FLINS 2008

CALL FOR PAPERS

Special session on
Soft computing methods for diagnostics and prognostics

Many efforts have been devoted in recent years to the development of techniques for system health monitoring, fault diagnosis and prognosis in a joint intent to rationally improve the safety and economic performance of existing and future plants and processes. To these purposes, innovative computational techniques are being used with increasing frequency due to their ability of capturing the complex nonlinear relationships of systems and processes from possibly uncertain and ambiguous information contained in the available real-world data.

This session aims at gathering experts and collecting their contributions with regards to the innovative computational techniques for 'on line' monitoring and real time fault diagnosis and prognosis.

Examples of innovative computational techniques are the soft computing techniques (neural networks, fuzzy and neuro-fuzzy logic systems and genetic algorithms).

Examples of applications are:

- Signal validation and reconstruction of corrupted signals;
- Fault identification and classification;
- Fault prognosis, process evolution prediction and intelligent condition-based maintenance;
- Data preprocessing and data mining techniques for system health monitoring, fault diagnosis and prognosis.

We encourage you to submit an abstract for this session. Please submit your paper (4-6 pages) to be prepared according to the publisher's instructions (http://www.worldscientific.com/style/proceedings_style.shtml select the trim size: 9" x 6") through the conference website, http://www.mat.ucm.es/congresos/flins2008/ specifying the title of the special session and the organizers in the headings of the paper. Also please send a copy by email to piero.baraldi@polimi.it.

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Please submit your paper by: January 15, 2008