8:30  Secretariat open

Opening Ceremony
09:30 - 10:00 - Anf1
Opening Session

Plenary Session 1
10:00 - 11:00 - Anf1

Sustainability in production & logistics: Progress and methodological challenges
Shimon Nof, Purdue University, USA
Florin George Filip, The Romanian Academy, Romania

Chair: Rui Neves da Silva (APCA, Portugal)

11:00 - 11:30 – Coffee Break

Session 1: Optimization Methods and Simulation Tools I
11:30 - 13:00 - room1

Chair: Thierry Soriano (France)

Simulation and Optimisation of Lift Networks in a Provincial Skiing Resort
FATAH CHETOUANE*, Simon Collart Dutilleul (Canada)

Contribution to the development of supplementary guidelines of embodiment design for roller conveyors
Dorothee Wieczorek*, Bernd Künne (Germany)

An Approach to Study the Value of Information Sharing in a Serial Supply Chain with Decentralised Decision
Mansour RACHED*, Zied BAHROUN, Armand BABOLI, Jean-Pierre CAMPAGNE, belhassen Zouari (Tunisia)

Coordination of Distributed Production Planning and Scheduling Systems
Chaojun Xu*, Guido Sand, Sebastian Engell (Germany)

Session 2: Production Control 1
11:30 - 13:00 – room2

Chair: J.A.M. Felippe de Sousa (Portugal)

Development of a holistic concept using mobile and stationary sensors to determine the condition of intralogistic systems
Jan Eggert*, Bernd Künne (Germany)

Case Study on Simulation Analysis of a Multiple Product Manufacturing System
Juraj Švančara*, Zdenka Kralová (Slovakia)

Model Reference Adaptive Control Applied to the Improvement of the Operational Conditions of a Sucker Rod Pump System
Luiz H. S. Torres, Leizer Schnitman, J.A.M. Felippe de Souza* (Portugal)

13:00:14:00 – Lunch

Session 3 (Invited): Enabling collaborative Innovation processes along the product life cycle

14:00 - 16:00 - room1

Chair: Markus Seifert (Germany)

Guidance for the Knowledge Intensive Early-Stage of Product Development
Alexander Hesmer* (Germany)

Innovation in Manufacturing: What Next?
Heiko Duin* (Germany)

Tuning in to organizational innovation – music as a metaphor to understand the improvisational field in organizations
Christopher Dell, Wolfgang Stark* (Germany)
Evaluating the Melodie ICT Tool for Supporting Idea Generation
Johann Riedel* (Germany)

Session 4: Production Control 2
14:00 - 16:00 - room2

Chair: Evgeny Gurevsky (France)

Flexible Internal Logistics based on AGV systems: A case Study
Luis André Freitas Rocha*, António Paulo Moreira, Americo Azevedo (Portugal)

An Efficient and User-Friendly Optimization Framework for Batch Process Scheduling
Thomas Tometzki*, Tobias Claus Neymann, Jochen Steimel, Subanatarajan Subbiah, Sebastian Engell (Germany)

A new formulation for a variant of the Capacitated Lot Sizing and Scheduling Problem with Sequence Dependent setup costs and times: Single machine, multiple products and periods
Imen CHAIEB MEMMI*, Sondes Hammami Laaroussi (Tunisia)

Post-optimal analysis of one transfer line balancing problem
Evgeny Gurevsky*, Olga Guschinskaya, Alexandre Dolgui (France)

16:00:16:30 – Coffee Break

Session 5 (Invited): Teaching and Curricula Development in Production Management and Control

16:30 - 17:40 room 1

Chair: David O’Sullivan (Ireland)

Integrating experimental learning into Industrial Engineering curricula – a case study
Ralph Riedel* (Germany)

Teaching Production Planning and Control to Informatics Engineering Students
Antonio Dourado* (Portugal)

Curriculum Development in Manufacturing Systems and Supply Chains
David O’Sullivan* (Ireland)
Session 6: Supply Chain Integration and Management 1
16:30 - 17:40 – room

Chair: Grzegorz Filcek* (Poland)

Comparison of inventory periodic policies applied within the framework of VMI approach
sondes hammami laaroussi, Imen CHAIEB MEMMI* (Tunisia)

Modeling a Supply Chain as a Queuing System
Peral Toktas Palut*, Fusun Ulengin (Turkey)

Managing Production and Transportation in a Class of Non-Balanced Supply Networks
Grzegorz Filcek* (Poland)

18:00 – Organ and choir concert: Chapel S. Miguel, Páteo da Universidade

19:00 Welcome reception: Faculty of Law, Páteo da Universidade
**Plenary Session 2**
09:00 - 10:00 - Anf1

*Towards a factory of things - technologies for the factory of the future*

Detlef Züehlke  
German Research Center for Artificial Intelligence DFKI  
Innovative Factory Systems, Kaiserslautern, Germany

Chair: Luís Camarinha-Matos (Portugal)

10:00 - 10:30 – Coffee Break

**Session 7 (invited): Process Control**
10:30- 12:30 - room1

Chair: Florin George Filip (Romania)

*Hierarchical control for ethylene production in petrochemical installations*  
Elena Margareta Cimpoesu*, Madalina Mircioiu, Ciprian Lupu, Catalin Petrescu (Romania)

*Robust model based control method for wind energy production*  
Andreea Pintea*, Ioana Pisica (Romania)

*Open Loop versus Closed Loop Identification and Control of an Active Suspension*  
Dan STEFANOIU*, Mihai CORNOIU, Ioan Dore Landau (Romania)

*Modeling, control and robustness analysis for a road sector*  
Catalin Dimon*, Geneviève Dauphin-Tanguy, Dumitru Popescu (Romania)

*Advanced control and optimization for thermo-energetic installations*  
Tudor Bogdan Airimitoaei*, Dumitru Popescu, Florin Gheorghe Filip (Romania)

**Session 8: Manufacturing Production 1**
10:30 - 12:30 – room2

Chair: Alexandra Tenera (Portugal)

*Supporting framework to improve Engineer-To-Order product lead-times*
Aïcha Amrani-Zouggar*, Salah Zouggar, marc Zolghadri, Philippe Girard (France)

**A Method to Optimize the Overall Equipment Effectiveness**
Marin Mainea, Luminita Dutu*, Paul Ciprian PATIC, Ion Caciula (Romania)

**A multi-criteria approach for a tasks allocation problem with consideration of equity between operators**
Imen CHAIEB MEMMI*, besma abbassi (Tunisia)

**Improving setup time in a Press Line – Application of the SMED methodology**
Andreia Cristiana Simões, Alexandra Tenera* (Portugal)

12:30 - 14:00 – Lunch

**Plenary Session 3**
14:00 - 14:45 - Anf1

Chair: Jean-Claude Hennet (France)

From product driven to market driven system: the implementations of BPS (Bosch Production System) in the factory of Cacia in Portugal, experiences and lessons

Paulo Vieira e Filipe Santos, Industrial Engineers, Bosch Thermotechnologies (Vulcano), Aveiro, Portugal

**Session 9 : Optimization Methods and Simulation Tools 2**
15:00 - 16:30 - room1

Chair: Yiannis Papadopoulos (United Kingdom)

Towards an experimental simulation platform for the optimisation of a production cell
Baptiste Arnault, Thierry SORIANO* (France)

Comparing the performance of genetic operators for the vehicle routing problem
mais HAJ RACHID, WAHIBA RAMDANE CHERIF*, Pascal Chatonnay, christelle bloch (France)

Dynamic Effect of Perfect Preventive Maintenance on System Reliability and Cost Using HiP-HOPS
Shawulu Hunira Nggada*, David James Parker, Yiannis Papadopoulos (United Kingdom)
Session 10 (Invited): Wireless Sensor Networks Applications
15:00 - 16:30 – room2

Chair: Anja Klein (Germany)

The GINSENG Middleware for Performance Control in Sensor Networks
Anja Klein* (Germany)

Multi-Agent Platform in WSAN Applications: A Time Synchronization Perspective
Amâncio Santos* (Portugal)

A Wireless Sensor Network Platform for Structural Health Monitoring: enabling accurate and synchronized measurements through COTS+custom-based design
R. Severino* (Portugal)

A Framework for Integrating WSNs and External Environments
Thanh-Dien Tran* (Portugal)

Session 11: Intelligent and Distributed Systems
15:00-16:30  Room 3

Chair: Alina Tarau (Netherlands)

Heterogeneous Processors Scheduling Problems using MAX-MIN Ant System & Crossover Procedure
Pierre Borne*, Ali Diouani (France)

The Future of Knowledge in Manufacturing Systems in the Future Era of Internet of Things
Mihaea Alexandru Moisescu*, Ioan Dumitrache, Simona Iuliana Caramihai, Aurelian M. Stanescu, Ioan Stefan Sacala (Romania)

A Service Oriented Platform for Context Aware Knowledge Enhancing
kening*, Savas Ziples, Sebastian Scholze, Maria Marques, Ana Rita Campos, Rui Neves-Silva, David O'Sullivan (Ireland)

16:30 - 17:00 – Coffee Break
**Session: Industry Panel**

17:00 - 18:00 - Anf1

**Chair: José Maria Ataide, Portucel-Soporcel (Portugal)**

*The challenges of the coming future: Supervision and systems integration in industrial scenarios*

Participants from:

- **Brisa** (Highways),
- **Bosch** (Thermotechnologies)
- **Galp**, Oil and Refineries
- **Portucel Soporcel** (Pulp and Paper),
- **SAP** (Software),
- **Plux** (Electronics)
- **DEI-UC** (Academics)

**20:00 Conference Dinner: Giusepe & Joaquim Restaurant, Rua da Sota.**

Phone 239 098 990
10 September 2010

Session 12 (Invited): Balancing costs and performances in manufacturing systems
10:00- 12:00 - room1

Chair: Octavian Bologa (Romania)

*Improving the Manufacturing Accuracy of the Profiling Machines*
Biris Cristina* (Romania)

*Low-cost solutions for manipulation tasks in manufacturing systems: balancing costs and performances*
Octavian Bologa* (Romania)

*Web engineering and multi-criterion analysis of modeling languages used in production systems*
Marius Cioca*, Luminita Dutu, L.Cioca (Romania)

*Aspects of Improving the Cost-Performance Ratio for the Manufacturing of Small-Size Cast Parts*
Cristian Deac* (Romania)

10:30:12:30 - room1

*Modular device for determining forming limit curves – a cost effective approach*
Octavian Bologa* (Romania)

Session 13: Production Control 3
10:00- 12:00 – room2

Chair: Dejan Gradisar (Slovenia)

*Passive Robustness in Milk Manufacturing Unit with Time Constraints*
Anis M’Halla* (France), Simon Collart Dutilleul (France)

*Supervisory Control of partially observable Marked Graph based on Marking Exclusion Constraint*
Maen ATLI*, Zied ACHOUR, Alexandre Sava, Nidhal REZG (France)

*A Profit Optimization Decision Support Tool for the Offshore Aquaculture Industry*
Michalis Menicou*, Marios Charalambides, Vassos Vassiliou (Cyprus)
Modelling case study for holistic production control
Dejan Gradinar*, Miha Glavan, Jus Kocijan, Stanko Strmcnik (Slovenia)

12:00 - 14:00 – Lunch

Session 14 (Invited): Planning, Scheduling and Performance Evaluation in Industrial Environments
14:00- 16:00 – room1

Chair: Carlos Passos (Brazil)

Aggregate Production Planning: Modeling and Solution via Excel Spreadsheet and Solver.
Oscar Salviano Silva Filho*, Wagner Cezarino (Brazil)

Supply network formation as a biform game
Jean-Claude Hennet*, Sonia Mahjoub (France)

A Methodology for Supply Chain Design An Application to Auto-part Industry
Marcius Fabius Carvalho* (Brazil)

Virtual Factory Framework: An Innovative Approach To Support The Planning And Optimization Of The Next Generation Factories
AMÉRICO AZEVEDO*, ROBERTO DA PIEDADE FRANCISCO, JOÃO BASTOS, ANTÓNIO ALMEIDA

A multi-agent approach to solve job shop scheduling problems using metaheuristics
Carlos Alberto dos Santos Passos*, Vitor Massara Iha, Rafael Baboni Dominiquini (Brazil)

Session 15: Production Control 4
14:00- 16:00 – room2
Chair: Carlos Alberto Costa (Italy)

A Real-Time Quality Assurance Tool for the Cyprus Construction Industry
Michalis Menicou*, Vassos Vassiliou, Petros Christou, Marios Charalambides (Cyprus)

Update Procedure for the Supervisory Control of P-Time Event Graphs
Patrice Bonhomme* (France)

Influence of fixed-deadline orders on memetic algorithm performance in production planning
Gregor Papa*, Peter Korosec, Vida Vukasinovic (Slovenia)

Organizational Processes Alignment and Company Strategy within a process management approach: an Assessment Tool
Carlos Alberto Costa*, Marilza Acordi Costa, Jana Toledo de Castilhos, Beatriz L.S. Bizotto, Giovani Zappas (Italy)

16:00 - 16:30 – Coffee Break

Session 16 (Invited): OR Applications in Industry
16:30-18:30 - room1

Chair : Valério de Carvalho (Portugal)

Solving a Multiprocessor Problem by Column Generation and Branch-and-price
António Duarte*, José Manuel Valério de Carvalho (Portugal)

Sequencing Cutting Patterns with Colored Interval Graphs
Isabel Cristina Lopes*, José Manuel Valério de Carvalho (Portugal)

A Fast Heuristic for a Lot Splitting and Scheduling Problem of a Textile Industry
Carina Pimentel*, Filipe Alvelos, José Manuel Valério de Carvalho, António Duarte (Portugal)

Exploring New Constructive Algorithms for the Leather Nesting Problem in the Automotive Industry
Pedro Brás, Cláudio Alves*, José Manuel Valério de Carvalho, Telmo Pinto (Portugal)

Session 17: Hierarchical, Distributed Networks
16:30: 18:30 – room2

Chair: Miguel Antonio Mujica Mota (Spain)

Predictive Control for Baggage Handling Systems using Mixed Integer Linear Programming
Alina Tarau*, Bart De Schutter, Hans Hellendoorn (Netherlands)

Scheduling supply chain node with fixed components arrivals and two partially flexible deliveries
Susana Carrera*, WAHIBA RAMDANE CHERIF, Marie-Claude Portmann (France)

The Modeling Methodology of Fuzzy Cognitive Maps for Complex Logistics Systems
Chrysostomos Stylios* (Greece)
Time Line Search for the State Space-based Optimization Algorithm for Timed Coloured Petri Nets
*Miguel Antonio Mujica Mota*, Miquel Angel Piera Eroles (Spain)

18:30 – Closing