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12th IFAC Symposium
on Information Control Problems
in Manufacturing

Information control:
a complex challenge
for the 21st century

17 / 18 / 19 MAY

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MINISTÈRE DE L'ÉCONOMIE
DES FINANCES ET DE L'INDUSTRIE

Information control: a complex challenge for the 21st century

conference scope

The purpose of the IFAC Symposium on INFORMATION CONTROL PROBLEMS IN MANUFACTURING (INCOM'06) is to offer a forum to present the progress in international research and development work in this field. Special emphasis will be given on the applications of optimization methods as well as automation, information and communication technologies in the **control of the manufacturing plant and the entire supply chain within the e-enterprise**. The symposium will stress the scientific challenges and issues raised by the Intelligent Manufacturing System and Supply Chain paradigms for *optimization* and *agile digital control* of the production systems. The whole product and processes life cycle will be covered, from the design, through the manufacturing and maintenance, to the distribution and service.

scientific topics

- *e-Solutions to Plan and to Design Manufacturing Systems*
- *Facilities Planning and Materials Handling*
- *Inventory Control, Production Planning and Scheduling*
- *Monitoring, Diagnosis and Maintenance of Manufacturing Systems*
- *Web-enabled Manufacturing Control and Wireless Automation*
- *Process Modeling and Information Systems within the Extended Enterprise*
- *Socio-technical and Cognitive Aspects of Automation*
- *Intelligent Manufacturing Systems Modeling and Applications*
- *Distributed Systems and Multi-agents Technologies*
- *Discrete Event Systems Simulation in Manufacturing*
- *Operational Research Applications in CAD/CAM/CAE*

industrial exhibition

Industrial enterprises will play an important role in the symposium. Technical workshops, roundtables discussions, and even publications devoted to industrial contributions will be offered. In addition, an innovative industrial exhibition is planned. It will focus on the cutting edge of information technology and optimization techniques for manufacturing control and industrial management.

This symposium opens a door on a wonderful opportunity to benchmark the latest innovations on Business Process Management, Operation Research Applications, Supply Chain Management Solutions, Intelligent Manufacturing Systems, Information Systems, Technologies for e-Business and e-Manufacturing, Integration Technologies...

**conference
chairs**

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General Scientific Chair

 A. DOLGUI **FR**

 Director of the Division for Industrial Engineering
and Computer Sciences

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12th IFAC Symposium on Information Control Problems in Manufacturing

main sponsor

IFAC International Federation on Automatic Control
TC 5.1 on Manufacturing Plant Control

IFAC co- sponsorships

IFAC TC 1.3 on Discrete Event and Hybrid Systems
IFAC TC 2.4 on Optimal Control
IFAC TC 4.1 on Components and Instruments
IFAC TC 4.2 on Mechatronic Systems
IFAC TC 4.4 on Cost Oriented Automation
IFAC TC 5.2 on Manufacturing Modelling for Management and Control
IFAC TC 5.3 on Enterprise Integration and Networking
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other sponsorships

IFIP WG 5.3 Computer Aided Manufacturing
IFIP WG 5.7 Integration in Production Management
IFIP WG 7.4 Discrete Optimization
SEE Société de l'Electricité, de l'Electronique, et des Technologies
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CNRS GDR MACS Sciences et Techniques de la Production de Biens et de Services

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CALL FOR PAPERS

submission of papers

Deadline for paper submission > **October 1st, 2005**
Submission to special sessions > **November 15, 2005**
Notification of paper acceptance/rejection > **January 6, 2006**
Deadline for final version > **March 1, 2006**

Regular papers (6 pages in IFAC double column format) as well as plenary and survey papers (12 pages in IFAC double column format) will be reviewed by at least two referees. As to regular papers, both academic and industrial oriented communications will be considered. Industrial and scientific contributions will be compiled into several volumes of INCOM06's proceedings. Further submission instructions are available on the website.

preprints and proceedings

Preprints Volumes with all accepted papers will be published before symposium and will be provided for INCOM'06 participants. The final proceedings will be produced after the meeting and will only gather the papers presented at the symposium. The Proceedings are published by Elsevier Ltd as post-conference books with an ISBN and will be kept on sale by the publisher for at least five years.

publication in international journals

The papers included in proceedings will be further examined for possible publication in the IFAC Journals (*Automatica*, *Control Engineering Practice*, *Annual Review in Control*, and *Engineering Applications of Artificial Intelligence*), or in IFAC affiliated journals (e.g. *Real-Time Systems*, *Mechatronics*). The papers not considered for IFAC publications will be examined for publication in some Industrial Engineering, Operations Research and Computer Sciences Journals as *International Journal of Production Economics*, *International Journal of Computer Integrated Manufacturing*, *Journal of Intelligent Manufacturing* and *Journal of Mathematical Modelling and Algorithms*. A complete list of journals associated to the symposium is available on the website.

IFAC Journals, and IFAC affiliated journals have priority access to all contributions presented. If the signing author has not been contacted for further publication within three months of the closing date of the symposium, he and his co-authors are free to submit the paper elsewhere, provided that full acknowledgement is given in any subsequent publication to the original IFAC Proceedings and to the INCOM'06 symposium.

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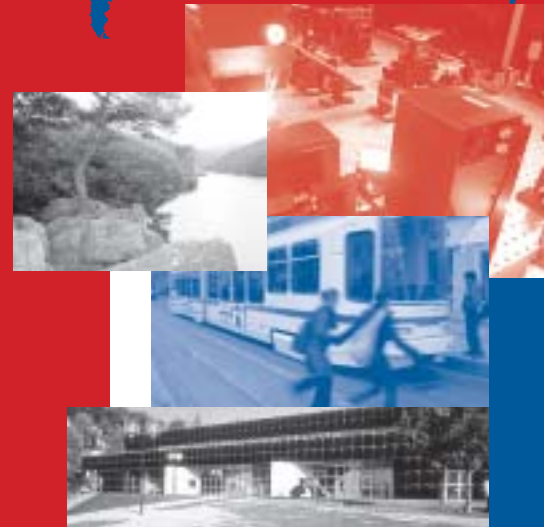
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2006SAINT-ETIENNE
FRANCE

Saint-Etienne, a cultural metropolis at the door of wonderful natural park

The era of coal mining and metal working firmly belongs to Saint-Etienne's past. **The city has clearly evolved towards an economy based on new technologies.** However, the city hasn't forgotten his remarkable industrial history. It is the only city in France selected as historical city for the 19th century. Beyond the Art and Industry National Museum with its unique collection of elaborate weaponry, unusual bicycles and braided ribbons, a complete industrial heritage is there to be visited.

Saint-Etienne does not only have a rich industrial past but an exciting cultural present. Retaining undiminished spirit of daring innovation, the town seems on the verge of becoming the design capital of the world. The design heritage was the impetus behind the creation, in 1998, of the biennial international festival of design, which was an immediate success (150 000 visitors in 2002). With an internationally renowned Modern Art Gallery, Saint-Etienne offers an exceptional cultural center completed with a plethora of cafés, theatres, clubs and restaurants.

Situated at only 60 km from Lyon, Saint-Etienne is at the crossroads of the major French motorways making easily accessible cities like Geneva, Marseilles, Paris and region like the Alps, Drôme and Provence. The region of Saint-Etienne has much to offer. With a town center situated a stone's throw from the Pilat a regional Nature Park, the Forez mountains and the gorges of the River Loire, Saint-Etienne will give you a direct access to wonderful landscape with medieval villages and old stone castles scattered around. In the middle of the regional park, Saint Victor water sport center will give you all the opportunities of sailing, water-skiing or canoeing.



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Festivités : le 190^{ème} anniversaire de l'ENSM.SE

Créée en 1816 sous la restauration, l'Ecole nationale supérieure des mines de Saint-Etienne est l'une des plus anciennes écoles d'ingénieurs en France. Elle est aussi l'une des plus prestigieuses.

S'affirmant comme un établissement d'élite au XIX^{ème} siècle, l'Ecole n'a cessé de se développer et d'évoluer au 20^{ème} siècle, sous les auspices du Ministère de l'Industrie.

Sa stratégie d'innovation s'appuie aujourd'hui sur six centres de recherche : Centre Génie Industriel et Informatique, Centre Sciences, Information et Technologies pour l'Environnement, Centre Sciences des Processus Industriels et Naturels (SPIN), Centre Sciences des Matériaux et des Structures, Centre Ingénierie et Santé, Centre Microélectronique de Provence-Georges Charpak.

En 2006 le symposium IFAC INCOM'06 sera dédié à la célébration des 190 ans de l'ENSM.SE, avec l'organisation de festivités spécifiques à cette occasion.



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