

# **International**



Innovation in Knowledge Based and Intelligent Engineering Systems

#### INVITED SESSION SUMMARY

**Title of Session:** Key Enabling Technologies for Virtual Factories (KET4VF)

# Name, Title and Affiliation of Chair:

Prof. Giacomo Cabri, University of Modena and Reggio Emilia Prof. Federica Mandreoli, University of Modena and Reggio Emilia

# Details of Session (including aim and scope):

The manufacturing industry is entering a new era in which new ICT technologies and collaboration applications will be integrated with traditional manufacturing practices and processes to increase flexibility and sustainability in manufacturing, mass customization, increase automation, better quality and to improve productivity. The virtual factory paradigm plays a key role in the achievement of these objectives. A virtual factory is defined as a multi-layered integration of the information related to various activities along the factory and product lifecycle manufacturing related resources. A central aspect of a virtual factory is that of enabling the product lifecycle stakeholders to collaborate through the use of software solutions. The virtual factory thus expands outside the actual company boundaries and offers the opportunity for the business and its suppliers to collaborate on business processes that affect the supply chain.

This session seeks at providing the opportunity for inspiration and cross-fertilization for the research groups working on technological solutions for virtual factories. It will welcome innovative papers from academic and industrial researchers covering a wide range of topics of interests in the computer science and computer engineering fields. The topics include but are not limited to:

- Cloud computing
- Big data architectures
- Real-time systems
- Data analytics
- Digital Security, Privacy and Liability
- Digital Platform Interoperability
- Service-Oriented Architectures
- Multi-agent systems
- Business Process Management
- Internet-of-things

## Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Supported by Marie-Curie RISE Project "FIRST: vF Interoperation suppoRting buSiness innovation"

#### Website URL of Call for Papers (if any):

http://didattica.agentgroup.unimore.it/KET4VF18/

### **Email & Contact Details:**

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