Submissions should be carried out through the official conference manuscript management system:

<http://ifac.papercept.net> by use of the link "**Submit a contribution to MIM 2013**".

Select: Invited Paper and indicate the session **code 6s4c6**.

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