




**12th IFAC Symposium
on Information Control Problems
in Manufacturing**

Information control:
a complex challenge
for the 21st century

A stylized world map in red and white, serving as a background for the main title.

incom 2006

**and associated industrial meetings:
EMM'2006, BPM'2006, JT'2006**

17/18/19 May

FINAL PROGRAM

Saint-Etienne France

www.emse.fr/incom06



International Federation of Automatic Control (IFAC)

_Main sponsor: IFAC Technical Committee 5.1 on Manufacturing Plant Control

_Co-Sponsors:

- TC 1.3 on Discrete Event Dynamic Systems
- TC 2.4 on Optimal Control
- TC 3.3 on Computers and Telematics
- TC 4.1 on Components and Instruments
- TC 4.2 on Mechatronic Systems
- TC 4.4 on Cost Oriented Automation
- TC 4.5 on Human Machine Systems
- TC 5.2 on Manufacturing Modelling for Management and Control
- TC 5.3 on Enterprise Integration and Networking
- TC 5.4 on Large Scale Complex Systems
- TC 9.2 on Social Impact of Automation

International Federation for Information Processing (IFIP)

_IFIP Technical Committees:

- TC 5 on Computer Applications in Technology
- TC 7 on System Modelling and Optimization
 - WG 5.3, Computer Aided Manufacturing
 - WG 5.5, Cooperation Infrastructure for Virtual Enterprises and Electronic Business
 - WG 5.7, Integration in Production Management
 - WG 5.12, Architectures for Enterprise Integration
 - WG 7.4, Discrete Optimization

International Federation of Operational Research Societies (IFORS)

- European Association of Operational Research Societies (EURO)
- French Society of Operational Research (ROADEF)

Institute of Electrical and Electronics Engineers (IEEE)

- IEEE Robotics and Automation Society
- IEEE Industrial Electronics Society
- IEEE Section France

Intelligent Manufacturing Systems (IMS)

- IMS World-Wide
- European IMS-NOE
- IMS Project PROMISE

Other scientific sponsors:

- European Network of Excellence for Innovative Production Machines and Systems (I*PROMS)
- European Network of Excellence for Interoperability Research for Networked Enterprises Applications and Software (INTEROP)
- European Co-ordination action "European Virtual Institute on Collaborative Demand & Supply Network" (CODES.NET)
- International Institute for Innovation, Industrial Engineering and Entrepreneurship (I4e2)
- European INTAS project "Scheduling for modern manufacturing, logistics and supply chains"
- Société de l'Electricité, de l'Electronique, et des Technologies de l'Information et de la Communication (SEE)
- Regional Cluster Gospi, Gestion et Organisation des Systèmes de Production et de l'Innovation
- GDR MACS of the CNRS (French National Council for Scientific Research)
- Club des Enseignants et des chercheurs en Electronique, Electrotechnique et Automatique (EEA)

Bâtir ensemble l'usine intelligente de demain



Avant même son ouverture, le 12^{ème} symposium de l'IFAC INCOM'2006, organisé par l'Ecole nationale supérieure des mines de Saint-Etienne (ENSM.SE), porte tous les signes du succès : 603 articles soumis, 442 communications scientifiques et industrielles programmées, plus de 54 pays contributeurs, 731 experts internationaux impliqués et le soutien de l'ensemble des grandes sociétés savantes internationales !

Les objectifs des organisateurs sont largement atteints et même dépassés puisque INCOM s'annonce comme une réussite sans précédent dans l'histoire de l'IFAC. L'autre ambition de l'ENSM.SE est de permettre également de dresser un pont entre la recherche et l'industrie. Ainsi, pour la première fois, trois colloques industriels sont associés à INCOM.

Le pari de l'Ecole des mines de réunir scientifiques et industriels pour bâtir « l'usine intelligente de demain » est donc en voie d'accomplissement. Un concept sur lequel le Centre Génie industriel et informatique de l'ENSM.SE travaille depuis plusieurs années en développant des programmes de recherche dans les domaines de la gestion industrielle, de l'organisation et l'optimisation des systèmes industriels, des réseaux-information-multimédia et des systèmes multi-agents.

A tous - scientifiques, industriels - je souhaite que INCOM 2006 offre l'opportunité d'initier des relations fructueuses et d'ambitieux projets innovants !

Robert GERMINET
Directeur
Ecole nationale supérieure des mines
de Saint-Etienne

Building together tomorrow's intelligent factory

On the verge of its opening, the 12th IFAC symposium on Information Control Problems in Manufacturing, organized by the Ecole nationale supérieure des mines de Saint-Etienne (ENSM.SE), is already likely to be very successful: 603 articles proposed, 442 industrial and scientific communications scheduled, more than 54 contributor countries, 731 international experts involved and the support of the whole international scientific community. The organizers have already reached their goals and are beyond them since INCOM looks like an unprecedented promising event in the history of IFAC.

The other ambition of the ENSM.SE is to build a bridge between research and industry: consequently three industrial seminars are organized along with INCOM. The Ecole des Mines' objective to bring together scientists and industrialists to build "tomorrow's intelligent factory" is currently on its way. The Industrial Engineering and Computer Science Division of the ENSM.SE has been working on this concept for some years by developing research programs in the field of industrial management, industrial systems modelling and optimisation, information-multimedia and multi-agent systems.

May the INCOM 2006 offer all of you – scientists and industrialists – the opportunity to start fruitful relationships as well as ambitious and innovative projects!

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INSPIRING INNOVATION / INNOVANTE PAR TRADITION



Education and research: the two pillars of the success of ENSM.SE.

Mission statement: respond to needs of enterprises by developing high level specialists ready to work effectively in the framework of globalization. Spirit of innovation, entrepreneurial, interdisciplinary, a high level of technical competences, flexibility and courage are the ingredients which make up our students. Allied with best universities and institutions in the Americas, Asia and Europe, ENSM.SE finds itself poised to take on new experiences, domains and challenges.

Created by Royal decree on the 2nd of August 1816, ENSM.SE quickly joined the highly selective group of "Grandes Ecoles" (a sort of Ivy League School). ENSM.SE is one of the oldest schools of this group, with Ecole polytechnique, Ecole des Mines de Paris, Ecole des Ponts et Chaussées, Ecole centrale de Paris. The School produces outstanding industrial managers. It is amongst the top 10 Graduate Engineering School (Institutes of Technology) in France.

ENSM.SE: reputed to be one of the major applied research institutions in France.

Working in close links with leading French and international firms, the School is considered as one of the major scientific centers and a crucial hub of industrial research in France and in Europe.

The School is structured around six research divisions: Industrial Engineering and Computer Sciences, Process Engineering, Environmental Engineering, Materials Science, Microelectronics Engineering, and Engineering and Health. Because research is fundamentally linked to the raison d'être of the school, it is at the heart of the School's activities. Publications, industrial contracts as well as the recognition of our expertise created our reputation.

They have left their mark on the history of school:

Benoît Fourneyron (1802 - 1867), the inventor of the hydraulic turbine

Jean-Baptiste Boussingault (1802 - 1887), the father of modern agronomics

Henri Fayol (1841 - 1925), the father of Fayol's theory of management

Georges Villiers (1899 - 1966), the founder of the CNPF (Confederation of French Industry)

The laying of the first French rail route (Saint-Etienne to Andrézieux) which opened in 1825 is also credited to the School.

Industrial Engineering and Computer Sciences Division (G2I Division)

The Industrial Engineering and Computer Sciences Division (G2I Division) is the former Division of Computer Sciences created in 1970. The G2I Division develops advanced methods for analysis and optimization of complex systems, in particular manufacturing. There are four main research departments in G2I: ***Scientific Methods for Industrial Management*** (MSGI), ***Organization and Modelling of the Industrials Systems*** (OMSI), ***Networks, Information, Multi-media*** (RIM), and ***Multi-Agent Systems*** (SMA).

Common threads running through all of these departments are complex interactions within organizations or networks, sophisticated approaches for management and control of systems, and utilization of state of the art computer science and operational research techniques. The Division is composed of 21 professors, 25 Ph.D. candidates and 4 full time employees. G2I is both research and teaching institution, with graduate and post graduate students.

G2I is known in both French and international scientific communities. The Division has numerous world wide projects. For example, participation in the projects: *European Virtual Institute on Cooperative Demand and Supply Networks* (CODESNET), *Scheduling in Production Systems and Supply Chain* (INTAS), *Inter-Organizational Workflow Management* (E-ALLIANCE), *Cooperation and Information Sharing in Supply Chain* (COPILOTE), *Collaborative Design in Mechanical and Industrial Engineering* (COSMOCE), *Internet-Based Intelligent Tool to Support Collaborative Argumentation-Based Learning* (SCALE), etc. In addition, G2I has privileged relationships with the likes of ST Microelectronics, France Telecom/R&D, Schneider Electric and Eurocopter.

Industrial Engineering and Computer Sciences Division (G2I Division)

is composed of 21 professors, 25 Ph.D. candidates and 4 full time employees.

35 articles in prestigious scientific journals
75 conference presentations
200 000 euros of industrial contracts
8 000 teaching hours
constitute the "steady state" annual performance of G2I.



We invite you to visit our site <http://www.emse.fr/g2i/>. Please feel free to contact us for any collaborative projects you have in mind.

CHAIRS AND COMMITTEES

Conference chairs:

Honorary President: **Robert GERMINET**
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Université Henri Poincaré, France

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IPC Industrial Co-Chair: **Timothy L. JOHNSON**
General Electric, USA

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Germany

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ENSM.SE, France

Industrial Co-Chair: **Robert RONCHI**
ST Microelectronics, France

Members of the National Organizing Committee:

Organized at the Ecole Nationale Supérieure des Mines de Saint Etienne, by the Industrial Engineering and Computer Sciences Division in collaboration with the Microelectronics Division and the Engineering and Health Division.

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OVERVIEW

	MAY 17th	MAY 18th	MAY 18th	MAY 18th	MAY 19th	MAY 19th	MAY 19th
	INCOM'2006	INCOM'2006	BPM'2006	EMM'2006	INCOM'2006	JT'2006	EMM'2006
08h00 -				Welcome			
09h00 -	Welcome & Refreshments		Welcome	Introduction	Keynote Speech	Welcome	Session #1
10h00 -	Opening Ceremony	Keynote Speech	Session #1	Session #1	Keynote Speech	Session #1	Session #2
11h00 -	Oral Sessions [WED-1]	Coffee Break	Roundtable		Coffee Break		
12h00 -		Poster & Oral Sessions [THU-1]	Coffee Break	Coffee Break	Poster & Oral Sessions [FRI-1]	Coffee Break	Coffee Break
13h00 -	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch	Lunch
14h00 -	Oral Sessions [WED-2]	Posters/Exhib	Exhib Visit	Exhib Visit	Posters/Exhib	Exhib Visit	Exhib Visit
15h00 -		Keynote Speech	Session #3	Session #3	Oral Sessions [FRI-2]	Session #3	Session #4
16h00 -	Coffee Break	Keynote Speech	Coffee Break	Session #3		Session #3	
17h00 -	Keynote Speech	Coffee Break	Session #4	Coffee Break	Coffee Break	Session #4	Roundtable
18h00 -	Keynote Speech	Oral Sessions [THU-2]	Exhib Visit	Roundtable	Closing Ceremony		
	BANQUET	CONCERT AT THE ESPLANADE					

INCOM'2006 And ASSOCIATED INDUSTRIAL MEETINGS

SOCIAL EVENTS AND CULTURAL PROGRAM

We hope INCOM'2006 will be not only a very productive trip, but also the occasion of a very pleasant moment for you.

Please note the **SOCIAL EVENTS** at INCOM:

▶ **May 16 th, 2006 (18H00):**

Welcome cocktail, offered to all participants by the "Conseil général de la Loire".
Préfecture de St Etienne, Town Center, 2 rue Charles de Gaulle, Salles des Fêtes (2nd Floor).

▶ **May 17th, 2006 (20H00):**

Symposium Gala, Montrond-les-Bains. Collective transport.

▶ **May 18th, 2006:**



Concert Piano, offered to the symposium participants to celebrate the 190th anniversary of Ecole des mines de Saint Etienne: Goldberg Variations of Johann Sebastian BACH by Evgeni Koroliou.

▶ **May 19th, 2006:**

Prize ceremony during the closing plenary session.

Please note the changes in the **CULTURAL PROGRAM** at INCOM:

Saint-Etienne – Mixing Culture and Nature

This program also open to all even if they are not registered for INCOM

▶ **May 18th, 2006 (afternoon)**

TOUR 1

- Enjoy a city tour called « Saint-Etienne, homeland of braids & ribbons »: discover the textile industry, established in the XVIth century and its interplay with the development of the city of Saint-Etienne.
- Visit the Art & Industry Museum: with its bricked vaults hosting the largest bicycle collection in France, magnificent weaving looms and an awesome collection of braids & ribbons. The museum is quite broad and eclectic, as its name implies, with exhibitions on the manufacture of weapons as well, and covering the Renaissance to the golden age of Manufrance (a famous catalogue company similar to Sears).

▶ **May 19th, 2006 (for this visit please contact directly the tourist information center)**

TOUR 2

Visit the Modern Art Museum: arguably the best collection of Contemporary Art outside of Centre Pompidou in Paris. This Museum owns one of the most extensive European collections of Modern & Contemporary Art. With 4 000 m² of exhibition in which to admire the twentieth century work of the likes of Léger, Kandinsky, Picasso, Soulages, Warhol,... This museum also is becoming well known locally for its student courses in creativity and innovative restaurant.
Again there will be a City Tour with commentary on some of the main attractions & historical venues of Saint-Etienne.

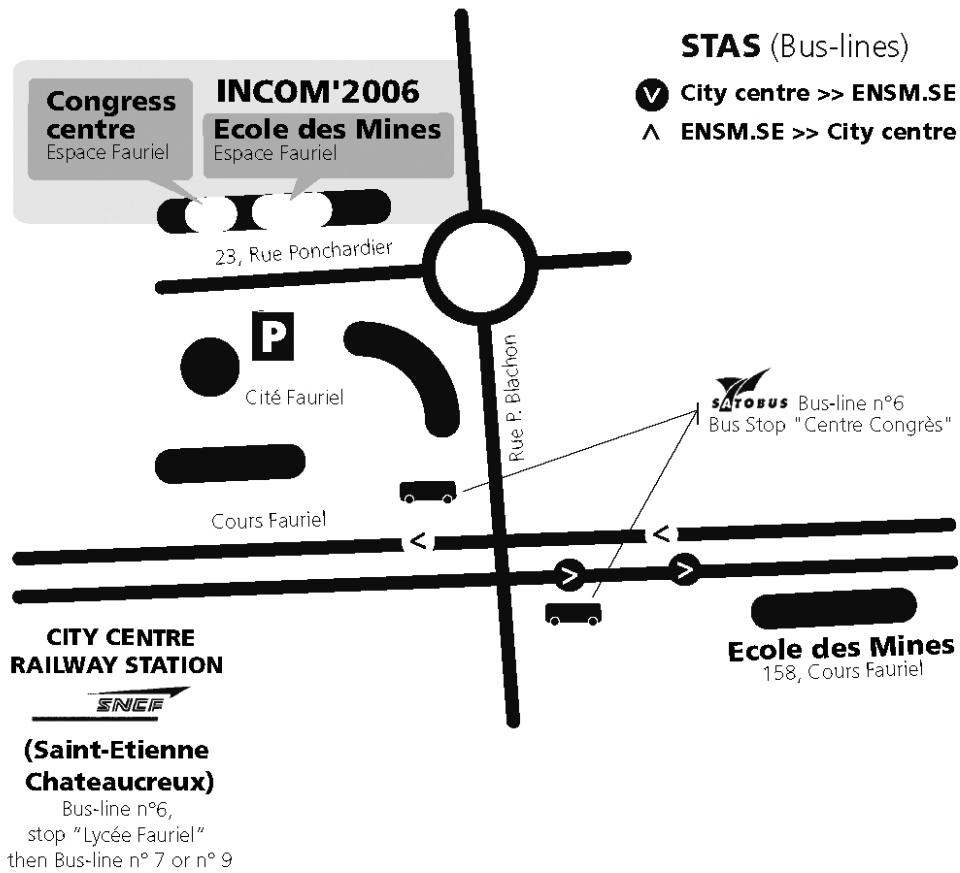
▶ **May 20th, 2006 (for this visit please contact directly the tourist information center)**

TOUR 3

Visit of the medieval village of Saint-Victor sur Loire overlooking the scenic River Loire Gorges. Located within a wilderness protected area (listed location), the village is a maze of picturesque alleys with ancient houses (ancient presbytery, an old manufacturing site for soft furnishings, a cross from the XVIIIth century). Come discover the secrets of its Roman Church.

Lunch in a typical restaurant of the region in the town of Saint-Victor sur Loire...

MAP OF THE SYMPOSIUM VENUE



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TAXI

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SAINT-ETIENNE TOURIST INFORMATION

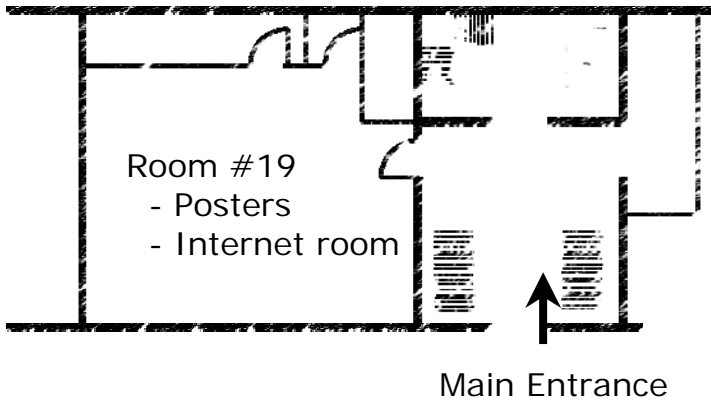
16 avenue de la Libération
Phone: +33 (0)8 92 70 05 42
Email: information@tourisme-st-etienne.com
<http://www.tourisme-st-etienne.com/>

BUS TO LYON-SAINT EXUPERY AIRPORT

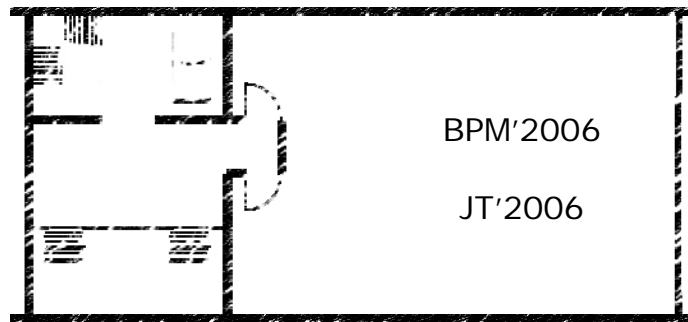
Satobus (Chazot Autocars)
Phone: +33 (0)4 72 68 17
Email: webmaster@satobus.com
<http://www.satobus.com/welcome.html>

MAP OF "ECOLE DES MINES"

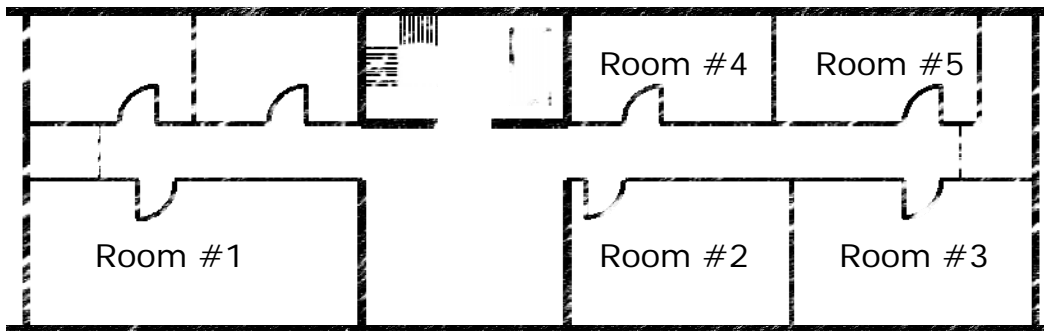
« Ecole des Mines » Floor #0.



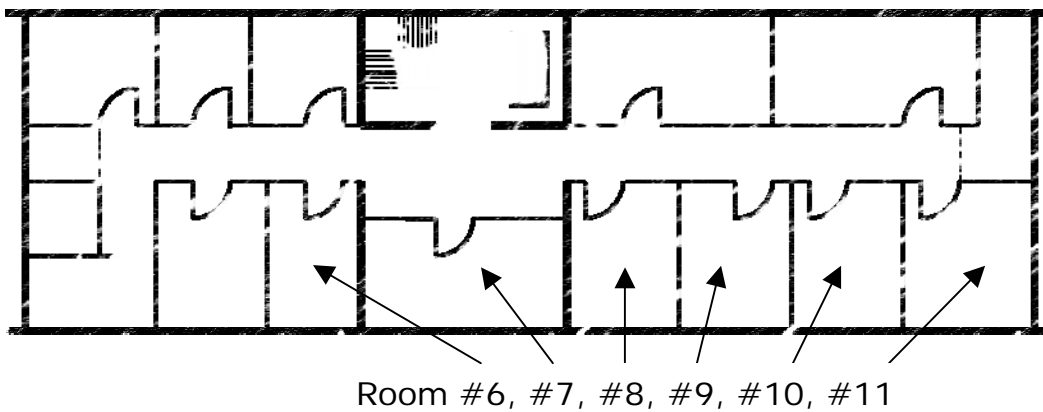
« Ecole des Mines » Mezzanine



« Ecole des Mines » Floor #1

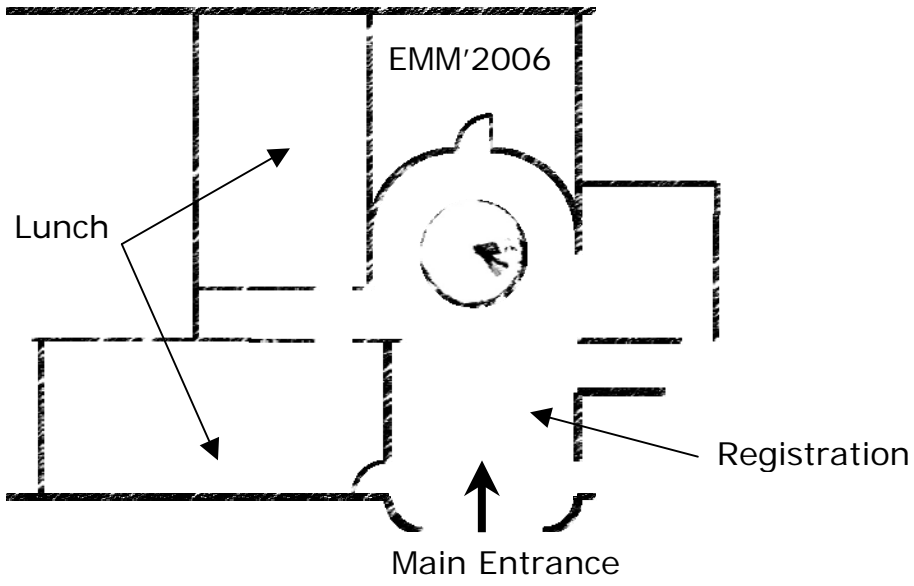


« Ecole des Mines » Floor #2

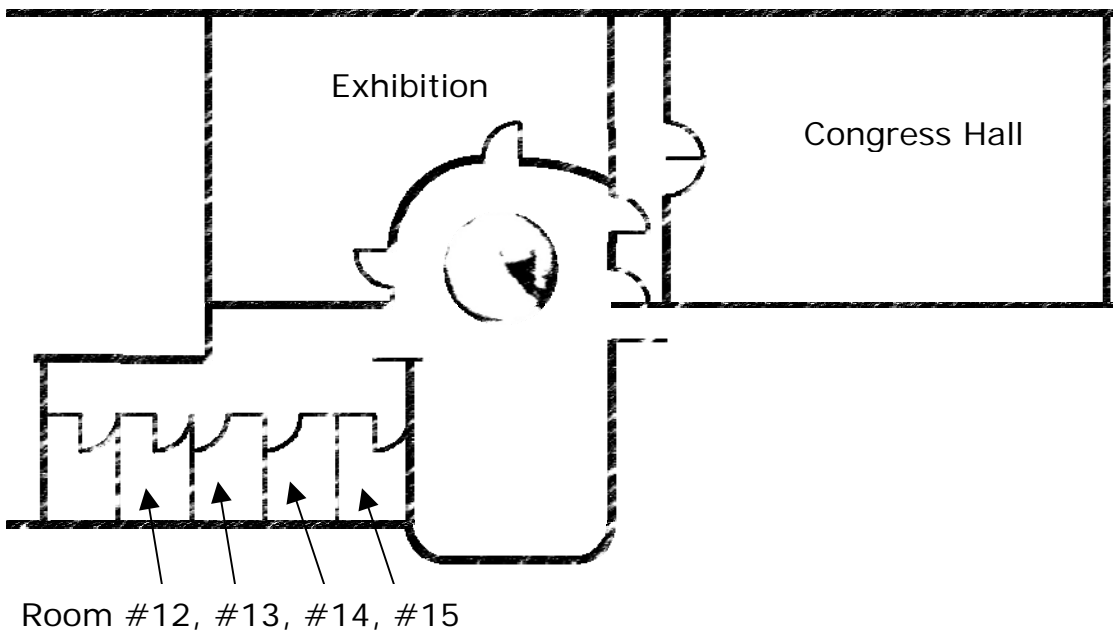


MAP OF "CONGRESS CENTRE"

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« Congress Centre » Floor #1



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▶ IT Issues In Manufacturing Plant Control	
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<i>Organizers: Faure J.M., Frey G., Papadopoulos Y. associated with IFAC TC 5.1</i>	
▶ New Trends In Fault-Tree Analysis Of Automated Systems	
▶ Improving DES Controllers Dependability Using Formal Specification And Verification	
▶ Improving DES Controllers Dependability Using Supervisory Control Theory	
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▶ Discrete Event Systems And Applications	
▶ Petri Nets And The E-Enterprise	
<i>Organizers: Berthomieu B., Moreaux P., Silva M.</i>	
Holonic And Multi-Agent Technologies For Industrial Systems	34
<i>Organizers: Valckenaers P., Marik V., Oliveira E.C., Boissier O. associated with IFAC TC 5.1, IFAC TC 5.2, IFAC TC 5.4, IMS Noe, I*PROMS Noe</i>	
▶ Holonic Manufacturing Systems	
▶ Multi-Agent Systems - I	
▶ Multi-Agent Systems - II	
▶ Multi-Agent Systems - III	
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<i>Organizers: Harrison R., Martinez-Lastra J.L., Colombo A.W.</i>	
▶ Reconfigurable And Agile Manufacturing Systems	
▶ Reconfigurable Manufacturing System Automation	
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<i>Organizers: Panetto H., Whitman L. associated with IFAC TC 5.3, INTEROP Noe, ECI GDR MACS</i>	
▶ Enterprise Systems Integration And Interoperability	
▶ Reference Models And Architectures For Collaborative Networked Organizations	
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▶ Information Management In Enterprise	
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▶ Ontology-Based Information Management For Industrial Applications	
<i>Organizers: Beaune P., Sandkuhl K., Smirnov A.</i>	
▶ Industrial Applications	
Integrated Design Of Product And Manufacturing Process	37
<i>Organizers: Van Houten F., Fadel G., Bernard A., Vajna S. associated with IS3C GDR MACS</i>	
▶ Information Systems For Product And Process Design	
▶ Collaborative Engineering Tools And Methods	
▶ Decision Making For Better Sustainable Products And Processes	
▶ Integrated Design And Manufacturing Processes	
▶ Total Integration Of CAX Processes	
<i>Organizers: Xu X., Klemm P., Hascoet J.Y., Newman S.</i>	
▶ PLM And Information Tracking Using Smart Embedded Systems	
<i>Organizers: Kiritsis D., McFarlane D., Thoben K.-D. associated with PROMISE Project</i>	

Intelligent And Collaborative Maintenance In Manufacturing	38
<i>Organizers: Lee J., Adjallah K.H., Zerhouni N. associated with IMS NSF Research Center, MACOD GDR MACS</i>	
▶ Monitoring Strategies For Intelligent Predictive Maintenance	
▶ Collaboration And Optimization For Maintenance Decision Making	
▶ Reliability And Safety Of Industrial Systems	
<i>Organizers: Zaikin O., Kulba V., Pavlov B.</i>	
Advanced Manufacturing Systems	39
▶ Innovative Production Machines And Systems	
<i>Organizers: Eldukhri E., Grabot B., Pham D., Xie X. associated with I*PROMS Noe</i>	
▶ Flexible Manufacturing Systems	
<i>Organizers: Castagna P., Moukrim A., Gharbi A. associated with ORT GDR MACS</i>	
▶ New Trends And Challenges In Mechatronics	
<i>Organizers: Toumi K.Y., Kaynak O., Lutz P. associated with Mechatronics GDR MACS</i>	
Models For Competence And Knowledge Management	40
<i>Organizers: Karagianis D., Mummolo G., Grabot B., Renaud J. associated with PAKM, C2EI GDR MACS</i>	
▶ Modelling And Simulation Of Human Performance	
▶ Competence Modelling For Decision Support Systems	
▶ Knowledge Modelling For Value Chain Management	
Integrated Engineering In Industry	41
▶ Mixed Reality A Tool For Cost Effective Collaborative Engineering	
<i>Organizers: Bruns F. W., Erbe H.-H.</i>	
▶ Integrated Product And Process Design For Market Driven Supply Chains: Spotlight On The Automotive Industry	
<i>Organizers: Miemczyk J. associated with ILIPT Project</i>	
▶ Automotive Automation Issues	
Design Of Production Systems	41
<i>Organizers: Askin R.G., Dolgui A., Proth J.-M., Scholl A. associated with IFAC TC 5.1, CSP GDR MACS</i>	
▶ Stochastic Models Of Production Systems I	
▶ Stochastic Models Of Production Systems II	
▶ Line Balancing And Layout	
▶ Product Design And Resource Planning	
▶ Production System Design Methodology	
▶ Production Control Systems	
Scheduling For Modern Manufacturing, Logistics And Supply Chains	43
<i>Organizers: Finke G., Strusevich V., Werner F. associated with INTAS Project 03-51-5501</i>	
▶ Production Planning And Scheduling	
▶ Flow Shop Scheduling	
▶ Job Shop Scheduling	
▶ Cyclic Scheduling	
<i>Organizers: Dupas R., Crama Y., Goncalves G. associated with Bermudes GDR MACS</i>	
▶ Scheduling Heuristics	
▶ Theoretical Aspects Of Scheduling	
Supply Networks Design And Management	44
<i>Organizers: Villa A., O'Brien C., Burlat P. associated with CODESNET coordination action</i>	
▶ Flexible And Collaborative Production	
▶ Extended Enterprise	
▶ Supply Chain Performance Measurement	
▶ Virtual Organizations	
▶ Supply Networks	
▶ OR Methods For Supply Chain Design And Management	
Production And Logistics	46
▶ Forecasting In Logistics Of Production And Inventory	
<i>Organizers: Fildes R., Pashkevich M.</i>	
▶ Dynamic Lot Sizing	
<i>Organizers: Brahimi N., Dauzère-Pérès S., Najid N.</i>	
▶ Reverse Logistics	
<i>Organizers: Riopel D., Lambert S.</i>	

Production Planning And Inventory Control	47
<i>Organizers: Frein Y., Hennet J.C.</i>	
▶ Production Planning Under Uncertainties	
▶ Advances In Inventory Policies	
▶ Information Sharing And Coordination	
Transportation And Logistics	47
<i>Organizers: Schöbel A., El Moudni A.</i>	
▶ Routing Problems	
▶ Traffic Control	
▶ Timetabling In Public Transportation	
▶ OR-Case Studies And Data Mining	
Location And Dynamic Pricing	48
<i>Organizers: Plastria F., Kolokolov A.</i>	
▶ Locational Analysis	
▶ Revenue Management And Dynamic Pricing	
<i>Organizers: Levin Y., McGill J., Nediak M.</i>	
Novel Models And Approaches For Semiconductor Manufacturing	49
<i>Organizers: Dauzère-Pérès S., Sarin S.</i>	
▶ Round Table With Industrials And Academics On "Gap Between Theory And Practice"	
▶ Automated Material Handling Systems	
▶ Industrial Session	
▶ Production Planning And Control	
▶ Scheduling And Dispatching	
Special Session On Education and Training	50
<i>Organizers: Gomes L., Szafnicki K., Cardeira C.</i>	
▶ E-Learning And Innovative Pedagogies	
Metaheuristics And Soft Computing In Industrial Applications	50
<i>Organizers: Jaszkievicz A., Siarry P., Taillard E., Talbi El-G., Teghem J. associated with EU/ME, META GDR MACS</i>	
▶ Metaheuristics For Combinatorial Optimization	
▶ Fuzzy Logic Or Metaheuristics In Industrial Applications	
▶ Intelligent Systems And Intelligent Information Processing	
Simulation In Industrial Engineering	51
<i>Organizers: Chabrol M., L'Anton A. associated with MMS GDR MACS</i>	
▶ Simulation For Enterprise Engineering	
<i>Organizers: Grimaud F., Merkurjev Y. associated with MISS Latvian Center</i>	
▶ Simulation In Logistics	
▶ Simulation And Optimization	
Special Event: Innovative Engineering Techniques In Healthcare Delivery	52
<i>Organizers: Dexter F., Jiang Z., Marcon E., Xie X.</i>	
▶ Operation Management - I	
▶ Work Organization Optimization	
▶ Process Engineering And Performance Evaluation	
▶ Operation Management - II	
▶ Workflow In Health Care	
Industrial Case Studies	53
▶ Process Modelling And Simulation	

The success of the 12th edition of INCOM wouldn't have been possible without a bringing together of the international scientific community. We sincerely thank all the talented organizers of Special Tracks and Sessions at INCOM'2006.

Your motivation, time and effort given to INCOM shows the vitality of our community.

WEDNESDAY, MAY 17th

INCOM'2006

08h00 -

Welcome
&
Refreshments

09h00 -

Opening
Ceremony

10h00 -

11h00 -

Oral
Sessions
[WED-1]

12h00 -

13h00 -

Lunch

14h00 -

Oral
Sessions
[WED-2]

15h00 -

16h00 -

Coffee Break

Keynote
Speech

17h00 -

Keynote
Speech

18h00 -

OPENING CEREMONY

09H30 – 10H30 Congress Hall

SESSIONS

10H30 – 12H30 15 parallel sessions (Room #1 to #15)

14H00 – 16H00 15 parallel sessions (Room #1 to #15)

KEYNOTE SPEECHES

Chair: *Luis M. CAMARINHA-MATOS*
Universidade Nova de Lisboa, Portugal



16H30 – 17H15 Congress Hall

ROBOTICS, AGENTS, AND E-WORK: THE EMERGING FUTURE OF PRODUCTION

Pr. Shimon Y. Nof, Purdue University, USA.

Shimon Y. Nof is the Director of the NSF-industry supported PRISM Center (Production, Robotics and Integration Software for Manufacturing & Management), Fellow of IIE, Secretary General of International Foundation for Production Research (IFPR), Chair of IFAC Coordinating Committee "Manufacturing and Logistics Systems". The authors of several books, for example: Handbook of Industrial Robotics (Wiley, 1999), Industrial Assembly (Chapman & Hall, 1997), Member of Editorial Board of numerous International Journals.



17H15 – 18H00 Congress Hall

INTEROPERABLE ENTERPRISE SYSTEMS: ARCHITECTURES AND METHODS
Pr. François B. Vernadat, European Commission, Luxemburg.

François B. Vernadat is an administrator at the European Commission in the unit for Interoperability, Architecture and Methods of DG DIGIT. He has researched in enterprise modeling and integration as well as information systems for over 20 years in Canada and France. He is the author of 7 books including Enterprise Modeling and Integration: Principles and Applications (Chapman & Hall, 1996), and an associate editor of Int. J. of Production Research, Int. J. of Computer Integrated Manufacturing and Computers in Industry.

BANQUET

20H00 Symposium Gala, Montrond-les-Bains.
Collective transport.

WEDNESDAY, MAY 17th

[ROOM #01]	Track "Integrated Design of Product and Manufacturing Process" Session " Information Systems For Product And Process Design " 37 Chairs: <i>Bernard A., Bigand M.</i>	37
[ROOM #02]	Track "Advanced Manufacturing Systems" Session " Innovative Production Machines And Systems " 39 Chairs: <i>Eldukhri E., Ferrarini L.</i>	39
[ROOM #03]	Track "Models for Competence and Knowledge Management" Session " Modelling And Simulation Of Human Performance " 40 Chairs: <i>Grabot B., Mummolo G.</i>	40
[ROOM #04]	Track "Novel Models and Approaches for Semiconductor Manufacturing" Round Table On " Gap Between Theory And Practice " 49 Chairs: <i>Dauzère-Pérès S., Ronchi R.</i>	49
[ROOM #05]	Special Event: Innovative Engineering Techniques in Healthcare Delivery Session " Operation Management – I " 52 Chairs: <i>Xie X., Xiao Y.</i>	52
[ROOM #06]	Track "Scheduling for Modern Manufacturing, Logistics and Supply Chains" Session " Production Planning And Scheduling " 43 Chairs: <i>Werner F., Kolokolov A.</i>	43
[ROOM #07]	Track "Supply Networks Design and Management" Session " Flexible And Collaborative Production " 44 Chairs: <i>Monostori L., Heavey C.</i>	44
[ROOM #08]	Track "Production and Logistics" Session " Forecasting In Logistics Of Production And Inventory " 46 Chairs: <i>Fildes R., Pashkevich M.</i>	46
[ROOM #09]	Track "Transportation and Logistics" Session " Traffic Control " 47 Chairs: <i>El Moudni A., Dobrowolski G.</i>	47
[ROOM #10]	Track "Metaheuristics and Soft Computing in Industrial Applications" Session " Metaheuristics For Combinatorial Optimization " 50 Chairs: <i>Siarry P., Teghem J.</i>	50
[ROOM #11]	Track "Design of Production Systems" Session " Stochastic Models Of Production Systems I " 41 Chairs: <i>Gershwin S., Di Mascolo M.</i>	41
[ROOM #12]	Track "Real Time and Networked Embedded Systems" Session " Manufacturing Plant Control " 31 Chairs: <i>Martinez Lastra J. L., Wollschlaeger M.</i>	31
[ROOM #13]	Track "Dependable Control of Discrete-Event Systems" Session " New Trends In Fault-Tree Analysis Of Automated Systems " 32 Chairs: <i>Frey G., Vogel-Heuser B.</i>	32
[ROOM #14]	Track "Holonc and Multi-agent Technologies for Industrial Systems " Session " Holonc Manufacturing Systems " 34 Chairs: <i>Valckenaers P., Saint Germain B.</i>	34
[ROOM #15]	Track "Networked Enterprise Control System Integration and Interoperability" Session " Enterprise Systems Integration And Interoperability " 35 Chairs: <i>Whitman L., Panetto H.</i>	35

[ROOM #01]	Track "Integrated Design of Product and Manufacturing Process" Session " Collaborative Engineering Tools And Methods " 37 Chairs: <i>Bernard A., Boujut J.F.</i>
[ROOM #02]	Track "Advanced Manufacturing Systems" Session " Flexible Manufacturing Systems " 39 Chairs: <i>Castagna P., Gharbi A.</i>
[ROOM #03]	Track "Models for Competence and Knowledge Management" Session " Competence Modelling For Decision Support Systems " 40 Chairs: <i>Zuelch G., Bonjour E.</i>
[ROOM #04]	Track "Novel Models and Approaches for Semiconductor Manufacturing" Session " Automated Material Handling Systems " 49 Chairs: <i>Sturm R., Montoya-Torres J.R.</i>
[ROOM #05]	Special Event: Innovative Engineering Techniques in Healthcare Delivery" Session " Work Organization Optimization " 52 Chairs: <i>Marcon E., Meskens N.</i>
[ROOM #06]	Track "Scheduling for Modern Manufacturing, Logistics and Supply Chains" Session " Flow Shop Scheduling " 43 Chairs: <i>Strusevich V., Oulamara A.</i>
[ROOM #07]	Track "Supply Networks Design and Management" Session " Extended Enterprise " 45 Chairs: <i>Burlat P., Antonelli D.</i>
[ROOM #08]	Track "Production and Logistics" Session " Dynamic Lot Sizing " 46 Chairs: <i>Brahimi N., Dauzère-Pérès S.</i>
[ROOM #09]	Track "Transportation and Logistics" Session " Routing Problems " 48 Chairs: <i>Proth J.M., Delorme X.</i>
[ROOM #10]	Track "Metaheuristics and Soft Computing in Industrial Applications" Session " Fuzzy Logic Or Metaheuristics In Industrial Applications " 51 Chairs: <i>Amirat Y., Djouani K.</i>
[ROOM #11]	Track "Design of Production Systems" Session " Stochastic Models Of Production Systems - II " 42 Chairs: <i>Proth J.M., Sauer N.</i>
[ROOM #12]	Track "Real Time and Networked Embedded Systems" Session " Industrial Communication Protocols " 31 Chairs: <i>Pereira C. E., Thomesse J.-P.</i>
[ROOM #13]	Track "Dependable Control of Discrete-Event Systems" Session " Improving DES Cont. Dependability Using Formal Spec. & Verif. " 33 Chairs: <i>Johnson T., Papadopoulos Y.</i>
[ROOM #14]	Track "Holonc and Multi-agent Technologies for Industrial Systems" Session " Multi-Agent Systems - I " 34 Chairs: <i>Boissier O., Thomas A.</i>
[ROOM #15]	Track "Networked Enterprise Control System Integration and Interoperability" Session " Reference Mod. & Arch. For Collab. Networked Organizations " 36 Chairs: <i>Molina A., Chen D.</i>

THURSDAY, MAY 18th

INCOM'2006

KEYNOTE SPEECHES

08h00 -

09h00 -

Keynote
Speech

10h00 -

Coffee Break

11h00 -

Poster
&
Oral
Sessions
[THU-1]

12h00 -

13h00 -

Lunch

14h00 -

Posters/Exhib

15h00 -

Keynote
Speech

16h00 -

Coffee Break

17h00 -

Oral
Sessions
[THU-2]

18h00 -

Chair: Gérard MOREL
Université Henri Poincaré, France



09H15 – 10H00 Congress Hall

DISTRIBUTED REAL-TIME EMBEDDED SYSTEMS: RECENT ADVANCES, FUTURE TRENDS AND THEIR IMPACT ON MANUFACTURING PLANT

Pr. Carlos Eduardo Pereira, Federal University of Rio Grande do Sul, Brazil.

Carlos E. Pereira is an Associate Professor of the Electrical Engineering Department at the Federal University of Rio Grande do Sul in Brazil, where he has served as Dean of the EE Department from 96 to 98 and Coordinator for the Graduate Research Program from 2002 to 2004. His research focuses on methodologies and tool support for the development of distributed embedded real-time systems. Carlos E. Pereira is the Chair of the IFAC Technical Committee on Manufacturing Plant Control (TC 5.1). He is an Associate Editor of the journal "Control Engineering Practice".

Chair: Shimon Y. NOF
Purdue University, USA



14H30 – 15H15 Congress Hall

HOW DO QUANTITY AND QUALITY REALLY INTERACT? PRECISE MODELS INSTEAD OF STRONG OPINIONS

Dr. Stanley B. Gershwin, Massachusetts Institute of Technology, USA.

Stanley B. Gershwin is a Senior Research Scientist at the MIT Department of Mechanical Engineering. Dr. Gershwin is the author of Manufacturing Systems Engineering. He has been an Associate Editor of several international journals, including the International Journal of Production Research, Operations Research, IEEE Transactions on Automatic Control. He is a Fellow of the IEEE.



15H15 – 16H00 Congress Hall

SCHEDULING: NEW TRENDS IN INDUSTRIAL ENVIRONMENT

Dr. Jean-Marie Proth, INRIA, Consultant, France.

Jean-Marie Proth received a Ph.D. in Computer Sciences from the University of Nancy (France) and a Ph.D. in Management from the University of Paris 9-Dauphine. He was Professor at the European Institute for Advanced Studies in Management (Brussels) and Research Director at INRIA, the French National Institute for Research in Computer Sciences and Automation. His research activities include Petri nets, scheduling, operation research and supply chains. He authored and co-authored 17 books and more than 400 papers on these subjects in France and the U.S. He also conducted 45 contracts (Industry, Defence and C.E.E).

ORAL AND POSTER SESSIONS

10H30 – 12H30	16 parallel sessions (Room #1 to #15 and #19)
14H00 – 14H30	Poster session (Room #19)
16H30 – 18H30	15 parallel sessions (Room #1 to #15)

ASSOCIATED INDUSTRIAL MEETINGS

08H30 – 18H00	BPM'2006 (Room #16)
08H00 – 18H00	EMM'2006 (Room #17)
10H00 – 18H00	Exhibition Visit (Room #18)

THURSDAY, MAY 18th

[ROOM #01]	Track "Integrated Design of Product and Manufacturing Process" Session " Decision Making For Better Sustainable Products And Processes " 37 Chairs: Kusiak A., Glardon R.	37
[ROOM #02]	Track "Advanced Manufacturing Systems" Session " New Trends And Challenges In Mechatronics " 40 Chairs: Lutz P., Kaynak O.	40
[ROOM #03]	Track "Models for Competence and Knowledge Management" Session " Knowledge Modelling For Value Chain Management " 40 Chairs: Boucher X., Weston R.	40
[ROOM #04]	Track "Novel Models and Approaches for Semiconductor Manufacturing" Session " Industrial Session " 49 Chairs: Vialletelle P., Glüer D.	49
[ROOM #05]	Special Event "Innovative Engineering Techniques in Healthcare Delivery" Session " Process Engineering And Performance Evaluation " 52 Chairs: Dexter F., Ladet P.	52
[ROOM #06]	Track "Scheduling for Modern Manufacturing, Logistics and Supply Chains" Session " Job Shop Scheduling " 43 Chairs: Finke G., Gordon V.	43
[ROOM #07]	Track "Supply Networks Design and Management" Session " Supply Chain Performance Measurement " 45 Chairs: Camarinha-Matos L.M., Pingaud H.	45
[ROOM #08]	Track "Production and Logistics" Session " Reverse Logistics " 46 Chairs: Riopel D., Wadhwa S.	46
[ROOM #09]	Track "Transportation and Logistics" Session " Timetabling In Public Transportation " 48 Chairs: Boimond J.L., El Moudni A.	48
[ROOM #10]	Track "Metaheuristics and Soft Computing in Industrial Applications" Session " Intelligent Systems And Intelligent Information Processing " 51 Chairs: Madani K., Mellouk A.	51
[ROOM #11]	Track "Design of Production Systems" Session " Line Balancing And Layout " 42 Chairs: Askin R.G., Bukchin Y.	42
[ROOM #12]	Track "Real Time and Networked Embedded Systems" Session " IT Issues In Manufacturing Plant Control " 31 Chairs: Diedrich C., Morel G.	31
[ROOM #13]	Track "Dependable Control of Discrete-Event Systems" Session " Improving DES Cont. Dependability Using Super. Control Theory " 33 Chairs: Faure J.-M., Niel E.	33
[ROOM #14]	Track "Holonc and Multi-agent Technologies for Industrial Systems " Session " Multi-Agent Systems - II " 34 Chairs: Nawarecki E., Smirnov A.	34
[ROOM #15]	Track "Networked Enterprise Control System Integration and Interoperability" Session " Enterprise Integration And Interoperability Issues " 36 Chairs: Vernadat F., Vincent L.	36
[ROOM #19]	POSTER PRESENTATION Session " Planning And Scheduling " 54 Chairs: Dautère-Pérès S., Montoya-Torres J. Session " Design Of Production Systems " 54 Chairs: Dolgui A., Roelens M. Session " Decision Support Systems " 55 Chairs: Grimaud F., Xie X	54 54 55

THURSDAY, MAY 18th (10H30 – 12H30)

[ROOM #01]	Track "Integrated Design of Product and Manufacturing Process" Session " Integrated Design And Manufacturing Processes " 38 Chairs: Newman S., Han W.S.	38
[ROOM #02]	Track "Intelligent and Collaborative Maintenance of Manufacturing Systems" Session " Monitoring Strategies For Intelligent Predictive Maintenance " 38 Chairs: Lung B., Thomson V.	38
[ROOM #03]	Track "Integrated Engineering in Industry" Session " Mixed Reality A Tool For Cost Effective Coll. Engineering " 41 Chairs: Bruns F. W., Erbe H.-H.	41
[ROOM #04]	Track "Novel Models and Approaches for Semiconductor Manufacturing" Session " Production Planning And Control " 50 Chairs: Sarin S., Kock A.	50
[ROOM #05]	Special Event "Innovative Engineering Techniques in Healthcare Delivery" Session " Operation Management - II " 53 Chairs: Gourgand M., Combes C.	53
[ROOM #06]	Track "Scheduling for Modern Manufacturing, Logistics and Supply Chains" Session " Cyclic Scheduling " 44 Chairs: Crama Y., Dupas R.	44
[ROOM #07]	Track "Supply Networks Design and Management" Session " Virtual Organizations " 45 Chairs: Villa A., MacCarthy B.	45
[ROOM #08]	Track "Production Planning and Inventory Control" Session " Production Planning Under Uncertainties " 47 Chairs: Frein Y., Langevin A.	47
[ROOM #09]	Track "Transportation and Logistics" Session " OR-Case Studies And Data Mining " 48 Chairs: Rönnqvist M., Delorme X.	48
[ROOM #10]	Track "Simulation in Industrial Engineering" Session " Simulation For Enterprise Engineering " 51 Chairs: L'Anton A., Habchi G.	51
[ROOM #11]	Track "Design of Production Systems" Session " Product Design And Resource Planning " 42 Chairs: Kusiak A., Montreuil B.	42
[ROOM #12]	Track "Robotics and Factory of the Future" Session " Industrial Robotics And Factory Automation " 32 Chairs: Kopacek P., Pashkevich A.	32
[ROOM #13]	Track "Discrete Event Systems and Supervisory Control" Session " Supervisory Control In Discrete Event Systems " 33 Chairs: Zaytoon J., Chelbi A.	33
[ROOM #14]	Track "Holonc and Multi-agent Technologies for Industrial Systems" Session " Multi-Agent Systems - III " 35 Chairs: Brennan R.W., Leitao P.	35
[ROOM #15]	Track "Integration and Information in Manufacturing" Session " Information Management In Enterprise " 36 Chairs: Beigbeder M., Corbett L.	36

THURSDAY, MAY 18th (16H30 – 18H30)

Business Process Management: From Strategy To Operation

The information system at the heart of the business process management: real value added! While 80% of the enterprises seriously consider a process oriented organization, their main challenge continues to be integrating the three management level: strategic, tactical, operational.

08h30 -	Welcome	
09h00 -	Introduction	Introduction , <i>L. Guizzi, THESAME, BPM Forum Animator</i>
	Session #1	The Implementation Of Balanced Scorecard (BSC) Within An Approach Of Business Process Management , <i>H. Kuehn, BOC, Development Manager</i>
	Roundtable	Discussion On Process Management Issues <i>Hosted by: L. Guizzi, THESAME, J. Chaillet, CSP</i> <i>Speakers: M. Diop, ORANGE FRANCE, Process Deployment</i> <i>M. Descamps, BSN GLASS PACK, former Director Quality Control for customers</i> <i>M. Schoumacher, GDF, Deputy Director Région Centre Est</i>
10h00 -	Coffee Break	
11h00 -	Session #2	BPM/BAM Software (Business Process Management – Business Activity Monitoring): Its Place, Advantages And Limits Within The Information System <i>Hosted by: R. Dindeleux, THESAME, Associated Director</i> <i>Speakers: C. Cador, STTS-TOULOUSE, President</i> <i>P. Bayle, AGILIUM, President</i>
12h00 -	Lunch	To Enhance The Relationship Between Business Players And IT Specialists : How To Utilize Shared Enterprise Models (Methodology And Case Studies) <i>J.-F Pirus, BPMS, Director and BPMS.info editor</i>
12h30 -	Exhib. Visit	Lunch and Exposition Visit (BPM, BAM, Process Analysis, ...)
14h00 -	Session #3	The Benefit of BPM/BAM To Manage Shopfloor Activities: The MES Process On Demand (M.E.S: Manufacturing Execution System) <i>J.-M. Bornand, ERA Club (Rhône-Alpes Region Software Editors), President</i>
15h00 -	Coffee Break	
16h00 -	Session #4	Process oriented organization: deployment methodology, expert advice and industrial best practices. <i>Hosted by: L. Guizzi, THESAME, BPM Forum Animator</i> <i>assisted by diverse experts and industrial speakers</i>
17h00 -	Exhib. Visit	Exhibition Visit (BPM, BAM, Process analysis, ...)

THURSDAY, MAY 18th (08H30 – 18H00)

From Mechanic To Mechatronics, Risk Or Opportunity For Industry ? (1/2)

08h00 -	Welcome	« Improve the efficiency of your product designs with integrated engineering »
	Introduction	Introduction French industrial leaders and research competitive clusters representatives
09h00 -	Session #1	Integrated Engineering In Practice <ul style="list-style-type: none"> - Advantages And Concepts <i>J.-C Bocquet, ECOLE CENTRALE DE PARIS</i> - Reliability All Through The Process Design <i>P. Lyonnet, R. Toscano, ECOLE NATIONALE D'INGENIEURS DE SAINT-ETIENNE</i> - Risk Management In The Design Of Safety Devices <i>B. Lanternier, D. Charpentier, INERIS</i>
10h00 -		
	Coffee Break	
11h00 -	Session #2	Reliability And Maintenance In Design - Examples Of Applications <ul style="list-style-type: none"> - Experimental Dependability: Definition Of A Test Bed <i>A. Poncet, RENAULT TRUCKS</i> - Building Up Of Experiment Plans Based On A Forced Resistance Approach Combined With Degradation Measurements <i>P. Schimmerling, RENAULT, Manager Statistics and Reliability Dept</i> - Optimisation Of Helicopter Maintenance Costs, Using "Design To Cost" <i>M. Glade, EUROCOPTER</i>
12h00 -		
12h30 -	Lunch	Lunch And Break
14h00 -	Exhib. Visit	Visit of the Exhibition
15h00 -	Session #3	Rapid Prototyping – Examples Of Applications <ul style="list-style-type: none"> - Design And Performance Of PHENIX Equipment <i>P. Teulet, PHENIX SYSTEMS</i> - Direct Laser Metal Powder Production: Application To Tools And Manufactured Parts <i>B. Le Razer, EUROPEAN CENTER FOR PLASTURGY</i> - Rapid Prototyping And Direct Fabrication Via Laser Of Multi Composite Objects With Multifunctional Uses <i>Philippe Bertrand, ECOLE NATIONALE D'INGENIEURS DE SAINT-ETIENNE</i>
16h00 -		
	Coffee Break	
17h00 -	Roundtable	The Transition From Integrated Mechanical Engineering Towards Mechatronics Hosted by: <i>P. Bertrand, ECOLE NATIONALE D'INGENIEURS DE SAINT-ETIENNE</i> <i>J.-C. Bocquet, ECOLE CENTRALE DE PARIS</i> <i>D. Charpentier, INERIS</i>

Visit the Art & Industry Museum:
 "Welcoming soirée" and buffet offered by the business leaders in the Loire region

THURSDAY, MAY 18th (08H30 – 18H00)

FRIDAY, MAY 19th

INCOM'2006

08h00 -

Keynote
Speech

09h00 -

Keynote
Speech

10h00 -

Coffee Break

11h00 -

Poster
&
Oral
Sessions
[FRI-1]

12h00 -

13h00 -

Lunch

14h00 -

Posters/Exhib

15h00 -

Oral
Sessions
[FRI-2]

16h00 -

Coffee Break

17h00 -

Closing
Ceremony

18h00 -

KEYNOTE SPEECHES

*Chair: Christopher O'BRIEN
Nottingham University, United Kingdom*



08H30 – 09H15 Congress Hall

DATA MINING IN DESIGN OF PRODUCTS AND PRODUCTION SYSTEMS
Pr. Andrew Kusiak, University of Iowa, USA.

Andrew Kusiak is a Professor of Mechanical and Industrial Engineering and the Director of the Intelligent Systems Laboratory at the University of Iowa, Iowa City, Iowa. He is interested in theory and applications of computational intelligence, data mining, and optimization in product development, manufacturing, healthcare, and the pharmaceutical industry. Dr. Kusiak has served on editorial boards of over twenty journals, published books, and edited book series. Dr. Kusiak is the Editor-in-Chief of the Journal of Intelligent Manufacturing.



09H15 – 10H00 Congress Hall

REINFORCING INDUSTRIAL DISTRICTS: NEED FOR A STRUCTURED APPROACH
Pr. Agostino Villa, Politecnico di Torino, Italy.

Agostino Villa is a member of the Department of Production Systems and Business Economics of Politecnico di Torino. He is the Chair of the Executive Committee of the International Foundation for Production Research (IFPR), Editor for Robotics and Computer Integrated Manufacturing journal (Elsevier) and the Coordinator of the European Coordination Action on Collaborative Demand and Supply Networks (CODES.NET).

ORAL AND POSTER SESSIONS

10H30 – 12H30 16 parallel sessions (Room #1 to #15 and #19)
14H00 – 14H30 Posters (Room #19) and Exhibition Visit
14H30 – 16H30 15 parallel sessions (Room #1 to #15)

ASSOCIATED INDUSTRIAL MEETINGS

08H30 – 17H30 JT'2006 (Room #16)
08H00 – 16H30 EMM'2006 (Room #17)
10H00 – 18H00 Exhibition Visit (Room #18)

CLOSING CEREMONY

17H00 – 18H00 Congress Hall

FRIDAY, MAY 19th

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FRIDAY, MAY 19th (14H30 – 16H30)

An Efficient And Scalable Information System: Architecture And Governance

Information Management is becoming ever more essential to company strategy: a critical performance factor. Nevertheless, Information Management can seem as a drawback often limiting flexibility. Therefore, the principle challenge is to ensure a coherent fit of the IT to the business.

« Improving IT Management Role And Efficiency »

08h30 -	Welcome	<i>Morning Session Kicked Off By OSIATIS (C. Durand) And Members Of The itSMF France Association</i>
09h00 -	Session #1	Strategy For IT Management ? <i>C.Durand, OSIATIS, Development Director and CTO</i>
10h00 -		New Standard For IT Services Management (ITSM) <i>T. Chamfrault, BOUYGUES TELECOM, Internet operational master builder</i>
	Coffee Break	
11h00 -	Session #2	IT Services Management Within A Manufacturing Firm. Actual Case. <i>O. Maupaté, ESSILOR, Production manager</i>
12h00 -	Roundtable	How To Present, Insure And Manage IT Services As An Integral Support Of All A Compagny's Functions ? <i>hosted by: C.Durand, OSIATIS, Development Director and CTO</i> <i>Speakers: Lecturers and members of a work team of the Pôle Productique Rhône-Alpes</i>
12h45 -	Lunch	Lunch and Exhibition visit
14h15 -	Exhib. Visit	
15h00 -	Session #3	Information System Architecture <i>A. Turba, M. Dardet, ORESYS, Senior Consultants, Members of the industrial club URBA-EA</i> Architecture of IS: state of the art <i>M. Dardet, Club Urba-EA</i> <i>S. Sadones, RENAULT, IS architect</i>
16h00 -	Session #4	Case studies <i>Hosted by: A. Turba, M. Dardet, ORESYS, Senior Consultants</i> - Scenarios of changing management projects for SME <i>CEREP, Industrial experiences</i> - IS architecture in a context of strong business changes <i>G. Roussel, Network of gas distribution, internal consultant</i>
17h00 -		

FRIDAY, MAY 19th / 08H30 – 17H30

From Mechanic To Mechatronics, Risk Or Opportunity For Industry ? (2/2)

« Managing transition towards mechatronics »

08h00 -	Session #1	<p>Economic Impact of Mechatronics</p> <ul style="list-style-type: none"> - Mechatronics At The Heart Of Competitiveness <i>Representatives of the Competitive Clusters ARVE INDUSTRIES and VIAMECA.</i> - Economic Impact In The Automotive Industry: Results Of The First European Study <i>T. Dujardin, DECISION</i>
09h00 -		<p>How to Start With Mechatronics ?</p> <ul style="list-style-type: none"> - Design Outsourcing: A Key To Success ? <i>J.- D. Sauzade, TELEMAQ</i> - Integrating Reliability And Functional Safety At The Design Stage. <i>P. Lyonnet, R. Toscano, ENISE</i> - Marketing Of Mechatronic Products: New Skills And New Commercial Approaches. <i>P. Laurin, BOSCH REXROTH, Marketing Manager technical support</i>
10h00 -	Coffee Break	
11h00 -	Session #3	<p>Implementation Of Mechatronics In Industry</p> <p>Mechatronics And SMEs:</p> <ul style="list-style-type: none"> - Ten Years Of Mechatronic Design: Success And Failure Factors <i>E. Bruyat, ALPES DEIS, Director electronic laboratory</i> - Mechatronics: Advantages For Design And Fabrication Of Intelligent Tools <i>S. Grygorowicz, RB3D, Director</i> <p>Mechatronics And Transport:</p> <ul style="list-style-type: none"> - The Vehicle Sector Organizes Around Mechatronics <i>G. Galand, STARTEC, project manager mechatronics CETIM</i>
12h00 -		
12h30 -	Lunch	<p>Lunch and Break</p>
14h00 -	Exhib. Visit	<p>Visit of the Exhibition</p>
15h00 -	Session #4	<p>Mechatronics and production:</p> <ul style="list-style-type: none"> - Trends In The Evolution Of Production Systems Architecture And Their Economic Impact <i>D. Thomas, BERGER LAHR, SCHNEIDER ELECTRIC GROUP</i> - When Pneumatics Meets Mechatronics <i>L. Marais, BOSCH REXROTH, Manager Pneumatic Development</i> - A Integration Platform For Maintenance Tools: The Proteus System <i>D. Reboul, CEGELEC, J.-P. Thomesse, LORIA</i>
16h00 -		<p>Roundtable</p> <p>New Forms Of Organisation And Engineering Products</p>

FRIDAY, MAY 19th / 08H00 – 16H30



PrePrints Index



Track "Real Time And Networked Embedded Systems"

► Manufacturing Plant Control		[WED 17th 10H30-12H30]
<i>Chairs: Martinez Lastra J. L., Wollschlaeger M.</i>		<i>Room #12</i>
10H30	Event Driven Applications For Automation Area <i>(DE) Riedl M., Diedrich C., Naumann F., Matzekat I.</i>	1-69
11H00	A Degraded Scheduling Generation Of A Component Based Application <i>(FR) Khalgui M., Rebeuf X., Simonot-Lion F.</i>	1-75
11H30	Run-Time Reconfigurable Real-Time Operating System For Hybrid Execution Platforms <i>(DE/BR) Götz M., Rettberg A., Pereira C.E.</i>	1-81
12H00	A Comparative Study Of Embedded Protocols For Safety-Critical Control Applications <i>(BR) Ataide F.H., Carvalho F.C., Pereira C.E., Wehrmeister M.A.</i>	1-87
 ► Industrial Communication Protocols		 [WED 17th 14H00-16H00]
<i>Chairs: Pereira C. E., Thomesse J.-P.</i>		<i>Room #12</i>
14H00	Performance Analysis Of Industrial Ethernet Networks By Means Of Timed Model-Checking <i>(DE/FR) Witsch D., Vogel-Heuser B., Faure J.-M., Marsal G.</i>	1-101
14H30	Use Of Upper Bound Delay Estimate In Stability Analysis And Robust Control Compensation In Networked Control Systems <i>(FR) Georges J.-P., Vatanski N., Rondeau E., Jamsa-Jounela S.-L.</i>	1-107
15H00	Switching Rates To Save Resources In Distributed Computer Control Systems <i>(BR/PT/SP) Mauro M., Almeida L., Fuertes J.M.</i>	1-113
15H30	An Ethernet Layer For Supporting Enhanced Real-Time Communication Services <i>(IT) Facchinetti T., Franchino G., Pedreiras P., Marau R.</i>	1-119
 ► IT Issues In Manufacturing Plant Control		 [THU 18th 10H30-12H30]
<i>Chairs: Diedrich C., Morel G.</i>		<i>Room #12</i>
10H30	Sensor Informatics For Manufacturing <i>(US) Johnson T.L., Dausch M.E.</i>	1-125
11H00	Information Security For Reconfigurable Manufacturing Systems Using Networked Embedded Controllers <i>(FI) Delamer I.M., Martinez-Lastra J.L.</i>	1-131
11H30	Flexible Information System For Life Cycle Support Of Heterogeneous Networks <i>(DE) Wollschlaeger M.</i>	1-137
12H00	ANDDR With Novel Gross Error Detection And Smart Tracking System <i>(CA) Laylabadi M.B., Taylor J.H.</i>	1-143

Track "Robotics And Factory Of The Future"

► Industrial Robotics And Factory Automation

[THU 18th 16H30-18H30]

Chairs: Kopacek P., Pashkevich A.

Room #12

- 16H30 Kinematic Calibration Of Orthoglide-Type Mechanisms
(BY/FR) Pashkevich A., Chablat D., Wenger P. 1-151
- 17H00 Modular Sensor System For Flexi-Picker And Multi-Axis Automated Machines
(ZA) Asif Shaik A., Bright G., Xu W.L. 1-157
- 17H30 Task Planner For A Cooperative Disassembly Robotic System
(ES) Diaz C., Puente S., Torres F. 1-163
- 18H00 Evolvable Assembly Systems: A Development Roadmap
(PT/SE) Barata J., Santana P., Onori M. 1-169

► Mobile Robots

[FRI 19th 10H30-12H30]

Chairs: Pashkevich A., Kopacek P.

Room #12

- 10H30 Convergence Of Communication With Computing For A Remote Oriented Mobile Minirobot
(RO) Dobrescu R., Dobrescu M. 1-181
- 11H00 Decision Making And Image Processing In Robot Soccer - The Challenge Of The Fira Mirosoot League
(DE) Jesse N. 1-187
- 11H30 Narosot - Nanotechnology In Robot Soccer
(AT) Kopacek P., Han M.-W., Putz B., Schierer E., Würzl M. 1-193
- 12H00 A Cooperative Mobile Robots Architecture Enabling Paralyzed Robots To Move
(FR) Simonin O., Grunder O. 1-199

► Artificial Intelligence In Robotics

[FRI 19th 14H30-16H30]

Chairs: Nof S., Borangiu T.

Room #12

- 14H30 Interactive Learning Of Scene-Robot Models Based On AI Techniques
(RO) Borangiu T., Anton F., Tunaru S., Dogar A., Ivanescu N. 1-205
- 15H00 A Fuzzy Hybrid Singularity Avoidance For Underwater Vehicle-Manipulator Systems
(BR) Dos Santos C.H., Bittencourt G., Guenther R., De Pieri E. 1-211
- 15H30 Controlling A Platoon Of Vehicles With Distributed Collision Avoidance Capabilities
(IT) Ferrara A., Vecchio C. 1-217
- 16H00 Mathematical Modelling of Movements of Intelligent Transport Devices Of The Automozed Warehouses
(PL) Kharchenko Y., Sobkowski S. 1-223

Track "Dependable Control Of Discrete-Event Systems"

► New Trends In Fault-Tree Analysis Of Automated Systems

[WED 17th 10H30-12H30]

Chairs: Frey G., Vogel-Heuser B.

Room #13

- 10H30 Pandora: The Time Of Priority-And Gates
(GB) Walker M., Papadopoulos Y. 1-237
- 11H00 Obtaining Temporal And Timed Properties Of Logic Controllers From Fault Tree Analysis
(FR) Barragan Santiago I., Roth M., Faure J.-M. 1-243
- 11H30 Evolutionary Algorithms For Safety-Costs Trade-Off In Control System Design
(GB) Grunske L., Papadopoulos Y. 1-249
- 12H00 Increased efficiency in the quantitative evaluation of state/event fault trees
(DE) Förster M., Kaiser B. 1-255

► **Improving DES Controllers Dependability
Using Formal Specification And Verification**

[WED 17th 14H00-16H00]

Room #13

Chairs: Johnson T., Papadopoulos Y.

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14H30	Verification Of Ethernet Protocols Via Parametric Composition Of Petri Net (UA) Zaitsev D.A., Zaitsev I.D.	1-261
15H00	A Functional Modeling Approach For Mode Handling Of Flexible Manufacturing Systems (FR) Hamani N., Dangoumau N., Craye E.	1-275
15H30	Formal Specification Of Safe Manufacturing Machines Using The B Method: Application To A Mechanical Press (FR) Evrot D., Petin J.-F., Mery D.	1-281

► **Improving DES Controllers Dependability
Using Supervisory Control Theory**

[THU 18th 10H30-12H30]

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Chairs: Faure J.-M., Niel E.

10H30	Design Of Coordination Controllers For A Class Of Discrete-Event Manufacturing Systems (MX) Sanchez A., Aranda-Bricaire E., Hernandez E.	1-287
11H00	Design Of Switching Supervisors For Reactive Class Discrete Event Systems (FR) Kamach O., Pietrac L., Niel E.	1-293
11H30	Synthesis Of Supervised Controller Based On Boolean Constraints And Boolean Automata (FR) Marange P., Tajer A., Gellot F., Carre-Menetrier V.	1-299
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Track "Discrete Event Systems And Supervisory Control"

► **Supervisory Control In Discrete Event Systems**

[THU 18th 16H30-18H30]

Room #13

Chairs: Zaytoon J., Chelbi A.

16H30	On Supervisory Control Of A Class Of Discrete Event Systems (CN) Zhao M., Li Z.	1-307
17H00	Control Of Constrained (Max, +)-Linear Systems Minimizing Delays (FR) Houssin L., Lahaye S., Boimond J.-L.	1-313
17H30	IEC 61131-3 Based Implementation Of PN Supervisors (IT) Basile F., Chiacchio P., Teta D.	1-319
18H00	Supervisory Control In Discrete Event Systems: Existence And Solutions (FR) Achour Z., Rezg N., Xie X.	1-325

► **Discrete Event Systems And Applications**

[FRI 19th 10H30-12H30]

Room #13

Chairs: Banaszak Z., Demongodin I.

10H30	Design & Development Of Pipeline Integrity Monitoring System For Rolling Machine (IN) Parikh P., Jafri T.A., Khurasia H.B.	1-337
11H00	Watchdog - A Practical Approach Of Fault Detection (HU) Kovacs G., Kiss B., Niel E.	1-343
11H30	Modelling Of The Debts Collection Process For Service Companies (FR) Deloffre A., Nait Abdallah R.	1-349
12H00	Geometrical Characterization Of Observability In Switched Linear Systems (MX) Ramirez-Trevino A., Ruiz-Leon J., Martinez-Barrientos C., Arias-Zambrano F.	1-355

► **Petri Nets And The E-Enterprise**

[FRI 19th 14H30-16H30]

Chairs: Berthomieu B., Moreaux P.

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- 14H30 High Level Petri Nets Based Approach For Analysing Conceptual Objects For Production Systems Simulation
(FR) Tamani K., Boukezzoula R., Habchi G. 1-361
- 15H00 A Petri-Net Based Approach For The Reconfiguration Of Flexible Manufacturing Systems Using Optimization Techniques
(FR) Bourdeaud'huy T., Toguyeni A. 1-367
- 15H30 Performance Evaluation Of Distributed Database- A Banking System Case Study
(FR) Sene M., Moreaux P., Haddad S. 1-373
- 16H00 State Feedback Control For The Manufacturing Systems Modeled By Continuous Petri Nets
(DZ) Kara R., Djennoune S., Loiseau J.-J. 1-379

Track "Holonic & Multi-Agent Technologies For Industrial Systems"

► **Holonic Manufacturing Systems**

[WED 17th 10H30-12H30]

Chairs: Valckenaers P., Saint Germain B.

Room #14

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(BE) Verstraete P., Valckenaers P. 1-393
- 11H00 Towards The Assessment Of Holonic Manufacturing Systems
(CA) Brennan R.W. 1-399
- 11H30 Holonic Manufacturing Control Using Multi Ant Colony Systems
(DE) Zuelch G., Stock P. 1-405
- 12H00 A Holonic Approach For Manufacturing Control: An Industrial Application
(FR) Blanc P., Demongodin I., Castagna P. 1-411

► **Multi-Agent Systems - I**

[WED 17th 14H00-16H00]

Chairs: Boissier O., Thomas A.

Room #14

- 14H00 Coalition Formation For Large Scale Multi-Agent Systems
(SK) Oravec V., Frankovic B. 1-417
- 14H30 Cooperation Between Business And Holonic Manufacturing Decision Systems
(FR) Pannequin R., Thomas A. 1-423
- 15H00 An Approach To Inter-Organizational Workflow Management In An Electronic Institution
(PT) Lopes Cardoso H., Leitao P., Oliveira E. 1-429
- 15H30 Multiagent Based Support For Electronic Contracting In Virtual Enterprises
(FR) Gateau B., Boissier O., Khadraoui D. 1-435

► **Multi-Agent Systems - II**

[THU 18th 10H30-12H30]

Chairs: Nawarecki E., Smirnov A.

Room #14

- 10H30 Auction-Based Agent-Oriented Process Control
(DE) Hussain T., Frey G. 1-447
- 11H00 Modelling Collaborative Information Systems: The E-Enabled Supply Chain Case
(FR) Briffaut J.-P., Lallement P. 1-441
- 11H30 Multi Criteria Decision Making For Supply Chain Partners: A Multi Agent Simulation Approach
(FR) Chehbi Gamoura S., Ouzrout Y., Bouras A. 1-453
- 12H00 Using Radio Frequency Identification In Agent-Based Control Systems For Industrial Applications
(CZ) Vrba P., Macurek F., Marik V. 1-459

▶ **Multi-Agent Systems - III**

[THU 18th 16H30-18H30]

Chairs: Brennan R.W., Leitao P.

Room #14

- 16H30 Monitoring As A Means For Discovery Of Crises In Mas
(PL) Dobrowolski G., Kisiel-Dorohinicki M., Nawarecki E. 1-477
- 17H00 Cooperative Disruption Management In Industrial Systems: A Multiagent Approach
(FR) Tranvouez E., Ferrarini A., Espinasse B. 1-483
- 17H30 Modeling And Optimization Of City Traffic With The Agent Approach
(PL) Swida P., Kozlak J., Creput J.-C. 1-489
- 18H00 Agent-Based And Evolutionary Planning Techniques Supporting Crises Management In
Transportation Systems
(PL) Drezewski R., Kisiel-Dorohinicki M., Kozlak J. 1-495

Track "Reconfigurable Manufacturing Systems"

▶ **Reconfigurable And Agile Manufacturing Systems**

[FRI 19th 10H30-12H30]

Chairs: Martinez-Lastra J.L., Harrison R.

Room #14

- 10H30 Reconfigurable Manufacturing System For Agile Manufacturing
(ZA) Xing B., Eganza J., Bright G., Potgieter J. 1-509
- 11H00 Agile Manufacturing System With Autonomously Operated Square Arrayed Machining Cells
(JP) Fujii S., Kaihara T., Sashio K., Seki T. 1-517
- 11H30 A Tool For Assessing Reconfigurability Of Distributed Manufacturing Systems
(GB) Farid A.M., McFarlane D. 1-523
- 12H00 A Framework For Validation Of Reconfigurable Manufacturing Systems
(FI) Lobov A., Popescu C., Martinez-Lastra J.L. 1-529

▶ **Reconfigurable Manufacturing System Automation**

[FRI 19th 14H30-16H30]

Chairs: McFarlane D.C., Jacomino M.

Room #14

- 14H30 A Real-Time Execution Model For IEC 61499 Based Control Applications
(AT) Smodic R., Zoitl A., Grabmair G., Strasser T. 1-541
- 15H00 Petri Net Model Reconfiguration Of Discrete Manufacturing Systems
(MD) Alcaraz-Mejia M., Lopez-Mellado E. 1-547
- 15H30 Distributed Engineering of Modular Reconfigurable Automation Systems
(UK) Harrison R., Lee S., Ong M.H., West A.A. 1-553
- 16H00 Performance Measurement Of A Multiagent System In Java-Based Industrial Embedded Controlers
(FI) Lopez O., Martinez-Lastra J.L. 1-559

Track "Networked Enterprise Control System Integration And Interoperability"

▶ **Enterprise Systems Integration And Interoperability**

[WED 17th 10H30-12H30]

Chairs: Whitman L., Panetto H.

Room #15

- 10H30 Product Centric Holons For Synchronisation And Interoperability In Manufacturing Environments
(FR) Baina S., Morel G. 1-573
- 11H00 Interoperability Of Enterprises Network Holonic Control Via HLA
(FR) Ounnar F., Pujo P., Zahaf A., Giambiasi N. 1-579
- 11H30 Linking Interoperability And Risk Assessment: A Methodological Approach For Socio-Technical
Systems
(FR) Aloui S., Chapurlat V., Penalva J.-M. 1-585
- 12H00 Real-Time, Cooperative Enterprises: Requirements And Solution Approaches
(HU) Monostori L., Vancza J., Kis T., Kadar B., Viharos Z.J. 1-591

▶ **Reference Models And Architectures
For Collaborative Networked Organizations**

[WED 17th 14H00-16H00]

Room #15

Chairs: Molina A., Chen D.

- 14H00 Information Exchanges In A Cross-Disciplinary Supply Chain: Formal Strategy And Application
(GB) Cutting-Decelle A.F., Das B.P., Young R.I.M., Case K., Bouchlaghem N.M., Anumba C.J. 1-603
- 14H30 An Enterprise Model Of Interoperability
(US) Whitman L.E., Santanu D., Panetto H. 1-609
- 15H00 Collaborative Information System Design: From Process Model To Information System Model
(FR) Touzi J., Benaben F., Pingaud H. 1-615
- 15H30 A Methodology To Develop Interoperability Of Enterprise Applications
(FR) Daclin N., Chen D., Vallespir B. 1-621

▶ **Enterprise Integration And Interoperability Issues**

[THU 18th 10H30-12H30]

Room #15

Chairs: Vernadat F., Vincent L.

- 10H30 Enterprise Model For Integrating Process Control Into Cam Systems
(FR) Bassetto S., Siadat A., Vernadat F., Martin P. 1-635
- 11H00 An Ontology-Driven Data Mediation Framework For Enterprise Application Integration
(FR) Izza S., Vincent L., Burlat P., Lebrun P., Solignac H. 1-641
- 11H30 Interoperability Problems In Supply Chains Context
(FR) Blanc S., Ducq Y., Vallespir B. 1-653
- 12H00 Towards A Framework For Integrating Risk And Business Process Management
(FR) Sienou A., Karduck A., Pingaud H. 1-647

Track "Integration And Information In Manufacturing"

▶ **Information Management In Enterprise**

[THU 18th 16H30-18H30]

Room #15

Chairs: Beigbeder M., Corbett L.

- 16H30 Toward A Unified Vision Of The Enterprise Informations
(FR) Laniel F., Mathieu M., Girardot J.-J. 1-661
- 17H00 A Framework Of Information And Knowledge Management For Product Design And Development-
A Text Mining Approach
(SG) Liu Y., Lu W.F., Loh H.T. 1-667
- 17H30 Service Oriented Organization For Cross-Enterprise Processes And Distributed Transaction
(FR) Jaber M., Badr Y., Biennier F. 1-673
- 18H00 Operations Strategy And Implementing ICTS: The Recipe For Success
(NZ) Corbett L.M. 1-679

▶ **Ontology-Based Information Management
For Industrial Applications**

[FRI 19th 10H30-12H30]

Room #15

Chairs: Beaune P., Sandkuhl K.

- 10H30 Constructing An Enterprise Ontology For An Automotive Supplier
(SE) Blomqvist E., Ohgren A. 1-703
- 11H00 Ontology-Based Information Integration In Automotive Supply Chains
(RU) Smirnov A., Levashova T., Shilov N. 1-709
- 11H30 Towards Ontology-Based Requirements Management In Automotive Electronics
(SE) Sandkuhl K., Billig A. 1-715
- 12H00 Integrating Semantic Resources To Support SME Knowledge Communities
(PT) Silva M.M., Soares A.L., Simoes D. 1-721

▶ **Industrial Applications**

[FRI 19th 14H30-16H30]

Chairs: Girardot J.J., Vallespir B.

Room #15

14H30	Development Of Computer Integrated Manufacturing And Management Systems (PL) Izworski A., Lewoc J.B., Skowronski S.	4-1
15H00	Collaborative Distributed Framework For SME Ecosystems: The Group-Buying Portal Use-Case (FR) Lorré J.-P., Carpentier M., Fabre O.	4-23
15H30	Pattern Based Database Knowledge Extraction (PL) Zygmunt M., Kozik J.	4-47
16H00	A Framework For I&C KM Using A CMS With Ontology Extension (FR) Dourgnon-Hanoune A., Dang T., Dissert B., Reguigui S.	4-83

Track "Integrated Design Of Product And Manufacturing Process"

▶ **Information Systems For Product
And Process Design**

[WED 17th 10H30-12H30]

Chairs: Bernard A., Bigand M.

Room #1

10H30	Case Studies In Model Integration (FR) Bigand M., Bourey J.-P., Perry N., Mauchand M.	1-729
11H00	A Conceptual Framework For Product Lifecycle Modeling (CN) Shu Q., Wang C.	1-735
11H30	Product Family Modelling - Attributes Rather Than Modules (DK) Joergensen K.A.	1-741
12H00	Design And Project Management: Coordination On A Platform Of Interoperable Tools (FR) Gutierrez Estrada C., Baron C., Duarte H., Esteve D.	1-747

▶ **Collaborative Engineering Tools And Methods**

[WED 17th 14H00-16H00]

Chairs: Bernard A., Boujut J.F.

Room #1

14H00	A Tool For Analysing Collaborative Practices In Project Design (FR) Merlo C., Pol G., Legardeur J., Jared G.	1-753
14H30	Management Of Evolution During Collaborative Design Process (FR) Blanc S., Robin V., Ducq Y., Girard P.	1-759
15H00	Expert Knowledge Justification In Plc Models Applied To Flank Milling (FR) Candlot A., Harik R.	1-765
15H30	Manufacturing Quality Information Supporting Concurrent Design Decisions (FR) Wang K., Roucoules L., Matta N., Tong S., Eynard B.	1-771

▶ **Decision Making For Better Sustainable
Products And Processes**

[THU 18th 10H30-12H30]

Chairs: Kusiak A., Glardon R.

Room #1

10H30	Methodology Of Outsourcing Design And Engineering Process (JP) Sato S., Roser C., Kubota F., Nakano M.	1-783
11H00	Drawing Data Refining System According To Plant Product Life Cycle (JP) Seki H., Tatehara K., Oomasa Y.	1-789
11H30	Designing A Decision Support System For Trucks Predictive Maintenance (IT) Sorlini M., Zangiacomi A., Fornasiero R.	1-795
12H00	Evaluation Of A Solution In Interactive Aiding Design Process (FR) Vareilles E., Aldanondo M., Gaborit P., Hadj-Hamou K.	1-801

▶ Integrated Design And Manufacturing Processes		[THU 18th 16H30-18H30]
<i>Chairs: Newman S., Han W.S.</i>		<i>Room #1</i>
16H30	Integrated Optimization For Weight, Performance And Cost Of Composite Structures (FR) Park C.H., Saouab A., Breard J., Han W.S., Vautrin A.	1-807
17H00	Cost Evaluation For Welding Process By Using Preparing Features (TN) Chayoukhi S., Bouaziz Z., Zghal A.	1-813
17H30	Numerical Modelling Of Compression Moulding For Improvement Of Mechanical Properties (KR) Kim M.S., Han W.S., Vautrin A., Lee W.I.	1-819
18H00	Optimization In Design Of Unit Head Machines With A Mobile Table (FR/BY) Dolgui A., Guschinskaya O., Guschinsky N., Levin G.	2-431
 ▶ Total Integration Of CAX Processes		 [FRI 19th 10H30-12H30]
<i>Chairs: Klemm P., Vernadat F.</i>		<i>Room #1</i>
10H30	Feature-Based Process Planning For Interoperable STEP-NC Manufacture (GB/CN) Liu R., Nassehi A., Allen R.D., Newman S.T.	1-825
11H00	A New Software Platform For STEP-NC Manufacturing Application Development (GB) Nassehi A., Allen R.D., Newman S.T.	1-831
11H30	The Certification Of CAM Output Toolpaths: A Necessary Improvement (FR) Duc E., Pateloup V., Ray P.	1-837
12H00	A Process Modelling Approach For Design Of Experiments Software (DE) Weckenmann A., Brenner P.-F.	1-843
 ▶ PLM And Information Tracking Using Smart Embedded Systems		 [FRI 19th 14H30-16H30]
<i>Chairs: Kiritsis D., Framling K.</i>		<i>Room #1</i>
14H30	System Architecture For Closed-Loop Plm (CH) Jun H.-B., Shin J.-H., Kiritsis D., Xirouchakis P.	1-849
15H00	Globally Unique Product Identifiers- Requirements And Solutions To Product Lifecycle Management (FI) Framling K., Harrison M., Brusey J.	1-855
15H30	Enriching Product Information During The Product Lifecycle (FI/DE) Framling K., Rabe L.	1-861
16H00	Early Data Processing In Smart Item Environments Using Mobile Services (DE) Anke J., Neugebauer M.	1-867

Track "Intelligent & Collaborative Maintenance In Manufacturing"

▶ Monitoring Strategies For Intelligent Predictive Maintenance		[THU 18th 16H30-18H30]
<i>Chairs: Iung B., Thomson V.</i>		<i>Room #2</i>
16H30	Information And Communication Technologies In Condition Monitoring And Maintenance (SE) Campos J., Prakash O.	2-3
17H00	Inspection Strategy For Availability Improvement (CA) Ait-Kadi D., Chelbi A.	2-9
17H30	Diagnosis Of Tool Wear With A Microcontroller (FI) Jantunen E., Vaajoensuu E.	2-15
18H00	Diagnosis Tasks Scheduling Based On A Distributed Multiprocessors System (FR/SN) Niang B., Adjallah K.H., Ndiaye P.A.	2-21

► **Collaboration And Optimization
For Maintenance Decision Making**

[FRI 19th 10H30-12H30]
Room #2

Chairs: Ait-Kadi D., Adjallah K.H.

10H30	Maintenance Work Coordination In Electricity Distribution (EE) Kangilaski T.	2-33
11H00	Service Oriented Semantics In Industrial Operation And Maintenance (FI) Viinikkala M., Kuikka S.	2-39
11H30	Production Line Simulation Using Stochastic Timed Petri-Net For Preventive Maintenance Scheduling (US) Lei Y., Liu J., Ni J., Lee J.	2-45
12H00	Joint Quality Control And Preventive Maintenance Strategy For Imperfect Production Processes (FR/TN) Radhoui M., Rezg N., Chelbi A.	2-51

► **Reliability And Safety Of Industrial Systems**

[FRI 19th 14H30-16H30]

Chairs: Zaikin O., Kulba V.

Room #2

14H30	CP-Based Project Driven Manufacturing (PL/CA) Banaszak Z.A., Zaremba M.B., Muszynski W.	2-75
15H00	A Conceptual Structure For The Use Of Near-Misses Properties (IT) Cavalieri S., Ghislandi W.M.	2-81
15H30	Reliability And Safety Of Restorable System For Maintenance Resources Planning (PL) Jazwinski J., Szytko J.	2-87
16H00	Structural-Technological Reserve And Its Use For Increasing Stability Of Manufacturing Systems (PL/RU) Kulba V., Pavlov B., Zaikin O.	2-93

Track "Advanced Manufacturing Systems"

► **Innovative Production Machines And Systems**

[WED 17th 10H30-12H30]

Chairs: Eldukhri E., Ferrarini L.

Room #2

10H30	Model-Based Machine Condition Monitoring With Web Access (GB) Victory J.L., Ebrahimi M.K.	2-107
11H00	A Neuro-Fuzzy Scheme For Process Control During Complex Curvature Friction Stir Welding (ZA) Van Niekerk T.I., Hua T., Hattingh D.G.	2-113
11H30	Adaptive Knowledge-Based Action Selection Architecture For Multiple Mobile Robots (GB) Pham D.T., Awadalla M.H., Eldukhri E.E.	2-119
12H00	Service-Oriented Architecture For Field Control Devices (IT/DE) Ferrarini L., Veber C., Schwab C., Tangermann M.	2-125

► **Flexible Manufacturing Systems**

[WED 17th 14H00-16H00]

Chairs: Castagna P., Gharbi A.

Room #2

14H00	A Simulation-Based Equipment Environment For Flexible Manufacturing Systems (TW) Huang Y.-S.	2-131
14H30	On Just In Time Control Of Flexible Manufacturing Systems Via Dioid Algebra (FR) Alsaba M., Boimond J.-L., Lahaye S.	2-137
15H00	Joint production and supply control in three levels flexible manufacturing systems (CA) Hajji A., Gharbi A., Kenne J.P.	2-149
15H30	Product-Driven Control In Manufacturing Systems Using IEC 61499 And RFID Technology (DE) Panjaitan S., Frey G.	2-143

► **New Trends And Challenges In Mechatronics**

[THU 18th 10H30-12H30]

Chairs: Lutz P., Kaynak O.

Room #2

- 10H30 Experimental Study Of Collaborater In Human-Machine System
(JP) Ohtsuka H., Shibasato K., Kawaji S. 2-155
- 11H00 Modeling Of A New SMA Microactuator For Active Endoscopy Applications
(FR) Abadie J., Chaillet N., Lexcellent C. 2-161
- 11H30 Optimising The Control Parameters In A Digital Mass Flow Controller
(FR) Couturier P. 2-167
- 12H00 Robograpes: A Fully Automated Machine For Grafting Vine Cuttings
(IT) Mazzon S., Salvador E., Bortolussi G., Piccinin M., Zanatta G. 2-173

Track "Models For Competence And Knowledge Management"

► **Modelling And Simulation Of Human Performance**

[WED 17th 10H30-12H30]

Chairs: Grabot B., Mummolo G.

Room #3

- 10H30 Manpower Allocation And Shift Scheduling Using Human Performance Simulation
(HK) Lau H.Y.K., Woo S.O., Choi C.Y. 2-181
- 11H00 A Dynamic Model For The Behavior Of An Operator In A Company
(FR) Elkosantini S., Gien D. 2-187
- 11H30 Qualification-Based Manufacturing Planning Based On Computer-Supported Modelling And Simulation
(DE) Zülch G., Becker M. 2-193
- 12H00 Considering Polyvalence When Minimizing Workload Fulfillment
(FR) Gruat La Forme F.-A., Botta-Genoulaz V., Campagne J.-P. 2-199

► **Competence Modelling
For Decision Support Systems**

[WED 17th 14H00-16H00]

Chairs: Zuelch G., Bonjour E.

Room #3

- 14H00 Human Systems Engineering Instrumented By Modelling Techniques
(GB) Ajaefobi J.O., Weston R.H. 2-205
- 14H30 Products, Organisation, And Processes Architectures Modeling: From Strategic Expectations To Strategic Competencies
(FR) Harmel G., Bonjour E., Dulmet M. 2-211
- 15H00 Competence Management For Business Integration
(FR) Houé R., Grabot B., Geneste L. 2-217
- 15H30 Business intelligence and Human Capital Management
(FR) De Lassence G.

► **Knowledge Modelling
For Value Chain Management**

[THU 18th 10H30-12H30]

Chairs: Boucher X., Weston R.

Room #3

- 10H30 Formalisation Of Norms For Recyclability Assessment
(FR) Houé R., Grabot B. 2-223
- 11H00 An Approach To Assess Knowledge Cruciality For Industrial Project
(FR) Saad I., Grundstein M., Rosenthal-Sabroux C. 2-229
- 11H30 Knowledge, Skills And Culture In Production: A Framework
(FR) Koenig J., Geiskopf F., Caillaud E., Sonntag M. 4-53
- 12H00 Competence Based Supply Value Chain Effectiveness
(TR) Kayakutlu G., Buyukozkan G. 2-235

Track "Integrated Engineering In Industry"

▶ Mixed Reality A Tool For Cost Effective Collaborative Engineering

[THU 18th 16H30-18H30]

Room #3

Chairs: Bruns F. W., Erbe H.-H.

16H30	Energy Interfaces For Mixed Reality (DE) Yoo Y.-H., Bruns W.	2-249
17H00	Distributed Workspaces (DE) Erbe H.-H.	2-255
17H30	Mixed Reality For Efficient Engineering Collaboration: The Aero-Cave Extension (DE) Pratsch D.	2-261
18H00	Mixed Reality For Teleoperation Of Mobile Robots In Search And Rescue Scenarios (DE) Driewer F., Sauer M., Schilling K.	2-267

▶ Integrated Product And Process Design For Market Driven Supply Chains: Spotlight On The Automotive Industry

[FRI 19th 10H30-12H30]

Room #3

Chairs: Miemczyk J., Dupont L.

10H30	Concept Of An Individual Vehicle Check With Formalized Models And Methods (DE) Schmidt C., Diedrich C.	2-279
11H00	ICT As An Enabler To The 5-Day Car: A Central Challenge To The ILIPT Project (DE) Witthaut M., Stone G., Miemczyk J., Hellingrath B.	2-285
11H30	Establishing Build To Order In The European Automotive Sector (GB) Stone G., Miemczyk J., Howard M., Graves A., Esser R.	2-291
12H00	Inter-Enterprise Collaborative Processes In A Pure BTO Automotive Manufacturing System (DE) Nayabi K., Baumgaertel H., Bischoff J., Mandel J.	2-297

▶ Automotive Automation Issues

[FRI 19th 14H30-16H30]

Room #3

Chairs: Thomas A., Ramudhin A.

14H30	The OPC In Warehouse Management System (PT) Alvarinhas H., Miguel N., Quinta A., Santos J.	4-7
15H00	Cost-Benefit Analysis For BTO Planning And Execution Processes (UK) Keller M.	2-303
15H30	The Role Of Inventory In Enabling Supply Chain Responsiveness (UK) Reichhart A., Framinan J.M., Holweg M.	2-309
16H00	Innovative Modular Valve Trains For 2015 Logistic Benefits By EMVT (UK) Huth T., Elsen O., Hartwig C., Esch T.	2-315

Track "Design Of Production Systems"

▶ Stochastic Models Of Production Systems I

[WED 17th 10H30-12H30]

Room #11

Chairs: Gershwin S., Di Mascolo M.

10H30	Optimization Of Continuous-Flow Transfer Lines With Delay Using IPA (FR) Mourani I., Hennequin S., Xie X.	2-323
11H00	Performance Evaluation Of Production Systems Monitored By Statistical Process Control And Offline Inspections (IT) Colledani M., Tolio T.	2-329
11H30	Production Control With Advanced Demand Information In A Join-Type Production Line (JP) Nakade K., Hiraiwa M.	2-335
12H00	The Effect Of Dynamic Worker Behavior On Flowline Performance (IT) Digiesi S., Kock A.A.A., Mummolo G., Rooda J.E.	2-341

► **Stochastic Models Of Production Systems II**

[WED 17th 14H00-16H00]

Chairs: Proth J.M., Sauer N.

Room #11

- 14H00 Selection Of Inventory Control Points In Multistage Pull Systems
(US) Askin R.G., Krishnan S. 2-353
- 14H30 Comprehensive Design Of An Order Picking Line By Simulation
(PL) Kawczynski L., Aguilar-Sommar R. 2-365
- 15H00 A Model For An Assembly System Under Lead Time Uncertainty
(CA) Chauhan S.S., Dolgui A., Louly M.A., Proth J.-M. 3-241
- 15H30 Estimating And Announcing Waiting Times In Multiple Customer Class Call Centers
(FR) Jouini O., Dallery Y. 2-371

► **Line Balancing And Layout**

[THU 18th 10H30-12H30]

Chairs: Askin R.G., Bukchin Y.

Room #11

- 10H30 Facility Layout Problems: A Literature Analysis
(FR) Drira A., Pierreval H., Hajri-Gabouj S. 2-389
- 11H00 A Generalized Cell Formation Problem In Dynamic Environment With Different Inter And Intra-Cell
Batch Sizes
(IR) Safaei N., Tavakkoli-Moghaddam R., Jabal-Ameli S. 2-401
- 11H30 Weld Reallocation In An Automotive Robotic Line Due To Robots Failures
(IL) Kahan T., Bukchin Y., Menassa R., Ben-Gal I. 2-407
- 12H00 A Comparative Evaluation Of Exact And Heuristic Methods For Transfer Line Balancing Problem
(FR) Guschinskaya O., Dolgui A. 2-413

► **Product Design And Resource Planning**

[THU 18th 16H30-18H30]

Chairs: Kusiak A., Montreuil B.

Room #11

- 16H30 Selection Of A Modules Stock Composition Using Genetic Algorithm
(CA) Agard B., Cheung B., Da Cunha C. 2-437
- 17H00 Optimizing Modular Machining Line Design Problem
(FR) Belmokhtar S., Dolgui A., Delorme X., Ignatenko I. 2-443
- 17H30 A Methodology For Modular Discrete Event Simulation Of Manufacturing Systems
(SE) Johansson B. 2-449
- 18H00 Resource Planning Algorithm For Personalizing Networks
(CA) Poulin M., Montreuil B. 2-455

► **Production System Design Methodology**

[FRI 19th 10H30-12H30]

Chairs: Levin G., Pierreval H.

Room #11

- 10H30 Comparison Of Process Structure Complexity In Manufacturing Before And After Redesign
(SK) Modrak V. 2-467
- 11H00 Towards A Reference Model For Problem-Solving In Manufacturing System Design
(FR) Guenebaut A., Barth M., De Guio R. 2-473
- 11H30 Efficient Engineering Of Flexible Assembly Lines In Discrete Manufacturing
(DE) Schilli B., Mechler G., Fay A., Bort P., Drath R. 2-479

► **Production Control Systems**

[FRI 19th 14H30-16H30]

Chairs: Barad M., Loiseau J.J.

Room #11

- 14H30 Outline Of A Framework For Analysis Of Manufacturing Systems Using The PAC Scheme
(CA) MacDonald C., Gunn E. 2-485
- 15H00 Marking Optimization Of Weighted Marked Graphs: A Modified Simulated Annealing Algorithm
(FR) Toursi L., Sauer N. 2-497
- 15H30 A Logic-Algebraic Method Based And Clp-Driven Approach To Control Of Concurrently Competing
Cyclic Processes
(PL) Banaszak Z., Wojcik R., Muszynski W. 2-491
- 16H00 EM Algorithm For Solving The Stochastic Assembly Line Balancing Problem
(FR) Gu L., Hennequin S., Sava A., Xie X. 2-419

Track "Scheduling For Modern Manufacturing, Logistics And Supply Chains "

► **Production Planning And Scheduling**

[WED 17th 10H30-12H30]

Chairs: Werner F., Kolokolov A.

Room #6

- 10H30 Thermal Test Scheduling Using Constraint Programming
(IE) Little J., Goyal S., Creed P., Berry S., Cokely D. 3-113
- 11H00 Process Design For Efficient Scheduling
(IE) Little J., Selensky E., Beck J.C. 3-3
- 11H30 L-Class Enumeration Algorithms For One Interval Production Planning Problem
(RU) Devyaterikova M.V., Kolokolov A.A. 3-9
- 12H00 A Home Automation System To Improve Household Energy Control
(FR) Ha D.-L., Ploix S., Zamai E., Jacomino M. 3-15

► **Flow Shop Scheduling**

[WED 17th 14H00-16H00]

Chairs: Strusevich V., Oulamara A.

Room #6

- 14H00 Scheduling Of Flexible Flow Lines With Blocking By Memetic Algorithms
(IR) Tavakkoli-Moghaddam R., Safaei N., Torabi S.A. 3-21
- 14H30 Two-Machine Flow Shop Scheduling With An Interstage Transporter: Two Shipments
(GB) Soper A.J., Strusevich V.A. 3-27
- 15H00 A New Heuristic-EM For Permutation Flowshop Scheduling
(FR) Yuan K., Hennequin S., Wang X., Gao L. 3-33
- 15H30 Flowshop Scheduling Problem With Batching Machines And Task Compatibilities
(FR) Kamgaing Kuiteing A., Oulamara A., Finke G. 3-39

► **Job Shop Scheduling**

[THU 18th 10H30-12H30]

Chairs: Finke G., Gordon V.

Room #6

- 10H30 Sequence-Dependent Setup And Clean-Up Times In A Two-Machine Job-Shop With Minimizing
Makespan
(DE) Sotskov Y.N., Werner F. 3-51
- 11H00 A Tabu Search Algorithm For Solving A Bicriteria Flexible Job Shop Scheduling Problem
(FR) Vilcot G., Billaut J.-C., Esswein C. 3-57
- 11H30 Predictive And Proactive Approaches For RCPSp With Labour Constraints
(FR) Drezet L.-E., Billaut J.-C. 3-125
- 12H00 Optimizing Scheduling In A Job-Shop Using Event Graphs: Still An Open Problem
(FR) Duron C., Proth J.-M. 3-69

► **Cyclic Scheduling**

[THU 18th 16H30-18H30]

Chairs: Crama Y., Dupas R.

Room #6

- 16H30 Flow-Shop Cyclic Scheduling For Cyclic Deliveries
(TN) Bahroun Z., Campagne J.-P., Moalla M. 3-83
- 17H00 Application Of Improved Hopfield Network To Cyclic Task Scheduling
(IE) Low K.S., Kechadi M.-T. 3-89
- 17H30 Two Approaches To The Cyclic Scheduling With Assembly
(FR) Trouillet B., Dupas R., Goncalvez G., Tsu T. 3-95
- 18H00 Scheduling In A Three-Machine Flexible Robotic Cell
(TR) Gultekin H., Akturk M.S., Karasan O.E. 3-101

► **Scheduling Heuristics**

[FRI 19th 10H30-12H30]

Chairs: Cavalieri S., Gourgand M.

Room #6

- 10H30 Finite Horizon Elsp In Flexible Flow Lines With Unrelated Parallel Machines
(IR) Torabi S.A., Jenabi M., Fatemi Ghomi S.M.T., Jolai F., Tavakkoli-Moghaddam R. 4-139
- 11H00 A Comparison Of Heuristics For Mean Flow Time Open Shop Scheduling
(DE) Bräesel H., Herms A., Moerig M., Tautenhahn T., Tusch J., Werner F., Willenius P. 3-119
- 11H30 A Mathematical Model For Cyclic Scheduling With Work-In-Progress Minimization
(FR) Bourdeaud'huy T., Korbaa O. 3-63

► **Theoretical Aspects Of Scheduling**

[FRI 19th 14H30-16H30]

Chairs: Ereemeev A., Demidenko V.

Room #6

- 14H30 A Fully Polynomial Time Approximation Scheme For Two Project Scheduling Problems
(RU) Servakh V., Shcherbinina T. 3-131
- 15H00 On-Line Algorithms For Single Machine Scheduling With Family Setup Times
(GB) Potts C.N., Strusevich V.A., Whitehead J. 3-137
- 15H30 Scheduling Of Coupled Tasks And One-Machine No-Wait Robotic Cells
(FR) Brauner N., Finke G., Lebacque V., Potts C.N., Whitehead J. 3-143
- 16H00 Cyclic Properties Of Triangular Grid Graphs
(BY) Orlovich Y., Gordon V., Werner F. 3-149

Track "Supply Networks Design And Management"

► **Flexible And Collaborative Production**

[WED 17th 10H30-12H30]

Chairs: Monostori L., Heavey C.

Room #7

- 10H30 Modeling Cooperation Links Within Networks Of Firms A Case Study
(FR) Benali M., Burlat P. 2-511
- 11H00 Analysis Of Collaborative Networks Using The Extremal Graph Theory
(IT) Antonelli D., Caroleo B. 2-517
- 11H30 Modelling Information Sharing In A VMI Environment With Inventory Hub
(IE) Lanning I., Heavey C. 2-523
- 12H00 A Modeling Framework For Organization Networks
(FR) Zaidat A., Vincent L., Boucher X. 2-589

► **Extended Enterprise**

[WED 17th 14H00-16H00]

Chairs: Burlat P., Antonelli D.

Room #7

- 14H00 Digital Traceability From Design To Manufacturing In Extended Enterprises
(ES) Garrido Campos J., Rodriguez Miguez L. 2-529
- 14H30 Model Checking In Planning Resource-Sharing Based Manufacturing
(EE) Otto T., Vain J. 2-535
- 15H00 A Survey On Some Aspects Of Ambient Intelligence
(HU) Kovács G.L., Kopácsi S. 2-541
- 15H30 Including Kitting Decisions In The Design Of Supply Chains For The Aeronautic Industry
(CA) Ramudhin A., Pronovost J. 2-553

► **Supply Chain Performance Measurement**

[THU 18th 10H30-12H30]

Chairs: Camarinha-Matos L.M., Pingaud H.

Room #7

- 10H30 Value Stream Oriented Planning Of Supply Networks
(IT) Matt D.T. 2-559
- 11H00 Management By Performance Of Supply Chain Processes With The Reed Method
(FR) Lauras M., Pingaud H., Lamothe J. 2-565
- 11H30 Performance Measurement In Supply Chain Supported By System Dynamics
(IT) Rafele C., Cagliano A.C. 2-571
- 12H00 Overall Performance Measurement In A Supply Chain
(FR) Clivillé V., Berrah L. 2-577

► **Virtual Organizations**

[THU 18th 16H30-18H30]

Chairs: Villa A., MacCarthy B.

Room #7

- 16H30 Creation Of Virtual Organizations In A Breeding Environment
(PT) Camarinha-Matos L.M., Afsarmanesh H. 2-595
- 17H00 A Methodology For Performance Analysis Of SMEs Networks
(IT) Villa A., Antonelli D., Cassarino I. 2-605
- 17H30 Process Improvement In A Virtual Organization Focused On Product Development Using Collaborative Environments
(MX) Penaranda N., Galeano N., Romero D., Mejía R., Molina A. 2-611
- 18H00 Variety, Postponement And Reconfiguration: Insights From Automotive Order Fulfilment Systems
(GB) MacCarthy B., Brabazon P.G. 2-505

► **Supply Networks**

[FRI 19th 10H30-12H30]

Chairs: O'Brien C., D'Amours S.

Room #7

- 10H30 Rebate System For Quality Improvement Under Supply Chain Environment
(JP) Kusakawa E., Kudo K., Ohta H. 2-617
- 11H00 A Preliminary Study On Safety Stock Placement In Capacitated Supply Chains
(BE) Sitompul C., Aghezzaf E.-H., Chen H., Dullaert W. 2-623
- 11H30 Dynamical Synthesis And Reconfiguration Of Competence-Cell-Based Production Networks
(DE) Ivanov D.A., Zschorn L., Kaeschel J., Sokolov B.V., Archipov A.V. 2-629
- 12H00 An Optimization Model For Tailings Distribution In An Oilsand Industry
(CA) Hammami A., Abbaoui Y., Savoie C., Ait-Kadi D. 2-635

► **OR Methods For Supply Chain
Design And Management**

[FRI 19th 14H30-16H30]
Room #7

Chairs: Martel A., Baptiste P.

14H30	A Petri Net Based Decision Support System For Purchasing Management In Supply Chains (IT) Costantino N., Dotoli M., Falagario M., Fanti M.P., Iacobellis G.	2-641
15H00	A Lagrangean Heuristic For An Inbound Supply Chain (MA/FR) Kebe S., Penz B., Sbihi N.	2-647
15H30	On The Selection Of Effective And Robust Supply Chain Network Designs (CA) Klibi W., Martel A.	2-653
16H00	Investment And Supply Chain Infrastructure (FR) Kogan K., Tapiero C.S.	2-659

Track "Production And Logistics"

► **Forecasting In Logistics
Of Production And Inventory**

[WED 17th 10H30-12H30]
Room #8

Chairs: Fildes R., Pashkevich M.

10H30	Demand Forecasting For Multiple Slow-Moving Items With Low Consumption And Short Requests History (FR) Dolgui A., Pashkevich M.	3-161
11H00	Why Do Companies Not Produce Better Forecasts Overtime? An Organisational Learning Approach (GB) Nikolopoulos K., Stafylarakis M., Goodwin P., Fildes R.	3-167
11H30	Smoothing And Adjustments Of Demand Forecasts For Inventory Control (GB) Syntetos A.A., Boylan J.E.	3-173

► **Dynamic Lot Sizing**

[WED 17th 14H00-16H00]

Chairs: Brahimi N., Dauzère-Pérès S.

Room #8

14H00	Lot Streaming And Pegging To Integrate Production Planning And Scheduling (FR) Robert A., Le Pape C.	4-11
14H30	Dynamic Programming Approach For A Capacitated Lot Sizing Problem Coupled With Transportation Activities (FR) Akbalik A., Larbi R., Penz B.	3-179
15H00	Capacitated Lot-Sizing Problem With Setup Times, Stock And Demand Shortages (FR) Absi N., Kedad-Sidhoum S.	3-185
15H30	A New Approach For Solving Integrated Planning And Scheduling Problem (FR) Wolosewicz C., Dauzère-Pérès S., Aggoune R.	3-191

► **Reverse Logistics**

[THU 18th 10H30-12H30]

Chairs: Riopel D., Wadhwa S.

Room #8

10H30	Combining Reverse Logistics Transport Of Hazardous Material Returns With Distribution (CA) Lambert S., Riopel D.	3-197
11H00	Operational Vehicle Routing Within Hydro-Quebec's Reverse Logistics Network (CA) Ayas J., Riopel D., Langevin A.	3-203
11H30	A Make-To-Stock Queue With Product Returns (FR) Gayon J.-P.	3-209
12H00	Intelligent Agent Technology For Reverse Logistics (IN) Wadhwa S., Madaan J.	3-215

Track "Production Planning And Inventory Control"

► Production Planning Under Uncertainties

[THU 18th 16H30-18H30]

Chairs: Frein Y., Langevin A.

Room #8

- 16H30 A SubOptimal Policy Applied To Production Planning Problem Under Exogenous Demand
(BR) Silva Filho O.S., Cezarino W. 3-229
- 17H00 A Local Search Algorithm For The Inventory Matching Problem In A Steel Company
(BE) Raa B., Van Der Stricht W. 2-359
- 17H30 Decision Support For Supply Chain Planning Under Uncertainty
(FR) Galasso F., Merce C., Grabot B. 3-235
- 18H00 Evaluating The Impact Of Misplacement Errors On Decentralized Retail Supply Chain
(FR) Rekik Y., Jemai Z., Sahin E., Dallery Y. 3-247

► Advances In Inventory Policies

[FRI 19th 10H30-12H30]

Chairs: Hennet J.C., Kotov V.

Room #8

- 10H30 An Analysis Of Forecast Based Reorder Point Policies: The Benefit Of Using Forecasts
(FR) Babai M.Z., Dallery Y. 3-253
- 11H00 A Discrete EOQ Problem With Maximum Order Size Costs
(BY) Kovalyov M.Y., Cheng T.C.E., Kotov V., Ng C.T. 3-259
- 11H30 Evolution Of Kanban Systems Thanks To A (Max, +)- Algebra Analysis
(FR) Cottenceau B., Hardouin L., Ouerghi I. 3-265
- 12H00 Efficient Heuristics To Design A Stock Of Semi-Finished Products
(FR) Yahiaoui A., Frein Y. 3-271

► Information Sharing And Coordination

[FRI 19th 14H30-16H30]

Chairs: Wortmann J.C., Riane F.

Room #8

- 14H30 Supply Chain Modelling And Control Under Proportional Inventory-Replenishment Policies
(GB) Papanagnou C., Halikias G.D. 3-277
- 15H00 Inventory Control In A Decentralized Two-Stage Make-To-Stock Queuing System
(FR) Arda Y., Hennet J.-C. 3-283
- 15H30 A Framework For Information Sharing And Cooperation In A Depot Problem
(FR) Mehrabi A., Campagne J.-P., Baboli A. 3-289
- 16H00 Analysis Of RHF Contracts Under Highly Variable Externalised Demand
(IE) Walsh P.M., Williams P.A., Heavey C. 3-295

Track "Transportation And Logistics"

► Routing Problems

[WED 17th 14H00-16H00]

Chairs: Proth J.M., Delorme X.

Room #9

- 10H30 A Multi Objective Model For The Robust Aircraft Routing
(IN) Nitika, Pal M.N., Pal A.K. 3-303
- 11H00 A Location-Districting Heuristic For Arc Routing Problems
(GB) Muyldermans L. 3-309
- 11H30 Hybrid Genetic Algorithm To Approach The DaRP In A Demand Responsive Passenger Service
(IT) Carotenuto P., Cis C., Storchi G. 3-315
- 12H00 Evolutionary Algorithms For Capacitated Arc Routing Problems With Time Windows
(FR) Ramdane-Cherif W. 3-321

► **Traffic Control**

[WED 17th 10H30-12H30]

Chairs: El Moudni A., Dobrowolski G

Room #9

- 14H00 Analysis Of Optimal Trajectory For Re-Entry Vehicle
(KR) Lee D., Cho K. 3-327
- 14H30 An Urban Traffic Control System Using Timed Coloured Petri Nets
(TW) Huang Y.-S., Chung T.-H. 3-333
- 15H00 Multi-Agent Model Predictive Control For Transportation Networks: Serial Versus Parallel Schemes
(NL) Negenborn R.R., De Schutter B., Hellendoorn H. 3-339
- 15H30 Bond-Graphs Traffic Flow Modelling And Feedback Control
(FR) Jordanova V., Abouaissa H., Jolly D. 3-345

► **Timetabling In Public Transportation**

[THU 18th 10H30-12H30]

Chairs: Boimond J.L., El Moudni A.

Room #9

- 10H30 Spectral Theory In (Max, Plus) Algebra For Performance Evaluation In A Transport Network
(FR) Nait-Sidi-Moh A., Manier M.-A., El Moudni A. 3-363
- 11H00 Designing A Multi-Agent System For Cooperative Train Dispatching
(NL) D'Ariano A., Hemelrijk R. 3-369
- 11H30 Timetable Synthesis Using (Max, +) Algebra
(FR) Houssin L., Lahaye S., Boimond J.-L. 3-375
- 12H00 Stability Evaluation Of A Railway Timetable At The Station Level
(FR) Delorme X., Gandibleux X., Rodriguez J. 3-381

► **OR-Case Studies And Data Mining**

[THU 18th 16H30-18H30]

Chairs: Rönnqvist M., Delorme X.

Room #9

- 16H30 Destination Estimation From Public Transport Smartcard Data
(CA) Trepanier M., Chapleau R. 3-393
- 17H00 Usage Of OR-Tools For Logistics Support In Forest Operations At Sveaskog After The Storm
Gudrun
(NO) Broman H., Frisk M., Rönnqvist M. 4-145
- 17H30 Scheduling Moves Within Railcar Maintenance Centers
(FR) Ramond F., Dauzère-Pérès S., De Almeida D. 3-405
- 18H00 Mining Public Transport User Behaviour From Smart Card Data
(CA) Agard B., Morency C., Trepanier M. 3-399

Track "Location And Dynamic Pricing"

► **Locational Analysis**

[FRI 19th 10H30-12H30]

Chairs: Kolokolov A., Levin Y.

Room #9

- 10H30 Solving Minimax Location Problems On Networks With Admissible Maximal Distances
(RU) Zabudsky G.G., Filimonov D.V. 3-413
- 11H00 Ant Colony Optimization Algorithm For The Capacitated Plant Location Problem
(RU) Levanova T.V., Loresh M.A. 3-419
- 11H30 A Bicriteria Problem Of Optimal Service Centers Location
(RU) Kolokolov A.A., Zaozerskaya L.A. 3-425
- 12H00 New Formulations And Valid Inequalities For The Toll Setting Problem
(BE) Heilporn G., Labbé M., Marcotte P., Savard G. 3-431

► **Revenue Management And Dynamic Pricing**

[FRI 19th 14H30-16H30]

Chairs: Levin Y., Tapiero C.

Room #9

14H30	A Bilevel Approach To Optimal Pricing (FR) Brotcorne L., Côté J.-P., Marcotte P., Savard G.	3-443
15H00	Revenue Management Of Auto Train At Amtrak (US) Sibdari S., Lin K., Chellappan S.	3-449
15H30	Optimal Product Segmentation With Strategic Customers (CA) Kim S.-W., Anderson C.K, Wilson J.G.	3-455
16H00	Dynamic Pricing With Online Learning Of General Reservation Price Distribution (CA) Levina T., Levin Y., McGill J., Nediak M.	3-461

Track "Novel Models And Approaches For Semiconductor Manufacturing"

► **Round Table With Industrials And Academics
On "Gap Between Theory And Practice"**

[WED 17th 10H30-12H30]

Room #4

Chairs: Dauzère-Pérès S., Ronchi R.

10H30	Gap Between Theory And Practice (US) Ignizio J.	
11H00	Round Table With Industrials And Academics <i>Industrials, Academics</i>	

► **Automated Material Handling Systems**

[WED 17th 14H00-16H00]

Chairs: Sturm R., Montoya-Torres J.R.

Room #4

14H00	Zone-Based Vehicle Control In Unified AMHS For Wafer Fabs (CO) Montoya-Torres J.R., Dauzère-Pérès S., Vermariën L., Marian H.	2-673
14H30	Integration Of Real Factory Variability In AMHS Simulations For Wafer Fabs (DE) Glueer D., Sturm R.	2-679
15H00	Approach For Artificial Load Generation For Acceptance Test Of AMHS (DE) Fischmann C., Muckenhirn R., Sturm R.	2-685

► **Industrial Session**

[THU 18th 10H30-12H30]

Chairs: Vialletelle P., Glüer D.

Room #4

10H30	"Gantt Charts For Production Flow" Framework (IT) Genua C., Giuffrida S., Rinaudo S.	2-691
11H00	Creation Of E-Learning Content For Microelectronics Manufacturing (DE) Oechsner R. et al.	4-29
11H30	Flying Wafer - A Standardised Methodology For Multi-Site Processing Of 300 Mm Wafers At Research And Development-Sites (DE) Frickinger J. et al.	4-59
12H00	An Overview Of An Original Wip Management Framework At A High Volume / High Mix Facility (FR) Vialletelle P., France G.	4-89

► **Production Planning And Control**

[THU 18th 16H30-18H30]

Chairs: Sarin S., Kock A.

Room #4

- 16H30 Processes Clusters For Organisational Urbanism
(FR) Boucher X., Chapron J., Burlat P., Lebrun P. 2-697
- 17H00 The Mythical Advanced Planning Systems In Complex Manufacturing Environment
(TW) Lin C.-H., Hwang S.-L., Wang M.-Y.E. 2-703
- 17H30 Achieving Reduced Cycle Times In Semiconductor Manufacturing Via Effective Control Of The P-K
Equation Factors
(IL) Kalir A., Bouhnik S. 4-65
- 18H00 Lumped Parameter Modelling Of The Litho Cell
(NL) Kock A.A.A., Etman L.F.P., Rooda J.E. 2-709

► **Scheduling And Dispatching**

[FRI 19th 10H30-12H30]

Chairs: Fariborz J., Sarin S.

Room #4

- 10H30 A Survey Of Dispatching Rules For Operational Control In Wafer Fabrication
(US) Varadarajan A., Sarin S.C. 2-715
- 11H00 Bi-Criteria Scheduling On A Batching Machine With Non-Identical Job Sizes
(IR) Kashan A.H., Karimi B., Jolai F. 2-727
- 11H30 A Batch Optimization Solver For Diffusion Area Scheduling In Semiconductor Manufacturing
(CA) Artigues C., Dauzère-Pérès S., Derreumaux A., Sibille O., Yugma C. 2-733

Special Session On Education And Training

► **E-Learning And Innovative Pedagogies**

[FRI 19th 14H30-16H30]

Chairs: Szafnicki K., Cardeira C.

Room #4

- 14H30 Developing Of An Intelligent Enterprise Staff Electronic Learning Component
(LT) Bielskis A.A., Bielskis P., Povilanskas R. 2-747
- 15H00 Integrating Mobile Robots Development And Competitions In Engineering Curricula
(PT) Cardeira C., Sousa J.M., Caldas Pinto J.R., Ayala Botto M., Ramalho M., Sá Da Costa J. 2-753
- 15H30 Pid Controller Tuning Remote Experiment With Learning Environment Integration
(BR) Schaf F.M., Pereira C.E. 2-765
- 16H00 Web Enabled CNC Milling Machine Control
(PT) Dias N., Alvarinhas H., Quintã A., Santos J. 2-759

Track "Metaheuristics & Soft Computing In Industrial Applications"

► **Metaheuristics For Combinatorial Optimization**

[WED 17th 10H30-12H30]

Chairs: Siarry P., Teghem J.

Room #10

- 10H30 Simulated Annealing Applied To The Rotational Polygon Packing
(BR) De Castro Martins T., De Sales Guerra Tsuzuki M. 3-475
- 11H00 Multicriteria Maintenance Problem Resolved By Tabu Search
(BE) Lust T., Teghem J. 3-481
- 11H30 A Tabu Search Method For The Non-Oriented Two-Dimensional Bin-Packing Problem
(FR) El Hayek J., Moukrim A., Negre S. 3-487

► **Fuzzy Logic Or Metaheuristics
In Industrial Applications**

[WED 17th 14H00-16H00]
Room #10

Chairs: Amirat Y., Djouani K.

14H00	A Genetic Local Search Algorithm For Minimizing The Total Weighted Tardiness In A Job-Shop (FR) Essafi I., Mati Y.	3-499
14H30	Neural Modelling And Control Of A Crystal Growth Process In Cane Sugar Industry (RE) Beyou S., Grondin-Perez B., Benne M., Lorion R.	3-505
15H00	Fuzzy Controller Of The Air System Of A Diesel Engine (FR) Arnold J.-F., Langlois N., Chafouk H., Trémoulière G.	3-511
15H30	Fuzzy Controller Tuning For UPFC Boost Rectifier By Experimental Designs (FR) Faucher J., Tonero A., Maussion P.	3-517

► **Intelligent Systems
And Intelligent Information Processing**

[THU 18th 10H30-12H30]
Room #10

Chairs: Madani K., Mellouk A.

10H30	A Novel Method To Shorten Inspection Process: A Case Study (TW) Su C.-T., Yang T., Chen L.-S., Chiang T.-L.	3-529
11H00	Genetic Algorithms For Supply Management Problem With Lower-Bounded Demands (RU/FR) Borisovsky P., Dolgui A., Ereemeev A.	3-535
11H30	A Memetic Algorithm With Population Management For A Production-Distribution Problem (FR) Boudia M., Louly M.A., Prins C.	3-541
12H00	Rescheduling Of Logistic Processes Using GA And ACO (PT/DE) Silva C.A, Sousa J.M., Runkler T., Sá Da Costa J.	3-547

Track "Simulation In Industrial Engineering"

► **Simulation For Enterprise Engineering**

[THU 18th 16H30-18H30]

Chairs: L'Anton A., Habchi G.

Room #10

16H30	Simulation Platform In The Virtual Factory Laboratory System (CN) Fang H., Feng Y., Rong G.	3-555
17H00	A Simulation Study Of The Crankshaft Line In An Automotive Factory (KR) Moon D.H., Xu T., Shin W.Y.	2-347
17H30	Virtual Factory Laboratory System And Its Application (CN) Wu Y., Zhang J., Feng Y., Rong G.	3-567
18H00	A Simulation Testbed For Decision System Evaluation In A Furniture Manufacturing Group (FR) Klein T., Thomas A.	3-573

► **Simulation In Logistics**

[FRI 19th 10H30-12H30]

Chairs: Grimaud F., Zaikin O.

Room #10

10H30	Handling Uncertainty In Production Activity Control Using Proactive Simulation (FR) Cardin O., Castagna P.	3-579
11H00	Risk Analysis For Cooperation Policies Benefits In Reducing The Bullwhip Effect (FR) Mahmoudi J., Lamothe J., Thierry S.	3-585
11H30	Feasibility Evaluation Of Multi-Site Scheduling By Distributed Simulation Of Workshops (FR) Enjalbert S., Archimède B., Charbonnaud P.	3-591
12H00	XML-Nets For Simulation Of The Supply Chain Processes (RO) Serbencu A., Minzu V., Cernega D.C.	3-597

► **Simulation And Optimization**

[FRI 19th 14H30-16H30]

Chairs: Dolgui A., Korytkowski P.

Room #10

- 14H30 A Simulation Based Approach For Optimization Of Multi-Stage Production-Distribution Systems With Batch Order
(FR) Li J., Sava A., Xie X. 3-609
- 15H00 Using Constraint Programming And Simulation For Execution Monitoring And Progressive Scheduling
(FR/CA) Bidot J., Laborie P., Beck J.C., Vidal T. 3-615
- 15H30 Simulation And Integer Programming Approach For Efficient Shift Design
(FR) Trilling L., Albert F., Marcon E. 3-621
- 16H00 Optimization Of Production Capacity In Intangible Flow Production Systems
(PL) Korytkowski P. 3-627

Special Event: Innovative Engineering Techniques In Healthcare Delivery

► **Operation Management - I**

[WED 17th 10H30-12H30]

Chairs: Xie X., Xiao Y.

Room #5

- 10H30 Endoscopies Scheduling Problem: A Case Study
(BE/FR) Fei H., Combes C., Meskens N., Chu C. 3-635
- 11H00 Operations Management Related Activities For Home Health Care Providers
(FR) Chahed S., Matta A., Sahin E., Dallery Y. 3-641
- 11H30 Dynamic Management Of Perioperative Processes: A Modeling And Visualization Paradigm
(US) Xiao Y., Wasei M., Hu P., Wieringa P., Dexter F. 3-647
- 12H00 Optimization Methods For Surgery Planning Under Uncertain Demand For Emergency Surgery
(FR) Lamiri M., Grimaud F., Xie X. 3-653

► **Work Organization Optimization**

[WED 17th 14H00-16H00]

Chairs: Marcon E., Meskens N.

Room #5

- 14H00 Improving The Efficiency Of A Clinical Laboratory: A Mathematical Approach
(IT) Bruni M.E., Beraldi P., Conforti D. 3-659
- 14H30 Renovation Of Mercy Family Health Center
(US) Haji M., Wang L., Wong Y., Darabi H. 3-665
- 15H00 Nurse Scheduling Using Integer Linear Programming And Constraint Programming
(FR) Trilling L., Guinet A., Le Magny D. 3-671
- 15H30 How To Combine Transversal Staff Skills In Operating Rooms?
(FR) Albert F., Marcon E. 3-677

► **Process Engineering And Performance Evaluation**

[THU 18th 10H30-12H30]

Chairs: Dexter F., Ladet P.

Room #5

- 10H30 Monitoring Waiting Times (Mean Tardiness) On The Day Of Elective Surgery
(US) Dexter F., Marcon E., Epstein R.H. 3-683
- 11H00 Process Reengineering And Information System Design For Physical Examination Center
(CN) Qiang S., Xiaoyun Y., Zhibin J., Guotong Z. 3-689
- 11H30 Activity Simulation Within A Radiology Department With Limited Nurse Resources
(IT) Celano G., Fichera S., Guglielmino M.G., Trefiletti M. 3-695
- 12H00 Methodology For Designing Medical Devices Packages Based On Sterilisation Costs
(FR) Reymondon F., Pellet B., Marcon E. 3-701

► **Operation Management - II**

[THU 18th 16H30-18H30]

Chairs: Gourgand M., Combes C.

Room #5

- 16H30 Using Constraint Programming For Solving Dynamic Scheduling In The Endoscopy Unit
(FR) Elkhyari A., Combes C. 3-707
- 17H00 Supplying The Operating Theatre: Cyclic And Supply Chain Approaches
(FR) Hammami S., Ruiz A., Ladet P., Hadj-Alouane A.B. 3-713
- 17H30 Re-organizing The Pharmaceutical Supply Chain Dowsntream: Implementation A New Pharmacy
(FR) Hassan T., Baboli A., Guinet A., Leboucher G., Brandon M.-T. 3-727

► **Workflow In Health Care**

[FRI 19th 10H30-12H30]

Chairs: Xie X., Di Mascolo M.

Room #5

- 10H30 Tutorial: OR Efficiency For Staffing And Scheduling Before And On The Day Of Surgery (1/2)
(US) Dexter F.
- 11H00 Tutorial: OR Efficiency For Staffing And Scheduling Before And On The Day Of Surgery (2/2)
(US) Dexter F.
- 11H30 Organization Of The Production Of Sterile Medical Devices
(FR) Di Mascolo M., Gouin A., Ngo Cong K. 4-35
- 12H00 Innovations in Health Care Delivery: An Indian Case Study
(IN) Ravichandran N.

Industrial Case Studies

► **Process Modelling And Simulation**

[FRI 19th 14H30-16H30]

Chairs: Stahre J., Barth M.

Room #5

- 14H30 A Neural Network Architecture For Process Time Estimation - An Application In Petroleum Wells
Operations
(BR) Roisenberg M., Coelho D.K., De Freitas Filho P.J., Jacinto C.M.C. 4-17
- 15H00 Evaluation Of Online Optimization Using Dynamic Simulation Environment
(JP) Takatsu H., Nozaki T., Okada K. 4-41
- 15H30 Distributed Simulation Environment To Evaluate Manufacturing Systems Along Engineering
Processes
(JP) Inukai T., Hibino H., Fukuda Y. 4-77
- 16H00 Application Of Virtual Manufacturing In Developing Manufacturing System For The Lens Module Of
Phone-Camera
(KR) Moon D.H., Baek S.G., Zhang B.L., Jung J.Y., Kim Y.K., Song J.Y. 4-95



Poster Presentations

Authors have to present posters THURSDAY or FRIDAY (See below)

→ from 10H30 to 12H30

and

→ from 14H00 to 14H30

► Planning And Scheduling

[THURSDAY 18th]

Chairs: Dauzère-Pérès S., Montoya-Torres J.

Room #19

[10H30-12H30, 14H00-14H30]

Using Johnson's Algorithm To Approximate Some Flow-Shop Scheduling Problems With Unavailability Periods (FR) Allaoui H., Lamouri S., Artiba A.	3-45
Special Case Of The Single Machine Total Tardiness Problem Is NP-Hard (RU) Lazarev A.A., Gafarov E.R.	3-155
Minimizing Lmax And Cmax In A Job Shop Problem With Sequence-Dependent Setup Times (TN) Ben Chihaoui F., Dridi N., Hadj-Alouane A.B.	3-75
The Multi-Item Capacitated Lot-Sizing Problem With Setup Times And Additional Industrial Constraints (FR) Briton J., Hutt C.	4-107
Scheduling Challenges And Approaches In Semiconductor Manufacturing (FR) Bureau M., Dauzère-Pérès S., Mati Y.	2-739
Operator's Assignment Problem In Workshop Scheduling (FR) Cheurfa M., Baptiste P., Campagne J.-P., Grimaud F.	3-107

► Design Of Production Systems

[THURSDAY 18th]

Chairs: Dolgui A., Roelens M.

Room #19

[10H30-12H30, 14H00-14H30]

A Two-Period Stochastic Programming Model For Distribution Network Design (FR) Tanonkou G.A., Benyoucef L., Xie X.	2-377
About Configuration Under Uncertainty Of A Power Distribution Network (FR) Aubry A., Espinouse M.-L., Jacomino M., Raison B.	2-383
A Hybrid Ant Colony Optimization Algorithm For The Layout Problem (FR) Hani Y., Amodeo L., Yalaoui F., Chen H.	2-425
A New Neural Networks Approach For Optimal Machines Tools Selection (TN) Ben Khalifa R., Ben Yahia N., Zghal A.	2-461
Quadratic Assignment Problem: Easily Solvable Cases (BY/FR) Demidenko V., Dolgui A.	3-437

► **Decision Support Systems**

Chairs: Grimaud F., Xie X.

[THURSDAY 18th]

Room #19

[10H30-12H30, 14H00-14H30]

Distributed Multiagent Systems For Vertically Integrated Companies: Architecture And Interfaces (RU) Lebedev V.N., Asratyan R.E., Orlov V.L.	4-101
Sensitivity Analysis On A Dynamic Pricing Problem Of An M/M/c Queuing System (TR) Cil E.B., Karaesmen F., Örmeci E.L.	3-467
Learning Of Multilayer Neural Networks With Threshold Activation Functions For Pattern Classification (BY) Batura M.P., Ptitchkin V.A.	3-523
Macro-Micro Simulation Of Traffic Flow (FR) El Hmam M.S., Abouaissa H., Jolly D., Benasser A.	3-351
Metaheuristics Versus Spectral And Multilevel Methods Applied On An Air Traffic Control Problem (FR) Bichot C.-E.	3-493
Preventive Maintenance Of Manufacturing Systems Under Subcontractor Constraints (FR) Dellagi S., Rezg N., Xie X.	2-57
Multicriteria Decision Analysis For Investment Choice Of Helium Extraction Installation (DZ) Belmokhtar O., Aib M., Aboun N.	2-665
A Simulation Study Of The Crankshaft Line In An Automotive Factory (KR) Moon D.H., Xu T., Shin W.Y.	2-347
Epoch Time Synchronization Method With Continuous Update For Distributed Simulation (US) Lee S., Zhao X., Shendarkar A., Vasudevan K., Son Y.	3-603
Physical Resource Coordination In Manufacturing Systems (GB) Covanich W., McFarlane D., Brusey J.	1-565
Case Study: Integration Approaches For Information Management In Virtual Organization (EE) Kangilaski T.	1-691

► **Multi-Agent And Intelligent Systems**

Chairs: Vercouter L., Beaune P.

[FRIDAY 19th]

Room #19

[10H30-12H30, 14H00-14H30]

Formalising An Agent-Based Container Stacking Model Via Petri Nets (TN) Kefi M., Korbaa O., Ghedira K., Yim P.	3-357
Robot Path Planning Using Simulated Annealing (BR) De Sales Guerra Tsuzuki M., De Castro Martins T., Kawaoka Takase F.	1-175
Telematic Based Transport Device Tracking And Supervision System (PL) Szpytko J., Kocerba A., Tekielak M.	2-99
Evaluation Management In Ethically-Social Approach To Security (PL) Cetnarowicz K., Ciecwiwa R., Rojek G.	1-501
Agent-Based Control For Thermoforming Processes (CA) Albadawi Z., Boulet B., DiRaddo R., Girard P., Thomson V.	1-465
Creating Organizational Reality: The Pivotal Role Of Leadership (FR) Vaudelin J.-P., Devise O.	2-785
Application Of Expert Systems In Intelligent Transportation Systems (PL) Michalski R., Rychlik A., Szczyglak P., Szuszkiewicz J.	2-27
Supply Chain Modeling: The Agent Based Approach (IN) Wadhwa S., Bibhushan	1-471

► **Knowledge And Process Modeling**

Chairs: Boucher X., Burlat P.

[FRIDAY 19th]

Room #19

[10H30-12H30, 14H00-14H30]

Transformation Of Product Field Data Into Knowledge (CH) Bufardi A., Folan P., Kiritsis D., Xirouchakis P.	2-241
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Decisional Modelling For Engineer-To-Order (FR) Lattanzio T., Cauvin A.	2-793
Verification, Validation And Accreditation Of Enterprise Models (FR) Chapurlat V., Braesch C.	1-627
A Process Model Based Methodology To Support Conflict Management (FR) Ouertani M.-Z., Gzara-Yesilbas L., Lombard M.	1-777
An Appearance Fuzzy Sensor Integrating A Knowledge Model (FR) Schmitt E., Bombardier V., Charpentier P., Vogrig R.	4-113
ISO9000 Based Advanced Quality Approach For Continuous Improvement Of Manufacturing Processes (FR) Deeb S., lung B.	2-799
Using RFID For Waste Minimization In The Automotive Industry (DE) Nunes K.R.A., Schnatmeyer M., Thoben K.-D., Valle R.A.B.	3-221
Models Of Knowledge On Manufacturing Systems For Control Law Synthesis (FR) Deschamps E., Henry S., Zamai E.	1-331
Mixed Reality Experiment For Distributed Learning Environment In Pneumatics Systems (BR) Schaf F.M., Pereira C.E.	2-273
Component Based Human Machine Interface System To Support Agile Manufacturing (UK) Mellor E.W., Harrison R., West A.A.	1-535

► **Information Systems And Extended Enterprise**

[FRIDAY 19th]

Chairs: Vincent L., Morel G.

Room #19

[10H30-12H30, 14H00-14H30]

Outsourcing Through BPR And SCOR At Rhodia (FR) Wattky Crestan A., Neubert G., Bouras A.	4-131
Evaluating The Holistic Decision Architecture Using An Organizational Metrics System (CY) Menicou M.	1-597
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- _ **603** Submitted papers
 - 54** different countries are represented via the principal author of papers
 - 731** reviewers participated in the peer review process
 - 2000** reviews received (approximately)

- _ Number of presentations in the program is **442**:
 - 7** keynote academic speakers
 - 60** invited industrial presentations
 - 375** papers selected after the peer review process

- _ Preprints: about **3000** pages (edited books + CD-ROM)
 - Total number of selected authors: **950**

- _ Exhibition stands: more than **40**

- _ World wide representation

- _ **Confirmed participating companies**
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