

# Special Track on "Monitoring and Predictive Maintenance of Manufacturing Systems" for INCOM2009

## (Track code: 64nsc)

June 3-5, 2009, Moscow, Russia http://incom09.org/

### Track Chairs:

- Pr. Kondo H. Adjallah, Ecole Nationale d'Ingénieurs de Metz, France, adjallah@enim.fr
- Pr. Nidhal Rezg, Université de Metz, France, rezg@univ-metz.fr

Mathematical models are flexible, scalable and useful tools for simulating systems operation, analysing failures influences and studying diagnosis and maintenance scenarios of complex manufacturing systems. Furthermore, advanced digital technologies enable virtual study of the diagnosis during the design of manufacturing hardware and help improving their maintainability. Taking advantage from the digital technologies of advanced simulation models allows designing smart solutions of monitoring and diagnosis. This would help, since design phase, to guaranteeing best performances to the manufacturing systems.

This special track invites original works on advanced mathematical and physical models of digital simulation and on the strategies of diagnosis and of reliability prediction, for the monitoring and the predictive maintenance of flexible manufacturing systems.

#### Track topics:

Authors are invited to submit to this session, their works related to the following topics:

- Mathematical model for diagnosis and prognosis
- Methods of effectiveness assessment of manufacturing systems
- Manufacturing system simulation and virtual diagnosis engineering
- Management of diagnosis tasks embedded in components of manufacturing systems
- Methods and tools of state monitoring and predictive maintenance decision support

#### **Submission**

Submitted papers (6 pages in IFAC double column format) will be reviewed by at least two referees, see submission site http://ifac.papercept.net/ Both academic and industrial oriented communications will be considered. All papers accepted for presentation will appear in the Preprints and will be distributed to the participants. Papers duly presented at the Symposium will be archived in the form of Proceedings published at IFAC-PapersOnline.net by Elsevier. Further submission instructions are available on the IFAC website www.ifac-control.org. Several international journals are associated with the symposium for publication of special issues.

#### **Important dates:**

November 15, 2008: deadline for paper submission	
January 6, 2009:	notification of acceptance/reject
March 15, 2009:	deadline for final paper.