



Special Session on
“**Identification technologies and Product Driven Supply-Chains**” (code: **sWPL4**)
for INCOM2009
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Session Chairs

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The Supply-Chain Management (SCM) paradigm concerns the inventory, production and delivery of products among several enterprises from the initial provider to the final customer (Christopher, 1992). It leads to the management of physical product flows according to different localization and available information coming from centralized and/or physically distributed systems.

Many companies are already using hybrid enterprise control systems where centralized information systems such as APS (Advanced Planning Systems) and ERP (Enterprise Resources Planning), interoperate with distributed technologies based systems such as Auto-ID. Thanks to these technologies, it is now possible to define emergent control architectures, more agile, by enabling products and resources to participate to their own physical flow management.

These emerging architectures are characterised by the high-degree of intelligence given to entities composing the SC. In this context, product-driven control is a way to change the hierarchical integrated vision of plant-wide control for a more interoperable/intelligent one (Morel et al., 2007), by dealing with products whose information content is permanently bound to their material content and which are able to influence decisions made about them (Mcfarlane et al., 2003). Relevant architectures may be for example holonic (HMS, from the IMS) (Cavalieri, 2003), multi-agent (MAS) (Marik, 2007), bio-inspired (Valckenaers, 2006).

Session topics

The variety of relevant approaches and systems leads to many innovative issues to control the Supply Chain material flows. Papers, which contribute to the solving of these problems, are welcome in this session.

Addressed issues may concern (but are not limited to):

- Simulation, performance evaluation of intelligent manufacturing systems
- Self-organisation in intelligent manufacturing and Supply Chain management systems
- Synchronization, coordination and consistency between decision models and information models for Supply-Chain Control
- Interoperability of ERP and APS with Product Driven Architectures
- Integration of Business and Manufacturing/Supply Chain models
- Control architecture design
- Control architecture evaluation
- Information management & decision making process modelling
- Deployment methodology of intelligent control systems.

Submission

Submitted papers (6 pages in IFAC double column format) will be reviewed by at least two referees. Both academic and industrial oriented communications will be considered. Accepted contributions will be published in INCOM Proceedings by Elsevier. Further submission instructions are available on the IFAC website <http://www.ifac-control.org>. Several international journals are associated with the symposium for publication of special issues.

For a submission to this session, please use “invited paper” option of the system <http://ifac.papercept.net/>, and then assign your paper (as invited paper) to the session “Identification technologies and Product Driven Supply-Chains” (the code is **sWPL4**).

Important dates:

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