

Université de Lorraine, France
LCOMS, Metz

October 28-30, 2015



Program

CIE45

45th International Conference on
Computers & Industrial Engineering

45th International Conference on
Computers & Industrial Engineering

CIE45

CIE45 PRESENTATION



Prof. Mohamed I. DESSOUKY
CIE45 Co-Chair
Editor-In-Chief, Computers &
Industrial Engineering



Prof. Imed KACEM
CIE45 Co-Chair
Area Editor, Computers &
Industrial Engineering

Welcome to CIE45! The 45th International Conference on Computers & Industrial Engineering (CIE39) is organized to disseminate recent theoretical and methodological developments, significant technical applications, case studies and survey results in the area of Computers, Industrial Engineering, Management and other related areas.

The conference consisted of both plenary sessions and technical sessions, focusing on theory and applications in industrial engineering. It has attracted about 300 submissions from about 46 countries and regions. After a careful evaluation, about 200 submissions to the conference were accepted for inclusion in the final program from Algeria, Australia, Belgium, Brazil, Canada, Chile, China, Colombia, Cyprus, Denmark, Egypt, France, Germany, Greece, Hong Kong, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Korea, Lebanon, Luxemboug, Mauritania, Morocco, Netherlands, Oman, Poland, Portugal, Qatar, Russia, Saudi Arabia, Senegal, Singapore, Slovakia, South Africa, Spain, Sudan, Taiwan, Tunisia, Turkey, United Arab Emirates, United Kingdom, and USA.

The conference aims to provide a very good opportunity for researchers and professionals of industrial engineering to exchange their ideas, gain insight from industry leaders, and enjoy the charm of the French history in Moselle.

Many people have assisted in the success of this conference. We would like to thank all the members of the Program and Organization Committees for their hard work and to express our gratitude to our sponsors for their assistance in the organization of this event. We would like also to express our thanks to all authors for contributing their research papers to the conference.

Prof. Mohamed I. DESSOUKY

Prof. Imed KACEM

CIE45 PRESENTATION



Dr. Sébastien MARTIN
CIE45 Organization
Committee Chair



Dr. Zsuzsanna ROKA
CIE45 Organization
Committee Co-Chair

Welcome to the Université de Lorraine, on the beautiful campus situated on the Ile du Saulcy, in the heart of Metz. The city can be reached from Paris by train in less than one hour and a half.

The 45th International Conference on Computers & Industrial Engineering (CIE45) is organized by the LCOMS Laboratory of Université de Lorraine, with the Computers & Industrial Engineering Journal as technical sponsor and is supported by CNRS-GDR RO 3002, I⁴e², ROADEF, GDR MAC, Metz Métropole and Région Lorraine.

The conference organization is supervised by a team of ten researchers of the LCOMS Laboratory to provide you a nice and interesting event. We hope you will enjoy the social programs, the visit of the city by the "little train" followed by the visit of the Cathedral or the visit of the Pompidou Museum. We are also very happy to offer you the Gala diner in a prestigious place of Metz, the Arsenal. This place has been a Napoleonian military buiding, close to the Esplanade Park giving access to the centre of the city and to the lake bordering Ile du Saulcy.

There are nice cafes and restaurants in the places Saint Jacques, Saint Louis, de Chambre, where you can taste some local specialities like quiche lorraine, pâté lorrain and mirabelle products.

We hope that this event will also be a good occasion for you to create new collaborations, to develop new projects and scientific partnerships, around a coffee or during the lunches. Three rooms (E100, D116 and D102) are available for deeper discussions and work.

Dr. Sébastien MARTIN

Dr. Zsuzsanna ROKA

SCIENTIFIC COMMITTEE & CHAIRS

Conference Co-Chairs

Prof. Mohamed I. DESSOUKY, University of Southern California, USA

Prof. Imed KACEM, Université de Lorraine, France

International Program Committee Chair

Prof. Imed KACEM, Université de Lorraine - LCOMS, France

Special Sessions Chair

Dr. Hab. Alexandre SAVA, Université de Lorraine - LCOMS ENIM, France

International Program Committee

Allahverdi A. (KW), Alpan G. (FR), Artiba A. (FR), Artigues C. (FR), Benyoucef L. (FR), Birattari M. (BE), Borne P. (FR), Boschetti M. (IT), Botta-Genoulaz V. (FR), Brauner N. (FR), Caillaud E. (FR), Chatelet E. (FR), Chien C. (TW), Chu C. (FR), Chu F. (FR), Dammak A. (TN), Dessouky Y. (USA), Dotoli M. (IT), Dou R. (CN), Drias H. (DZ), El Baz D. (FR), Frein Y. (FR), Gardi F. (FR), Glock C. (DE), Goncalves G. (FR), Govindan K. (DK), Grabot B. (FR), Grunder O. (FR), Habbas Z. (FR), Hanafi S. (FR), Haouari M. (QT), Hifi M. (FR), Jansen K. (DE), Kellerer H. (AT), Klau G. (NL), Kuntz P. (FR), Kusiak A. (USA), Lallement P. (FR), Levner E. (IS), Lozano S. (ES), Mahjoub R. (FR), Martello S. (IT), Meskens N. (BE), Moench L. (DE), Moukrim A. (FR), Nagih A. (FR), Nickel S. (DE), Norre S. (FR), Otjacques B. (LU), Paschos V. (FR), Pierreval H. (FR), Quilliot A. (FR), Rabadi G. (USA), Romero C. (ES), Rousseaux F. (FR), Sarker R. (AU), Schmidt G. (DE), Sevaux M. (FR), Siarry P. (FR), Süer G. (USA), Telmoudi A. (TU), Trentesaux D. (FR), Tsoukias A. (FR), Weber G.W. (TR), Wolfler Calvo R. (FR), Xie M. (HK), Zeng X. (FR).

ORGANIZATION COMMITTEE & CHAIRS

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Dr. Sébastien MARTIN, Université de Lorraine, France

Organization Committee Co-Chair

Dr. Zsuzsanna ROKA, Université de Lorraine, France

Organization Committee

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TECHNICAL PROGRAM

WELCOME RECEPTION 18:15, October 28th, 2015
Salles des examens – UFR MIM
Ile du Saulcy, Metz

October 28, 2015								October 29, 2015								October 30, 2015							
08:00 - 08:30 REGISTRATION								08:30 - 10:10 Technical Sessions								08:30 - 10:10 Technical Sessions							
08:30 - 10:10 Technical Sessions																							
A1	B1	C1	D1	E1	F1	G1		A3	A3	C3	D3	E3	F3	G3	A6	B6	C6	D6	E6	F6	G6		
10:10 - 10:30 Coffee Break								10:10 - 10:30 Coffee Break								10:10 - 10:30 Coffee Break							
10:30 - 11:15 Plenary Session 1								10:30 -11:15 Plenary Session 2								10:30 -11:15 Plenary Session 5							
11:15 - 11:55 OPENING CEREMONY								11:15 -12:00 Plenary Session 3															
11:55 - 13:25 Lunch								12:00 - 13:30 Lunch								11:30 - 13:30 Lunch							
13:25 - 15:05 Technical Sessions								13:30 - 15:10 Technical Sessions								13:30 - 15:10 Technical Sessions							
A2	B2	C2	D2	E2	F2	G2		A4	B4	C4	D4	E4	F4	G4	A7	B7	C7	D7	E7	F7	G7		
								15:10 - 15:30 Coffee Break								15:10 - 15:30 Coffee Break							
15:05 - 15:30 Coffee Break								15:30 -16:15 Plenary Session 4								15:30 -16:15 Plenary Session 6							
16:00 - 18:00 SOCIAL PROGRAM								16:15 - 17:55 Technical Sessions								16:15 - 18:20 Technical Sessions							
18:15 - 20:00 WELCOME RECEPTION								A5 B5 C5 D5 E5 F5 G5								A8 B8 C8 D8 E8 F8 G8							
								19:15 GALA BANQUET															

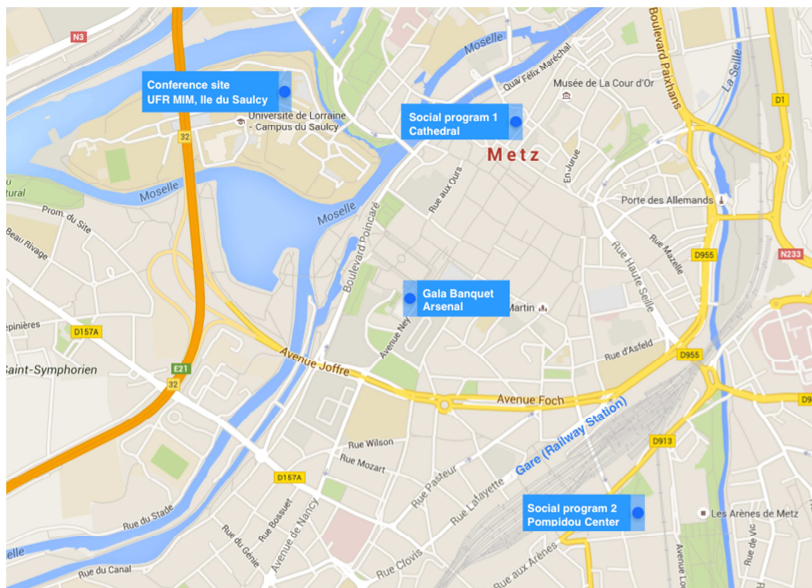
Sessions and rooms: UFR MIM, METZ, according to the following assignment:

Session	Opening Ceremony Plenary Sessions	A1-A8	B1-B8	C1-C8	D1-D8	E1-E8	F1-F8	G1-G8
Room	Amphi Poncelet	Salle Ampère	Salle IP1	Salle IP2	Salle IP5	Salle IP6	Salle D104	Salle D106

PRESENTATIONS The duration of each presentation is of 15 minutes plus 10 minutes for questions. Accepted file formats for your presentation are PDF and PPT.

Rooms E100, D116 and D102 are available for deeper discussions and work.

- GALA BANQUET** 19:30, October 29th, 2015
Salle de l'Orangerie, Arsenal, Metz
- COFFEE BREAK** UFR MIM, Ile du Saulcy, Metz
- SOCIAL PROGRAM** 16:00, October 28th, 2015
Visit of the Centre Pompidou of Metz
Visit of the city of Metz
(More information will be announced during the conference.)
- LUNCH** Salles des examens – UFR MIM
Ile du Saulcy, Metz
- PLENARY SESSIONS** Amphi Poncelet – UFR MIM
Ile du Saulcy, Metz
- WIFI ACCESS** Available from October 28 until October 30, 2015
ID (Identifiant): cie45
Password (Mot de passe): Z7sycoNd
SSID : Universite de Lorraine



ACCESS MAP

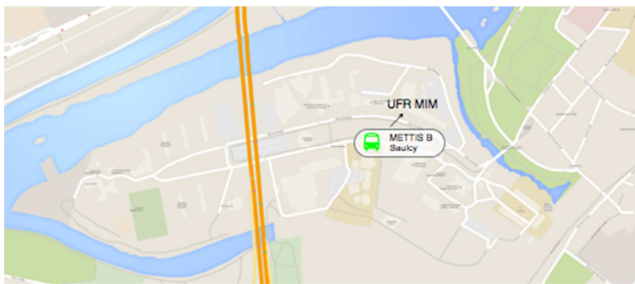
CONFERENCE SITE

UFR MIM
Ile du Saulcy
57045 Metz Cedex 1



UFR MIM is situated in Metz-Center, at about 5 minutes by bus from the center of the city. It can be easily reached from the Railway Station (Gare SNCF) by the bus Mettis B, direction *Saulcy*, stop *Saulcy*. Most of the time there is a bus every 10 minutes and the journey takes about 10 minutes. For other bus lines, see the official site LeMet (<http://lemet.fr/>).

How to get to the conference site



CIE45 CONFERENCE CHAIRS

Prof. Mohamed I. DESSOUKY received his B.Sc. in Mechanical Engineering from Cairo University, Egypt. He obtained his M.S. in Industrial Engineering at Purdue University and his Ph.D. in the same field at The Ohio State University. Dr. Dessouky was on the faculty of University of Illinois at Urbana-Champaign for 22 years, and then joined Northern Illinois University as Chair, Department of Industrial Engineering.



Currently, he is Research Professor, Daniel J. Epstein Department of Industrial and Systems Engineering, University of Southern California. He has been serving as Editor-in-Chief of *Computers & Industrial Engineering: An International Journal*, since 1998. He has consulted for many companies and organizations including Western Electric, Kalkan Foods, Andrew Corporation, and the United Nations Industrial Development Organization (Vienna, Austria). He also provided advice to many small industries. He has given seminars and/or engaged in consulting projects in several countries, including Egypt, Sudan, Brazil, Turkey, Kuwait, Indonesia, Japan, and China. His research interests are in scheduling, network analysis, and project management. He published many refereed articles in these areas.

Prof. Imed KACEM is Full Professor at the University of Lorraine, France, in Computer Science. He is the Founder and the Head of LCOMS Laboratory of the University of Lorraine since 2013 (LCOMS is the Laboratory of Design, Optimization and Modelling of Systems) after being the Head of the Computer Science Department. His scientific activity is in a transversal and interdisciplinary domain: the Operational Research.



More precisely, his contributions are related to the design of exact and approximate algorithms with a guaranteed performance for the NP-hard combinatorial problems. Such problems are mainly related to the scheduling theory. These research activities are at the frontier of the Computer Science and the Applied Mathematics, and the applications are interdisciplinary and various (production, packing in electronic design, Healthcare, Transportation...). His contributions have been published in referred journals (Discrete Applied Mathematics, Discrete Optimization, Journal of Combinatorial Optimization, Journal of Scheduling, JIMO, IJPE, JIM, JIMO, IJPR, EJOR, IJOR, 4OR, CAIE, IJCM, IEEE Transactions, CAOR,...). He obtained several distinctions such as the 2009 ROBERT FAURE Award attributed by the French Society of Operational Research and Decision Aid (ROADEF), the Great Award of Research 2010 from the Lorraine Universities, the participation to several editorial boards of international journals (like *Computers & Industrial Engineering-ELSEVIER*), the invitations as Keynote Speaker in several conferences (IEEE/CIE40, Japon (2010), FUBUTEC2011, United Kingdom (2011), IEEE/CoDIT2013, Tunisia (2013), IEEE/ICSCS2013, France (2013)).

SPECIAL SESSIONS CHAIR

Dr. Hab. Alexandre SAVA received his Master degree in Control and Industrial Informatics in 1998 at Politehnica de Bucarest (Romania), and his Ph.D in Computer Science in 2001 at Institut National Polytechnique de Grenoble (France). Since 2002, he is Assistant Professor (Maître de Conférences) at Ecole Nationale d'Ingénieurs de Metz (ENIM). He obtained his HDR (Habilitation à diriger des recherches) at Université Paul Verlaine de Metz in 2011 in Control.



He is a member of the LCOMS laboratory at the Université de Lorraine. His research area includes: *decision-aid systems, supervision and control, reconfigurable and discrete events systems*. He has published in leading international journals and was involved in important scientific projects, events and groups.

CIE45 ORGANIZATION CHAIRS

Dr. Sébastien MARTIN received his Master degree in Computer Science in 2007, and his Ph.D in Computer Science and Combinatorial Optimization at Université Paris-Dauphine in 2011. Since 2012, he is Assistant Professor (Maître de Conférences) at Université de Lorraine in Metz. His research area includes: operations research, complexity and graph theory, combinatorial optimization, integer linear programming, polyhedral and branch-and-cut algorithms. The aim of his research is to propose efficient exact algorithms for solving real world combinatorial problems. He studied various practical optimization problems having applications in the assignment of nurses to services the resolution of differential algebraic systems; parallel frequency assignment; scheduling and cloud computing. He has published in leading international journals.



Dr. Zsuzsanna ROKA is Assistant Professor in Computer Science, at the University of Lorraine, France. She obtained her Master of Science Degree in Computer Science at Jozsef Attila University in Szeged (Hungary) and her PhD at Ecole Normale Supérieure de Lyon, under the supervision of Pr. Jacques Mazoyer. Her first research area concerned cellular automata, especially the study of their properties when working on any regular network such as Cayley graphs.



She is now a member of the « Decision and Optimisation » team of the LCOMS Laboratory. Her recent research is focused on health-care systems in the area of combinatorial optimization. She has published in leading international journals.

Technical Content

PLENARY SESSIONS

KEYNOTE 1

Big Data Analytics for Digital Decision and Smart Production

By Prof. Chen-Fu CHIEN



KEYNOTE 2

Operations Research : Old Problems, New Paradigms

By Prof. Alain QUILLIOT

KEYNOTE 3

Partition Inequalities and Network Design

By Prof. A. Ridha MAHJOUB



KEYNOTE 4

What if Inductive Data-Driven Algorithms Become IT Commonplaces? About some epistemo-logical, ethical and legal consequences

By Prof. Francis ROUSSEAU

KEYNOTE 5

Applications of Metaheuristics to Manufacturing Scheduling for HDD, Panel and Semiconductor Devices

By Prof. Mitsuo GEN



KEYNOTE 6

Advanced Challenges in Real-time Optimization of Maintenance Decisions of Distributed Parallel Machines under Sustainable Production Constraints

By Prof. Kondo Hloindo ADJALLAH

TECHNICAL SESSIONS

SESSION A1 – G1: Wednesday, October 28th, 8h30-10h10

SESSION A1: Applied Operations Research

Chair: Philippe LACOMME

Salle Ampère

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- 14 A Beam Search Approach To The Disassembly Line Balancing Problem
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- 96 Determination Of Robust Solutions For The Dynamic Dial-A-Ride Problem
Giboulot Valentin, Chassaing Maxime, Lacomme Philippe, Alain Quilliot and Ren Libo
- 105 A Simulation-Optimization Approach for Robust Aircraft Routing
Mohamed Ben Ahmed, Farah Zeghal Mansour and Mohamed Haouari
- 157 Multi-Site Rcsp: Notations, Mathematical Model And Resolution Method
Arnaud Laurent, Nathalie Grangeon, Laurent Deroussi and Sylvie Norre
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SESSION B1: Integrated Maintenance and Logistics Problems

Chairs: Sid-Ali ADDOUCHE & Sofiene DELLAGI

Salle IP1

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- 154 Optimal Selective Maintenance Policy For Series-Parallel Systems Operating Missions Of Random Durations
Imene Djelloul, Abdelhakim Khatib, El-Houssaine Aghezaff and Zaki Sari
- 207 An optimal maintenance policy for transport vehicles in a supply chain under infrastructure/environment constraints
Asma Troudi, Sofiene Dellagi and Sid-Ali Addouche
- 151 Optimal Preventive Maintenance For A Two Dimensional Lease Contract
Bermawi P. Iskandar, Andi Cakravastia and Hennie Husniah
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SESSION C1: Data Analytics and Decision Making for Smart Management

Chair: Hsiao-Fan WANG & Jei-Zheng WU

Salle IP2

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- 199 The Effectiveness and Validation Scheme on Multiple Criteria Decision Making Methods
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- 248 Identify And Prioritize The Factors Influencing In Local Content
Sadegh Abedi, Reza Radfar, Tara Salek and Mitra Saboori
- 284 Analysis of the Consumption Patterns From Smart Meter
Hsiao Fan Wang and Chia-Yu Shen
- 195 Data Mining For Eco-Driving Behavior And Fuel Consumption Analysis
Chia-Yu Hsu and Yi-Ting Wang
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SESSION D1: Manufacturing

Chair: Gursel SUER

Salle IP5

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- 110 Analyzing Buffer Allocations Using Utilization-Based Search Methods
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- 175 A Bi-Level Multiobjective Optimization Approach For Layout Design Of Robotic Cellular Manufacturing Systems
Kazuhiro Izui, Xiaobo Bai, Takayuki Yamada, Shinji Nishiwaki, Akio Noda and Tatsuya Nagatani
- 176 Routing Proposition To Face Myopia In Flexible Manufacturing System Distributed Control
Nassima Aissani and Damien Trentesaux
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SESSION E1: Quality Management/Engineering, Reliability and Maintenance

Chair: Alexandre SAVA

Salle IP6

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- 70 An improved method with interval-valued intuitionistic fuzzy setting to failure mode and effects analysis based on complex proportional assessment
Z. Hajjigahseini, S.M. Mousavi and A. Siadat
- 240 A study of linear multi-state systems with interval-valued states
Wei Wang, Junlin Xiong and Min Xie
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SESSION F1: Supply Chain Management & Logistics

Chair: Anass NAGIH

Salle D104

- 254 Study Of Improved Fiscal Performance Of Hospital Supply Chain By Centralizing Pharmacies
Driss Serrou and Abdellah Abouabdellah
- 46 Swift Trust in Humanitarian Logistics Operations: An Ongoing Work
Qing Lu, Mark Goh and Robert de Souza
- 50 Risk-averse procurement strategy in presence of strategic customer
Lei Shu and Feng Wu
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SESSION G1: supply chain management & logistics

Chair: Malek MASMOUDI

Salle D106

- 11 Exergy analysis: A new paradigm for modelling inventory systems
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- 8 An Entropic Comparison Between The Economic Production Quantity (Epq) And Just-In-Time (Jit) Models
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- 27 Optimal Configuration Of Multi-Echelon Assembly Supply Chains With Augmented Lagrange Coordination In An Industrial Cluster
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SESSION A2: Applied Operations Research

Chairs: Zineb HABBAS & Pierre LAROCHE

Salle Ampère

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- 220 Lagrangian Relaxation Dominance Based Heuristic For Solving A Shortest Path Problem With Resources Constraints
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- 225 On Balancing Bicycle Sharing Systems : A Hybrid Ga For Solving The Multiple Vehicles Routing Problem
Kadri Ahmed Abdelmoumene, Kacem Imed and Labadi Karim
- 234 Bees Swarm Optimization metaheuristic Guided by Decomposition for solving MAXSAT
Youcef Djenouri, Zineb Habbas and Wassila Aggaoune-Mtalaa

SESSION B2: Transportation Systems

Chair: Abdelaziz DAMMAK

Salle IP1

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Mohamed Amine Masmoudi, Wu Peng, Chu Feng and Abdelaziz Dammak
- 136 A hybrid algorithm for a static dial-a-ride problem
Mohamed Amine Masmoudi, Chu Feng, Wu Peng and Abdelaziz Dammak
- 146 Two-Echelon Vehicle Routing Problem With Simultaneous Pickup And Delivery: Mathematical Model And Valid Inequalities
Onder Belgin, Ismail Karaoglan and Fulya Altiparmak
- 230 The Multi-Depot Topology For The Automated Transit Network Problem
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SESSION C2: Supply Chain Management & Logistics

Chair: Anass NAGIH

Salle IP2

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- 213 Conception And Implementation Of A Decision Support System Heuristic For Selecting Medicines Suppliers In The Hospital Sector
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- 241 A Spare Part Inventory Management Problem Considering Region Stock Coordination
Donghai Wang and Qihong Zhao
- 253 Supply Chain Of Blood Products And Its Optimization
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- 256 The Impact Of Promotional Signs On Newsboy's Ordering Decision
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SESSION D2: Computers & Industrial Engineering in fashion industry

Chair: Sébastien THOMASSEY

Salle IP5

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- 54 Men Underwear Design – Main Problems And Solutions
Kuzmichev Victor and Cheng Zhe
- 94 Modification Of Pattern Block For Getting The Similar Silhouette For System "Female Body In Different Sizes - Clothes"
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- 122 Building An Intelligent Collaborative Garment Design Platform By Controlling Human Perception On 3d Virtual Products
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SESSION E2: Heuristics and Approximation Algorithms for Scheduling Problems
Chairs: Abdelghani BEKRAR & Jouhaina CHAOUACHI Salle IP6

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Frank Phillipson
- 216 Mixed integer programming formulations for the single processor scheduling problem with time restrictions
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- 228 An Improved Multi Agent Particle Swarm Optimization To Solve Flexible Job Shop Scheduling Problem
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- 169 Statistical Learning Versus Machine Learning: Integrating Estimation Of Distribution Algorithms Versus Q-Learning Into Meta-Raps
Arif Arin and Ghaith Rabadi

SESSION F2: Supply Chain Management & Logistics
Chair: Sarada P. SARMAH Salle D104

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- 165 A Retailer-Supplier Supply Chain Models With Trade Credit Default Risk Under A Supplier-Stackelberg Game
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- 166 Value Analysis Dashboard in Supply Chain Managementn
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- 99 Proposing a resilient reschedule design in liner shipping considering two recovery strategies and CO2 emissions
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SESSION G2: Supply Chain Management & Logistic
Chairs: Gulgun ALPAN & Abdelaziz DAMMAK Salle D106

- 65 Supply chain configuration for diffusion of new Product
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- 100 Multidimensional Failure Probabilities Based On Symmetric And Asymmetric Product Characteristic Distribution Models Within High-Precision Manufacturing Processes
Stefan Bracke and Bianca Backes
- 102 A Modeling Framework Based On Scor Model Towards Supply Chain Risk Management
Saleh Eddine Ben Jbara, Pierre David and Gülgün Alpan
- 148 An Ordering Policy in a Serial Two-echelon Inventory System to Eliminate the Uncertainty in Upstream Demand
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SESSION A3 – G3: Thursday, October 29th, 8h30–10h10

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Chair: Lei WU

Salle Ampère

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- 263 A Study On Capacity Pricing And Reservation Problem Under Option Contract
Yi Tao, Ek Peng Chew and Loo Hay Lee
- 264 Operational Rules And Simulator To Dynamic Slab Stack Shuffling Problem
Gislaine Almeida, Michelle Botelho, Gabriela Breder, Gabriel Bianchi and Leandro Resendo
- 268 Electricity cost and makespan optimization on a single batch processing machine under Time-of-use pricing policy
Junheng Cheng, Feng Chu, Ming Liu and Weili Xia

SESSION B3: Cellular manufacturing

Chairs: Yong YIN & Ana XAMBRE

Salle IP1

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- 208 Cell Formation Problem: A Genetic Algorithm Based On An Inter-Operation Flow Matrix
Ana Raquel Xambre
- 236 Principles Of Lean Planning And Control
Jan Riezebos
- 247 Lean and agile productions: an evolution process by seru systems
Yong Yin

SESSION C3: Data Mining, Knowledge Discovery and Computational Intelligence

Chairs: Franc MARCHETTI & Francis ROUSSEAU

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- 35 The Establishment And Development Of The Customs Information Technology Data Platform
Changhu Liu, Sihan Zhang and Bozhi Yu

SESSION D3: Artificial Intelligence in Medicine

Chairs: Amir HAJJAM EL HASSANI, Emmanuel ANDRES & Samy TALHA

Salle IP5

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SESSION E3: Data Mining, Knowledge Discovery and Computational Intelligences
Chairs: Nicolas MUSEUX Salle IP6

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Samah Elrhanimi, Laila El Abbadi and Abdellah Abouabdellah
- 152 A Svr/Hadoop Based Traffic Forecasting Scheme Using Big Open Data
Ching-Hao Lai
- 245 Locate: Inferring Timetable Of Individuals From The Gps Traces Of Their Vehicles
Nicolas Museux
- 258 A Real Time Data Mining Rules Selection Model For The Job Shop Scheduling Problem
Mohamed Habib Zahmani, Baghdad Atmani, Abdelghani Bekrar and Nassima Aissani
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SESSION F3: Computers & Industrial Engineering in fashion industry
Chair: Sébastien THOMASSEY Salle D104

- 155 Simulation Based Optimisation Planning For A High Variety Textile Production
Brahmadeep and Sébastien Thomassey
- 185 Detecting The Morphology Of A Remote Individual Consumer In A Web-Based Environment
Pascal Bruniaux, Maria Kulinska and Xianyí Zeng
- 211 Automatic Definition Of Adaptive Morphotype From A 3d Scan Population For Virtual Try-On
Moez Hamad, Sébastien Thomassey and Pascal Bruniaux
- 232 Apparel Sales Performance: Findings Of A Case Study Of Fashion And Fast Fashion
Adriana P. Martins, Sébastien Thomassey and Pascal Bruniaux
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SESSION G3: Heuristics and Approximation Algorithms for Scheduling Problems
Chair: Christoph GLOCK Salle D106

- 142 A New Branching Scheme For The Open Pit Mine Production Scheduling Problem
Mehran Samavati, Daryl Essam, Micah Nehring and Ruhul Sarker
- 143 The Impact Of Batch Shipments On The Economic Lot Scheduling Problem
Fabian Beck and Christoph Glock
- 170 Considering Product Dimensionality And Utilization Rates On The Performance Of Different Production Strategies For The Economic Lot Scheduling Problem
Raul Cortes-Fibla, Pilar Isabel Vidal-Carreras and Jose Pedro Garcia-Sabater
- 178 Stochastic Scheduling Of An Automated Two-Machine Robotic Cell With In-Process Inspection System
Mehdi Fomani, Kate Smith-Miles, Indra Gunawan and Asghar Moeini

SESSION A4 – G4: Thursday, October 29th, 13h30–15h10

SESSION A4: Applied Operations Research

Chairs: Amir ELALOUF & Christian MINICH

Salle Ampère

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- 273 Conversion Algorithms with a reward function and interrelated conversion rates
Pascal Schroeder, Robert Dochow and Günter Schmidt
- 103 A Column Generation Algorithm For The Team Orienteering Problem With Time Windows
Racha El-Hajj, Aziz Moukrim, Bilal Chebaro and Mohamed Kobeissi
- 121 Resource Constrained Project Scheduling: A Branch And Cut Approach
Ripon Kumar Chakraborty, Ruhul Sarker and Daryl Essam
- 257 A Memetic algorithm for the vehicle routing problem with stochastic demands
Andres Gutierrez, Laurence Dieulle, Nacima Labadie and Nubia Velasco

SESSION B4: Multi-Criteria Decision Making and Decision Analysis

Chair: Sébastien MARTIN

Salle IP1

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- 153 Multi-Criteria Analysis Of Supplier Selection Using Ahp, Fuzzy-Ahp, Fuzzy-Topsis, Irp And Weighted-Irp: A Comparative Study
Nilesh R. Ware, Surya Prakash Singh and D. K. Banwet
- 158 An Investigation On Crm Implementation Failure Through A System Approach Case Study: An Iranian Private Travel Agency
Abouzar Ilkhani, Shahnaz Piroozfar and Seyed Hossein Hosseini
- 159 Analysis Of Workshop Location With Lagrange Interpolation
Sara Haddou Amar and Abdellah Abouabdelah
- 172 Identify Software Quality Indicators Based On Fuzzy Delphi Method
Shahnaz Piroozfar, Roohollah Barzi and Mohammad Ali Afshar Kazemi

SESSION C4: Environment & Green Industrial Engineering

Chair: Matthias BECKER

Salle IP2

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- 26 An Evolutionary Approach for Scheduling Solar-Thermal Power Generation System
Md Forhad Zaman, Dr Saber Mohammed Elsayed, A.Prof. Tapabrata Ray and A.Prof. Ruhul A. Sarker
- 58 Empirical Research On Key Influencing Factors Of Co2 Emission In The Running Process Of Urban Residential Buildings
Xianchun Tan, Lele Dong, Baoguang Xu, Baihe Gu and Dexue Chen
- 226 Eco-Efficiency For Sustainable Manufacturing Planning Decisions With Applications To Auto Parts Industry
Hager M. Salama, Noha M. Galal and Aziz E. Elsayed
- 229 Heuristic Approach For The Environmental Vehicle Routing Problem
Jouhaina Chaouachi and Ezzeddine Fatnassi

SESSION D4: Design & Complex Engineering Systems

Chair: Min XIE

Salle IP5

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- 238 Holonic Control System: Reference Design Architecture For South African Tooling Industrial Clusters
Mncedisi Trinity Dewa, Andre Francois Van der Merwe and Stephen Matope
- 192 Research On The Uncoupling Method Of Multidisciplinary Data Flow In Integrated Design For Complexengineering System
Fei Xiao, Qiang Liu and Bei Jia

- 202 Deciding The Level Of Automation During The Design Of Assembly Systems: Literature Review Of Decision Methods And A New Approach Proposal
Anas Salmi, Pierre David, Eric Blanco and Joshua D. Summers
- 147 Requirements Interoperability Method To Support Integrated Product Development
Anderson Luis Szejka, Osiris Canciglieri Junior, Eduardo Rocha Loures, Hervé Panetto and Alexis Aubry

SESSION E4: Supply Chain Management & Logistics

Chair: Xianyi ZENG

Salle IP6

- 173 Developing A Two-Stage P-Median Location-Allocation Model Considering Nonlinear Establishment Costs And Proposing A Recursive Two-Phased Algorithm
Mehdi Seifbarghy and Taiebeh Davoodabadi
- 189 Warehouse Pooling Specificities: A Preliminary Study
Mourad Makaci, Paul Reaidy, Karine Evrard Samuel, Valérie Botta Genoulaz and Thibaud Monteiro
- 24 Framework For Closed Loop Supply Chain Modeling
Hadi Fors, Nermine Harraz and M. Hamdy Elwany
- 275 Capacity sharing among truck owners: A collaborative approach to overcome overloading
Arindam Debroy and Sarada Prasad Sarmah

SESSION F4: Heuristics and Approximation Algorithms for Combinatorial Problems

Chairs: Mhand HIFI & Lei WU

Salle D104

- 106 A fast algorithm for solving the max-min knapsack problem with two scenarios
Thekra Aldouri, Mhand Hifi and Sagvan Saleh
- 107 An Statistical Approach For The Fine-Tuning Of Metaheuristics: A Case Study Combining Design Of Experiments And Racing Algorithms
Eduardo Barbosa, Edson Senne and Messias Silva
- 117 An Reactive Search for the Two-Edge Disjoint Survivable Network Design Problem with Relays
Adel Bouchakhchoukha, Mhand Hifi and Sagvan Saleh
- 118 Vector Evaluated Genetic Algorithm For The Bi-Objective Minimum Sum Coloring Problem
Hend Bouziri, Joughaina Siala and Olfa Harrabi

SESSION G4: Mining and classification models for Biomedical data or image analysis

Chair: Camel TANOUGAST

Salle D106

- 61 A Study on the Evaluation and Accuracy of Anatomic and Mirror Image Reconstruction Design Technique
Emad Abouel Nasr, Abdulrahman Al-Ahmari, Khaja Moiduddin, Mohammed Al Kindi and Ali Kamrani
- 87 Skull Failure-Correction Modelling Method By Symmetry Mirroring
Marcelo Rudek, Gustavo Campana Mendes, Osiris Canciglieri Junior and Marcos Da Silveira
- 88 Anatomic Prosthesis Modelling Based On Descriptors By Cubic Bézier Curves
Marcelo Rudek, Yohan Bonescki Gumiel, Gerson Linck Bichinho, Marcos Da Silveira and Osiris Canciglieri Junior

SESSION A5 – G5: Thursday, October 29th, 16h15–17h55

SESSION A5: Healthcare engineering and management

Chair: Malek MASMOUDI

Salle Ampère

- 85 A Heuristic For Definition Of Shifts In An Emergency Department
Karim Ghanes, Agapitos Diakogiannis, Oualid Jouini, Zied Jemai and Mathias Wargon
- 150 Evaluating The Adaptation Of A Dwelling To A Disabled Person: A Graph-Based Approach
Yahya Bouzoubaa, Christian Minich, Anass Nagih and Pruski Alain
- 174 A Probabilistic Choice Model For Location Of Preventive Health Care Facilities With Constrained Queuing System
Mehdi Seifbarghy and Leila Rostamian
- 203 Healthcare Logistic Network Models For Shared Resource Management
Imene Elhachfi Essoussi and Pierre Ladet

SESSION B5: Manufacturing

Chair: Koichi MURATA

Salle IP1

- 66 Investigation Of Visual Management Cases In Construction By An Analytical Framework From Manufacturing
Koichi Murata, Kazuki Nakajima, Koichi Kinoshita, Algan Tezel, Lauri Koskela, Patricia Tzortzopoulos and Hiroshi Katayama
- 149 A Study On Design Of Visual Management System For Improving Its Performance
Koichi Murata
- 193 Real-Time Production Performance Analysis And Exception Diagnosis System For The Internet Of Manufacturing Things
Yingfeng Zhang and Wenbo Wang
- 196 Metrics And Methods In Leanness Assessment: A Literature Review
Pinar Yurdaer and Huseyin Selcuk Kilic

SESSION C5: Heuristics and Approximation Algorithms for Scheduling Problems

Chair: Philippe LACOMME

Salle IP2

- 86 Extended Model Formulations For Cell Loading And Family Scheduling Problem With Individual Due Dates To Minimise Maximum Tardiness
Cemalettin Ozturk and Gursel Suer
- 104 Joint Resolution Of A Job-Shop Scheduling Problem With A Routing Problem
Murat Afsar, Philippe Lacomme, Libo Ren, Caroline Prodron and Daniele Vigo
- 111 Genetic Algorithms For Scheduling A No-Wait Two-Machine Flow-Shop To Minimize The Makespan Under Non-Availability Constraints
Faten Ben Chihaoui, Atidel B.Hadj Alouane and Imed Kacem
- 135 Stability measures for a stochastic multi-level job scheduling problem with daily working hour
Byung Jun Joo, Sang-Oh Shim, Tay Jin Chua and Tian Xiang Cai

SESSION D5: Applied Operations Research

Chairs: Eugene LEVNER & Amir ELALOUF

Salle IP5

- 277 A Matheuristic For Solving An Industrial Problem Of Cutting Mousse Blocks: A Practical Tunisian Case
Mariem Baazaoui, Hichem Kamoun and Saïd Hanafi
- 246 Improving The Complexities Of Fptas For Scheduling And Routing Problems
Eugene Levner, Amir Elalouf and Imed

- 252 Production order quantity under uncertainties and forecasts update: optimal control quantity using stochastic dynamic programming
Maxime Claisse, Zied Jemai and Chengbin Chu

SESSION E5: Manufacturing

Chair: Ibrahim Garbie

Salle IP6

- 15 Creating Index For Sustainability/Sustainable Development In An Industrial Estate
Ibrahim Garbie
- 47 Deadlock Control Design And Plc Implementation Of Manufacturing Systems
Husam Kaid, Abdulaziz El-Tamimi, Emad Abouel Nasr, Abdulrahman Al-Ahmari and Zhiwu Li
- 51 Robust Optimization To Design A Dynamic Cellular Manufacturing System Integrating Group Layout And Worker Assignment
Reza Kia, Mohsen Lashgari and Fariborz Jolai

SESSION F5: Polyhedra and Combinatorial Optimization

Chair: Ali R. MAHJOUB

Salle D104

- 45 A pseudo-polynomial size formulation for 2-stage 2-dimensional knapsack problems
Fabio Furini and Enrico Malaguti
- 93 The K-Node Connected Subgraph Problem: Formulation, Polyhedra And Branch-And-Cut
Meriem Mahjoub, Ibrahim Diarrassouba and A. Ridha Mahjoub
- 98 Energy Saving In Content-Oriented Networks
Nicaise Choungmo Fofack, Ali Ridha Mahjoub, Mohamed Yassine Naghmouchi and Nancy Perrot
- 205 The multi-terminal vertex separator problem: polyhedral analysis and branch-and-cut
Denis Cornaz, Youcef Magnouche, Ali Ridha Mahjoub and Sébastien Martin

SESSION G5: Virtual product development

Chairs: Jean-Yves DANTAN, Frédéric DEMOLY & Jérôme PAILHES

Salle D106

- 138 Product variety and reconfigurable process plan modeling for new manufacturing paradigms
Qing Xia, Alain Etienne, Jean-Yves Dantan and Ali Siadat
- 244 A Function Analysis Approach To Reduce Complexity In Product Design
Roozbeh Babaeizadeh Malmiry, Jean-Yves Dantan, Jérôme Pailhès and Jean-François Antoine
- 262 The Impact Of Immersive Virtual Reality On Collaboration In Design Meetings: A Comparative Study
Ahmad Al Khatib, Damien Fleche, Morad Mahdjoub and Jean-Claude Sagot

SESSION A6 – G6: Friday, October 30th, 8h30–10h10

SESSION A6: Healthcare engineering and management

Chair: Malek MASMOUDI

Salle Ampère

- 217 Quantitative Modelling Of Elderly People Flow Within French Heathcare System Behaviour
Fatima Zahra Hamdani, Lamya Jdaini, Malek Masmoudi and Jean Roche
- 222 Multi Criteria Decision Making Approach For Home Care Team Selection
Ikram Khatrouch and Malek Masmoudi
- 223 Maintenance Strategy Selection For Medical Equipments Using Fuzzy Multiple Criteria Decision Making Approach
Zeineb Ben Houria, Mariem Besbes, Bouthaina El Aoud, Malek Masmoudi and Faouzi Masmoudi
- 243 Hybrid Heuristic For Patients Tasks Scheduling On Medical Resources With Bed Allocation
Nour Al Houda Saadani, Maroua Helioui and Zied Bahroun

SESSION B6: System Simulation and Forecasting

Chair: Yasser DESSOUKY

Salle IP1

- 10 Simulating Performance For One-Dedicated-Lane Bus Rapid Transit/Light Rail Systems
Yasser Dessouky
- 19 Prediction of CPU Availability in Volunteer Computing Systems using Multivariate Time Series Modeling
Nahla Chabbah Sekma, Ahmed Elleuch and Najoua Dridi
- 71 Implementing PID Control for Adjustable Service-Rate Queueing System Simulations
Paul Babin and Allen Greenwood
- 115 Internet Prospects' Flows Forecasting For A Multi-Period Optimisation Model Of Offer/Demand Assignment Problem
Manel Maamar, Vincent Mousseau, Wassila Ouerdane and Alexandre Aubry

SESSION C6: Recent Metaheuristics & Scheduling

Chairs: Mitsuo GEN, Young Jae JANG & Gursel SUER

Salle IP2

- 281 Recent Hybrid Metaheuristics For Multiobjective Scheduling
Mitsuo Gen, Lin Lin, Wenqiang Zhang and Youngsu Yun
- 282 Hybridization Of Modified Cuckoo Search And Genetic Algorithm For Reliability Optimization Problems
Youngsu Yun, Jung-Bok Jo and Mitsuo Gen
- 283 Modeling And Analysis Of The Charging Infrastructure Allocation For A Multiple-Route Service Dynamic Wireless Charging Transportation System Using A Genetic Algorithm
Min Seok Lee, Seungmin Jeong and Young Jae Jang
- 285 Evaluation Of Island Genetic Algorithm Based Hierarchical Scheduler Organization For Multi-Objective Scheduling
Gursel Suer and Arkopaul Sarkar

SESSION D6: Manufacturing

Chair: Yasser DESSOUKY

Salle IP5

- 194 A New Flexibility Index For Machines Selection In Reconfigurable Manufacturing System Design Problem: Multiobjective Approach
Hichem Haddou Benderbal, Mohammed Dahane and Lyes Benyoucef
- 206 Hybrid Differential Evolution-Data Mining (Hdedm) Algorithm For Uncertain Dynamic Cms Problem
Fariborz Jolai, Mona Koushan and Ata Allah Taleizadeh

- 224 Towards A Dynamic Reconfiguration For Manufacturing System
Wiem Mrabet and Talel Ladhari
- 108 A Bi-Objective Model For A Cellular Manufacturing System Integrating Intra-Cell Layout And Processing Route Reliability
Yousef Nejatbakhsh, Shima Shirzadi, Reza Tavakkoli-Moghaddam, Ahmad Ebrahimi and Reza Kia

SESSION E6: Heuristics and Approximation Algorithms for Combinatorial Problems

Chairs: Mhand HIFI & Lei WU

Salle IP6

- 212 Mathematical Formulations for the Unrelated Parallel Machines with Precedence Constraints
Mohammed-Albarra Hassan Abdel-Jabbar, Imed Kacem, Sébastien Martin and Izzeldin M. Osman
- 144 A GraspXpels Approach For The Resolution Of The Integrated Production And Transportation Scheduling Problem
Phillipe Lacomme, Aziz Moukrim, Alain Quilliot, Daniele Vigo and Marina Vinot
- 235 Hybrid metaheuristic based on adaptive memory programming for the vehicle routing problem with two-dimensional loading constraints
Lei Wu, Mhand Hifi and Moudher Khalid Abdal-Hammed
- 261 A genetic algorithm approach to the single-vendor multi-customer integrated delivery-inventory problem
Zakaria Hammoudan, Benoit Beroule, Olivier Grunder, Oussama Barakat and Abdellah El Moudni

SESSION F6: Multi-Criteria Decision Making and Decision Analysis

Chair: Sarada P. SARMAH

Salle D104

- 255 Identifying An Assessable Set Of Soft Skills Engineers Need To Succeed
Dyah Ariningtyas Hening and David Koonce
- 13 From a Literature Review to a Research Direction: Integrative Supply Chain Network Optimization Models
Canser Bilir, Sule Onsel Ekici and Donald C. Sweeney
- 25 Prioritization Of Improvement Projects In Energy Management System
Mohamed Salaheldin, Ahmed Farouk Abdul Moneim and M. Nashat Fors
- 78 Selecting The Contractor using Multi Criteria Decision Making in National Gas Company of Lorestan province of Iran
Fatemeh Jaferi, Hadi Shirouyезд and Heshmatolah Shams Khorramabadi

SESSION G6: Industrial Big-data Instrumentation and Infrastructure Integrity

Chairs: Kondo ADJALLAH, Yury KOLOKOV & Jay LEE

Salle D106

- 190 Awcc-Technology Of Space-Time Bifurcation Analysis To Risk Assessment In Weather-Dependent Industries
Yury Kolokolov, Anna Monovskaya and Kondo Adjallah
- 214 Integer Linear Programming Based Scheduling Method for Wireless Sensors Network Lifespan Optimization
Yousif Elhadi Elsideeg Ahmed, Kondo H. Adjallah, Imed Kacem and Sharief F. Babiker
- 251 Wind data Collection for potential analysis and electricity generation Case study in northwestern coast of Senegal
Boudy Ould Bilal, Kondo H. Adjallah, Fadel Kebe, Papa Alioune Sarr Ndiaye, Vincent Sambou and Alexandre Sava

SESSION A7 – G7: Friday, October 30th, 13h30–15h10

SESSION A7: Applied Operations Research

Chair: Runliang DOU

Salle Ampère

- 17 A SMART production planning approach of a multi-sites company
Rihab Khemiri, Khaoula Elbedoui-Maktouf and Belhassen Zouari
 - 53 An Empirical Study Of Product Configuration Design Based Gsa
Runliang Dou and Chao Zong
 - 64 A Genetic Algorithm For Solving The Mixed Orienteering Problem
Mekki Mariem and Dammak Abdelaziz
 - 69 Sustainable Project Selection In A Portfolio By A New Uncertain Mathematical Programming
V. Mohagheghi, S.M. Mousavi and A. Siadat
-

SESSION B7: Cellular manufacturing

Chair: Gursel SUER

Salle IP1

- 259 Robust Cellular Design With Product Life Cycle Consideration
Berna Ulutas and Gürsel Süer
 - 266 Optimisation Of Manufacturing Cell Formation Algorithm Through Parameters Of Genetic Operators
Vladimir Modrak and Pavol Semanco
 - 267 Static Complexity In Design Of Manufacturing Systems
Vladimir Modrak, Slavomir Bednar and Jan Modrak
 - 269 Simogga, The User-Friendly Solution To Optimize And Analyze The Factories Layout Using Genetic Algorithms
Emmanuelle Vin and Abdelkrim Boujraf
-

SESSION C7: Data Mining, Knowledge Discovery and Computational Intelligence

Chair: Chen-Fu CHIEN

Salle IP2

- 84 Coupled Co-Linearity Index And Pca Scores Projection Approach To Discover Product Specific Process Knowledge To Support Process Fmea In The Foundry
Raed Batbooti, Rajesh Ransing and Meghana Ransing
 - 97 The Application Of Separability Analysis In Feature Selection Of The Serial Crime Linkage Problem
Zhihong Lin, Hong Chi, Mengyi Sha, Baoguang Xu and Mingang Gao
 - 101 Association Rule Mining Of Manufacturing Data To Enhance Maintenance And Repair
Emad Abouel Nasr, Hisham Al-Mubaid, Adel Al-Shayea and Ali Kamrani
 - 128 Wavelet Based Radiomics For Brain Tumour Phenotypes Discrimination
Ahmad Chaddad, Ahmed Bouridane, Lama Hassan and Camel Tanougast
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SESSION D7: Simulation

Chairs: Pascal BRUNIAUX & Xiany ZENG

Salle IP5

- 114 Modeling And Simulation In Dialysis Centre Of Hedi Chaker Hospital
Jridi Ichraf, Jerbi Badreddine and Kamoun Hichem
- 162 A Heuristic Approach Taking Operators' Fatigue Into Account For The Dynamic Assignment Of Workforce To Reduce The Mean Flowtime
Aicha Ferjani, Achraf Ammar, Henri Pierreval and Abdelwaheb Trabelsi

- 168 A Simulation-Optimization Approach For Managing The Sales And Operations Planning In The Automotive Industry
Lâm Laurent Lim, Gulgun Alpan and Bernard Penz
- 200 Simulation platform for multi agent based manufacturing control system based on the Hybrid agent
Ali Vatankhah Barenji, Reza Vatankhah Barenji and Amir Shaygan

SESSION E7: Multi-Criteria Decision Making and Decision Analysis

Chair: **Matthias BECKER**

Salle IP6

- 177 A Study Of The Standard Setup Time Quota Based On Employees' Knowledge Level
Haicao Song, Shuping Yi and Hongyu Shen
- 219 A Framework For Decision Support In Systems With A Low Level Of AutomatiON
Matthias Becker, Sinan Balci and Helena Szczerbicka
- 249 Study Of R&D Capabilities Characteristics: Case Study Auto Industry
Sadegh Abedi, Javad Mehrabi and Mohammad Reza Soroush
- 276 Prioritazation Of Failure Mode In Trucking Industry Using It2 Fss In Failure Mode And Effect Analysis
Krishna Kumar Dadsena, V N A Naikan and Sarada Prasad Sarmah

SESSION F7: Project Development & Management

Chair: **Ghada EL KHAYAT**

Salle D104

- 215 An Evaluation of Archimate as an Architecture Framework for Business-IT Alignment
Michaël Petit and Virginie Goepf
- 75 A study on how to improve PMBOK guidelines performance by simulation Case Study: National Gas Company of Lorestan province
Fatemeh Jaferi, Seyed Mojtaba Sajadi and Heshmatolah Shams Khorramabadi
- 124 Shipyard Repair Projects Scheduling Using Case Based Reasoning And Genetic Algorithm
Yaser Elkady, M. Nashat Fors and Amin Shoukry
- 272 Framework And Model For Building Effective Information Systems Project Teams
Ghada El Khayat, Mohamed Abougabal and Yasser Hanafy

SESSION G7: Transportation Systems

Chair: **Anass NAGIH**

Salle D106

- 55 Location Routing Problem With Simultaneous Pickup And Delivery Of Demands With Leaking Characteristic
Mahdi Bashiri and Azar Balaei
- 57 Application Of Hybrid Algorithm To Joint Decision Making In Hinterland Barge Transport Planning
Fan Feng, Yusong Pang and Gabriel Lodewijks
- 59 A Bi-Objective P-Hub Location Problem With A Queue System And Transportation Modes
Mohammad Zhaelehchian, Reza Tavakkoli-Moghaddam and Yaser Rahimi
- 92 Integer Programming Model Formulations For Over Constrained Flight – Gate Assignment Problem
Cemalettin Ozturk, Arslan M. Ornek and Ipek Sugut

SESSION A8 – G8: Friday, October 30th, 16h15–18h20

SESSION A8: Applied Operations Research

Chairs: Lei WU & Zsuzsanna ROKA

Salle Ampère

- 52 Minimizing Exceptional Elements And Voids In A Cell Formation Problem With Optimal Number Of Cells
Malihe Aliasgari, Mohammad Kazemi, Reza Kia and Ahmad Ebrahimi
- 160 Complexity and Heuristics for Multi Bipartite Complete Matching Vertex Interdiction Problem: Application to Robust Nurse Assignment
Pierre Laroche, Franc Marchetti, Sébastien Martin, Zsuzsanna Roka and Mengli Zheng
- 164 New model for the robust vehicle routing problem with uncertain travel time
Lei Wu, Mhand Hifi and Hiba Bederina
- 28 Competitive Facility Location Problem with foresight Considering Service Distance Limitation
Xia Mingfei, Qi Mingyao, Zhang Ying and Miao Lixin

SESSION B8: Cloud Computing, Future Generation Computer Systems for High Performance Parallel, Distributed, and Network-Based Processing

Chairs: Daniel SINGER & El-Bay BOURENNANE

Salle IP1

- 287 WSN localization scheme based on Received Signal Strength Indicator (RSSI) for ZigBee Networks
Monaem Idoudi, Jorge Cabral, El-Bay Bourennane and Khaled Grayaa
- 125 A Model Of Urban Intelligent Traffic Management Cloud Platform Constructed By Wireless Mesh Network
Lijun Sheng and Xiaochuan Shi
- 274 Aid to Design and Reconfiguration of the MPSOC Architectures
Naija Mohamed and Ben Ahmed Samir

SESSION C8: Complex Systems & Applications

Chair: Chen-Fu CHIEN

Salle IP2

- 9 Implementing Business Intelligence's Performance Management System In Strategy Base Corporations (Bi Logic)
Nader Nematpour and Kaveh M. Cyrus
- 140 An Authentication System For Industrial Control Network Based On Cryptographic Algorithm
Shanshan Xu, Dongqin Feng and Jianfei Chen
- 231 Monitoring Of Complex Syetems By Bayesian Networks
Fatma Lajmi, Achraf Jabeur Telmoudi and Lotfi Nabli

SESSION D8: Applied Operations Research

Chairs: Faten BEN CHIHAOUI & Myriam SAHNOUNE

Salle IP5

- 301 Genetic Algorithm Approaches For Scheduling In A Cpu/Fpga Architecture With Heterogenous Communication Delays
Fadel Abdallah, Camel Tanougast, Imed Kacem, Daniel Singer
- 302 On the Knapsack Problem with Overlapping Properties
Aristide Grange, Imed Kacem, Karine Laurent, Sébastien Martin
- 298 On the Visualization of the Information in Social Numerical Networks
Youcef Abdelsadek, Kamel Chelghoum, Francine Herrmann, Imed Kacem, Benoît Otjacques
- 295 Genetic Algorithm for Scheduling Surgical Units
Rania Ayachi, Imed Kacem, Myriam Sahnoune, Achraf Telmoudi
- 133 Two Developed Models for a Green Vehicle Routing Problem with Safety and Social Concerns
Mahdi Bashiri and Arghavan Sharafati

SESSION E8: Hub-and-Spoke operations in land and maritime transport

Chairs: Shahin GELAREH & Kassem DANACH

Salle IP6

- 181 Containers Storage Optimization In A Container Terminal Using A Multimethod Multi-Level Approach
Khadidja Yachba and Karim Bouamrane
- 182 Container Stacking Problem: A Literature Review
Ines Rekik, Sabeur Elkosantini and Habib Chabchoub
- 186 Reverse Logistics In The Liner Shipping Industry
Naima Belayachi, Shahin Gelareh and Karim Bouamrane
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SESSION F8: IE Research, Education and Practice in China and East Asia

Chair: Runliang DOU

Salle D104

- 137 New demands for Lean Production in the context of customized production and smart manufacturing
Ting Qu
- 300 Lean Six Sigma and Management Innovation in China
Zhen He
- 29 A Carbon Footprint Based Closed-Loop Supply Chain Network Design Model
Juhong Gao, Rui Wang and Haiyan Wang
- 237 Lean Production Practice in China——a Case in Coal Industry
Feng Wu
-

SESSION G8: Mining and classification models for Biomedical data or image analysis

Chairs: Camel TANOUGAST & Ahmed CHADDAD

Salle D106

- 90 Image Data Monitoring Using Nonparametric Profile Monitoring Techniques
Mehdi Koosha and Rassoul Noorossana
- 91 Continuum Analysis Of Colorectal Cancer Using Texture Feature Extraction
Ahmad Chaddad, Ahmed Bouridane and Camel Tanougast
- 120 Hybrid Segmentation Of Bio-Images
Hawraa Haj-Hassan, Ahmad Chaddad, Camel Tanougast and Youssef Harkouss

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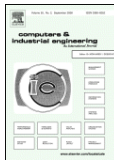
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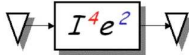
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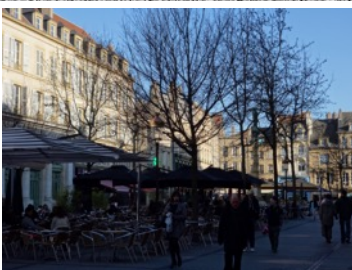
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The resources include about 80 individuals, 5 research teams, nearly 50 researchers, about thirty Ph.D students and engineers, some administrative staff and, they profit from several services for supporting the research activities. The laboratory has an excellent scientific production level by publishing about 100 articles in international journals during the last 4 years, and it has a strong participation to high-education programs related to the scientific research and to the professional learning. Several collaborations exist between the LCOMS teams and other French and foreign universities. These collaborations are concretized by high-level publications, national and international projects (ANR, FP7, FEDER, CNES...) and the organization of prestigious international conferences (CIE39, CoDIT14, CIE45...).





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