

### **Factory Analytics: Data Driven Models for Planning, Scheduling and Performance Prediction**

Industry 4.0 revolution is changing the way we design and manage manufacturing systems. With the advancing technology, it is possible to create complete digital copies of the manufacturing processes and the factory itself. Although digitalization is the first key step, the future of the manufacturing industry will be “smart manufacturing” systems, in which digitalized infrastructure is used to give smart decisions about the processes. Through complete digitalization, it is now possible, more than ever, conduct planning, scheduling and inventory control activities using data driven approaches. In this session we plan to include research papers, which concentrate on key manufacturing activities such as control, planning, scheduling, inventory management by proposing data driven models; and research efforts that focus on prediction of critical parameters for these data driven models, such as prediction of quality of products, machine breakdowns etc.