INCOM 2015

CALL FOR PAPERS

IFAC

Ottawa, Canada
Ottawa Convention Centre
May 11 – 13, 2015

15th IFAC/IEEE/IFIP/IFORS Symposium
on Information Control Problems
in Manufacturing

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IMPORTANT DATES

Special/Invited Session proposals: .... October 15, 2014
Regular paper submission: .... **November 1, 2014**
Special/Invited paper submission: .... **November 15, 2014**
Notification of acceptance: .... February 1, 2015
Camera ready and registration: .... **March 1, 2015**

The INCOM symposium is the triennial flagship IFAC conference in the broad area of advanced manufacturing and complex information systems. The theme of INCOM 2015 is "Advanced Information and Manufacturing Systems for a Sustainable Economy". Papers are solicited on all aspects of design, modeling, implementation and operation of modern manufacturing and logistics systems. The technical topics include, but are not limited to:

- **ADVANCED MANUFACTURING, TECHNOLOGIES AND SYSTEMS** – Recent advances, technologies for aerospace, power, nuclear, biopharmaceutical and medical industries, modern transportation and vehicle systems, materials and structures, nano-systems, mechatronics, CAD/CAE/CIM, 3-D printing.
- **ROBOTICS AND AUTONOMOUS SYSTEMS** – Tele-robotics and space robotics, modelling and optimization in robotics, multi-robot systems, IMS, intelligent vehicles, automated manufacturing, CNC machines, flexible manufacturing systems, web-enabling manufacturing control and wireless automation.
- **OPERATIONS MANAGEMENT IN PRODUCTION SYSTEMS AND LOGISTICS** – Design and balancing of production systems, facility planning, production planning and scheduling, inventory control, workflow management, outsourcing, warehousing, supply chain engineering and management, market responsive and green supply chains, RFID.
- **ENTERPRISE MODELLING AND INFORMATION SYSTEMS** – Enterprise modelling, integration and networking, virtual production networks, collaborative systems, service oriented architectures, net-enterprise, IT systems control and interoperability, next generations of infrastructure, complex systems.
- **MODELING AND OPTIMIZATION** – Operational Research, Artificial Intelligence, multi-agent technologies, multi-objective optimization, Discrete Event Systems, performance evaluation, semantic web, Big Data and Data Mining, Cloud technologies.
- **SAFETY AND SECURITY** – Monitoring, diagnosis and maintenance, risk assessment and reliability, sensor design, integration and fusion, remote sensing applications, network and cyber-security, safety in nuclear industry, regulatory issues.
- **HUMAN AND SOCIAL FACTORS** – Fostering innovations in modern economies, socio-technical and cognitive aspects of automation, design for reusability, Human-Machine Systems, life science and health care applications, environment monitoring, renewable energy technologies, sustainable economies.
- **APPLICATIONS, INDUSTRIAL PROJECTS AND CASE STUDIES**

The program of INCOM 2015 will consist of several kinds of presentations, including regular and invited sessions, special industrial sessions, dissertation sessions and workshops.

Regular papers - Authors are invited to submit draft papers (6 pages) reporting original research of theoretical or applied nature. Guidelines for the preparation of manuscripts are provided on the IFAC website: http://www.ifac-control.org/events/information-for-ifac-authors.

Invited sessions - Invited sessions consist of 5-6 papers focusing on targeted subjects and presenting a unifying theme. Proposals must describe the relevance of the session and be accompanied by full versions of each paper.

Special sessions - Special sessions offer a venue for the presentation of topics of special academic, social or industrial interest, such as emerging research areas or most recent trends in manufacturing engineering. Special sessions will also include *Doctoral Consortium*. Those interested in holding special sessions, workshops or exhibits are invited to contact the conference secretariat (secr@incom2015.org).

Complete manuscripts and session proposals must be electronically submitted through the PaperPlaza Conference Manuscript Management System (https://ifac.papercept.net).

Post-symposium publications - Proceedings will be hosted on-line on the IFAC PapersOnLine.net website and submitted for indexation by Thomson Reuters Web of Science, Scopus, INSPEC, and EI (Elsevier Index). The presented papers will be further screened for publication in the IFAC Journals (*Automatica, Control Engineering Practice, Annual Reviews in Control, Journal of Process Control, Engineering Applications of Artificial Intelligence, and Mechatronics*). Extended versions of selected papers will also be published in other Operational Research, Manufacturing Engineering and Industrial Engineering journals.

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