

Dear Colleague,

The International Conference on “**Modeling and Analysis in Applied Control and Automation**”, will be held on **October 2004 in Genoa, Italy** ([www.liophant.org/i\\_m\\_scs/i3m2004/imaaca/](http://www.liophant.org/i_m_scs/i3m2004/imaaca/)).. This 1<sup>st</sup> International Mediterranean Modeling Multiconference is sponsored by SCS International, the Society for Modeling and Simulation, San Diego, CA, USA. ([www.liophant.org/i\\_m\\_scs/i3m2004/](http://www.liophant.org/i_m_scs/i3m2004/))

In this framework, we are pleased to organize a **session** dealing with:

**“Fault Detection and isolation in process engineering”**

*Process engineering is characterized by the coupling of several phenomena of different nature. Such systems appear in many processes with risk such as nuclear and chemical ones. The improvement of their safety is based on fault detection and isolation (FDI) procedures. Different approaches to the design of such procedures have been developed in the past twenty years, depending on the kind of knowledge (bond graph, structural, statistical, fuzzy, expert rules, functional ...) used to describe the plant operation.*

*How to elaborate such models, how to develop the FDI algorithm, how to avoid false alarms, how to improve the diagnosability of the faults for alarm management design, how to continue to control the process in failure mode, what are the limits of each method,...?. Such are the questions we want to contribute and discuss from an industrial and theoretical point of view.*

*The main purposes of this session are tackling with:*

- *Dynamic modeling for FDI design*
- *Supervision*
- *Alarm management*
- *Integration of models and methods for supervision design*
- *Fault Tolerant Control*
- *Diagnosis methods*

We hope such a session will interest you.

Please send **an abstract** in PDF format **before January 16, 2004** to [belkacem.bouamama@univ-lille1.fr](mailto:belkacem.bouamama@univ-lille1.fr) (Extended to February 06, 2004.)

**The full paper is to be sent before March 05, 2004** as drafts 12-17 pages, double-spaced, PDF or PS format. **Attach** a file specifying "IMAACA 2004", and stating author's names, affiliations, mail addresses, telephone and FAX numbers, and E-mail addresses

Only original papers written in English will be considered on the basis of a full paper revision. After a first review by the two Chairs for general suitability to the conference, each full paper will be reviewed by members of the IPC.

The accepted papers will be published in the Conference Proceedings edited by SCS, the Society for Modeling and Simulation International ([www.scs.org](http://www.scs.org)). The best papers will be considered for publication in special issues on technical journals.

DEADLINES are:

- February 06, 2004: Special Session Proposal
- February 06, 2004: Tutorial Proposal
- March 05, 2004 : Full Paper Submission
- April 23, 2004: Notification Acceptance

- July 01, 2004:

Final Submission

Hoping to meet you in Genoa an important and most interesting city in the wonderful framework on the Italian Riviera, please receive my best regards.

Sincerely yours.

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