

2013 5th International Conference on Modeling, Simulation and Applied Optimization (ICMSAO)

Final Program

SUNDAY 28/04/2013		
8.00 - 9.00		Registration
9.00 - 9.40		Opening Ceremony Under the patronage of the Ministry of Higher Education and Research Professor <i>Moncef Ben Salem</i>
9.40 - 10.20	P1-1	Modeling and Optimization for Sustainability in Transport Systems using Artificial Intelligence (Chair: Fouad Ben Abdelaziz) <i>Ghassan Abu-Lebdeh</i>
10.20 - 10.40		COFFEE BREAK
		<b>A1 - Engineering Management (Chair: Abdelkader Mazouz)</b>
10.40 - 11.00	A1-1	Optimizing the Performance of Complex Maintenance Systems <i>Chefi Triki, Abdallah Alalawin and Gianpaolo Ghiani</i>
11.00 - 11.20	A1-2	Process Optimum Design <i>Abdelkader Mazouz</i>
11.20 - 11.40	A1-3	Optimizing Cost and Quality of International Calls Routing Using Multi-Objective Optimization Techniques <i>Fouad Ben Abdelaziz and Samer El Gamal</i>
11.40 - 12.00	A1-4	A novel Scheme for Economic Ranking of the European Union Countries toward 2020 by MULTIMOORA Optimization <i>Brauers Willem Karel M., Baležentis Alvydas and Baležentis Tomas</i>
		<b>A2 - Operations Management-1 (Chair: Rim Kalai)</b>
10.40 - 11.00	A2-1	Cycle-Service-Level in Guaranteed-Service Supply Chains <i>Ayse Sena Eruguz, Zied Jemai, Evren Sahin, Yves Dallery</i>
11.00 - 11.20	A2-2	Imbricating Tasks in a Multichannel Contact Center <i>Benjamin Legros, Oualid Jouini and Ger Koole</i>
11.20 - 11.40	A2-3	Integrated Surface and Departure Management at Airports by Optimization <i>Dag Kjenstad, Carlo Mannino, Patrick Schittekat and Morten Smedsrud</i>
11.40 - 12.00	A2-4	Comparison Between Continuous Review Inventory Control Systems for Perishables With Deterministic Lifetime and Lead Time <i>Chaaben Kouki, Zied Jemai, Evren Sahin and Yves Dallery</i>
		<b>A3 - Mechanical Engineering-1 (Chair: Verica Radisavljevic-Gajic)</b>
10.40 - 11.00	A3-1	Complexity adaption of simulation models in a function-based modular framework <i>Florian Netter, Frank Gauterin and Chu Xu</i>
11.00 - 11.20	A3-2	Modeling of Solid Oxide Fuel Cells (SOFCs): An Overview <i>Michael Lee, Gunhyung Park and Verica Radisavljevic-Gajic</i>
11.20 - 11.40	A3-3	Numerical Investigation To Study Airfoil Efficiency In Plunging Motion <i>Mohamed Mehdi Oueslati, Anouar Wajdi Dahmouni, Mohieddine Ben Salah and Sassi Ben Nasrallah</i>
11.40 - 12.00	A3-4	Adaptive Seismic Isolation of Structures Using MR-Fluid Dampers <i>Ameen El Sinawi, Ali Al Jhemi and Mohammad AlHamaydeh</i>
		<b>A4 - Transportation-1 (Chair: Ghassan Abu-Lebdeh)</b>
10.40 - 11.00	A4-1	Demand Responsive Transport Problem A new modelization of static case <i>Manel Ayadi, Habib Chabchoub and Adnan Yassine</i>
11.00 - 11.20	A4-2	Evaluation of different vehicle management strategies for the Personal Rapid Transit System <i>Ezzeddine Fatnassi, Ofa Chebbi and Joughaina Chaouachi Siala</i>
11.20 - 11.40	A4-3	An Optimization Tool for Intersection Design <i>Nikiforos Stamatiadis, Adam Kirk and Nithin Agarwal</i>
11.40 - 12.00	A4-4	Effect of Driver & Vehicle Characteristics on Speeds at a Tangent Section of a Rural Highway in Jordan <i>Bashar Al-Omari, Ashraf Al-Ja'afari and Ghassan Abu-Lebdeh</i>

<b>A5 - Electrical Engineering-1 (Chair: Mohamed Hassen)</b>		
10.40 - 11.00	A5-1	Thermal Simulation Approach to the Cooling of a Power IGBT by Heat Pipes <i>Améni Driss, Samah Maalej and Mohamed Chaker Zaghoudi</i>
11.00 - 11.20	A5-2	Peer-to-Peer Communication on Android-Based Mobile Devices: Middleware and Protocols <i>Waheb A. Jabbar, M. Ismail and R. Nordin</i>
11.20 - 11.40	A5-3	A New Software Program for Power flow solution computing using LabVIEW <i>Slimane Souag, Farid Benhamida, Fatima Zohra Gherbi and Amel Graa</i>
11.40 - 12.00	A5-4	Short-Term Wind Power Forecast for Economic Dispatch <i>Ahmed Osman, Mohamed Hassan and Taha Landolsi</i>
<b>A6 - Applied Optimization-1 (Chair: Hazim El-Baz)</b>		
10.40 - 11.00	A6-1	A Variable Neighborhood Descent for solving the Single Machine Total Weighted Tardiness Problem <i>Hiba Yahyaoui, Saoussen Krichen, Bilel Derbel and El-Ghazali Talbi</i>
11.00 - 11.20	A6-2	Solving the Person-based Multitask Shift Generation Problem With Breaks <i>Nico Kyngäs, Kimmo Nurmi and Jari Kyngäs</i>
11.20 - 11.40	A6-3	Novel Modeling Paradigm For The Algal Production Of Biofuel <i>Rohit Sharma, Avani K Tiwari and G. Sanjay Kumar</i>
11.40 - 12.00	A6-4	A new modelling for p-hub median problem by considering flow-dependent costs <i>Masoud Rabbani, Farhang Pakzad and Seyed Mahmood Kazemi</i>
12.00 - 14.00		<b>LUNCH</b>
14.00 - 14.40	P1-2	<b>Optimization in supply chain management: packing and routing (Chair: Ismail Kucuk)</b> <i>Saoussen Krichen</i>
<b>B1 - Combinatorial Optimization-1 (Chair: Talel Ladhari)</b>		
14.40-15.00	B1-1	Solving the Steiner Tree Problem with Revenues, Budget and Hop Constraints to optimality <i>Safa Bhar Layeb, Ines Hajri and Mohamed Haouari</i>
15.00 - 15.20	B1-2	Artificial Bee Colony Metaheuristic to Find Pareto Optimal Set Solutions for engineering design problems <i>Saïma Dhoubi, Souhail Dhoubi and Habib Chabchoub</i>
15.20 - 15.40	B1-3	Nonlinear system identification of Hestersis-Backlash in Hammerstein models <i>Elayyan Elamari</i>
15.40 - 16.00	B1-4	A Balanced Approach for Hazardous waste allocation problem <i>Ines Kanoun, Youssef Masmoudi, Habib Chabchoub and Belaid Aouni</i>
<b>B2 - Multiple Criteria Decision (Chair: Matthias Takouda)</b>		
14.40-15.00	B2-1	On solving the bi-objective aircraft cargo loading problem <i>Nadia Dahmani and Saoussen Krichen</i>
15.00 - 15.20	B2-2	Benchmarking chains of hardware retail stores in Canada <i>Pawoumodom M. Takouda and Mohamed Dia</i>
15.20 - 15.40	B2-3	Comparing Multi-Criteria Decision Aid Methods Through a Ranking Stability Index <i>Mbarka Selmi, Tarek Kormi and Nizar Bel Hadj Ali</i>
<b>B3 - Mechanical Engineering-2 (Chair: Verica Radisavljevic-Gajic)</b>		
14.40-15.00	B3-1	Effect of the design moldboard on the tillage forces <i>Ayadi Ibrahmi, Hatem Bentaher and Aref Maalej</i>
15.00 - 15.20	B3-2	Fatigue crack initiation and vibration prediction life of turbine blade <i>S. Lecheb, T.Djeddid, A.Chellil, A. Nour, M.Chergui and H. Kebir</i>
15.20 - 15.40	B3-3	Aeroelastic stability analysis of composite rotor blade <i>A.Chellil, A.T.Settet, S.Lecheb, A.Nour, A.Yahiaoui and H.KEBIR</i>
15.40 - 16.00	B3-4	Linearized State-Space Model of the behavior of MR-Fluid Dampers <i>A.H. EISinawi, Ali Jhemi and Mohammad AlHamaydeh</i>

<b>B4 - Genetic Algorithms (Chair: Saoussen Krichen)</b>		
14.40-15.00	B4-1	Solving Resource-Constrained Project Scheduling Problem by A Genetic Local Search Approach <i>Olfa Dridi, Saoussen Krichen and Adel Guitouni</i>
15.00 - 15.20	B4-2	A Genetic Algorithm for the Two-level Location Area Planning in Telecommunication Networks <i>Ons Abdelkhalek, Saoussen Krichen and Adel Guitouni</i>
15.20 - 15.40	B4-3	On parameters optimization of dynamic weighted majority algorithm based on Genetic Algorithm <i>Dhouha Mejri, Mohamed Limam and Claus Weihs</i>
15.40 - 16.00	B4-4	Behavior study of genetic operators for the minimum sum coloring problem <i>Hend Bouziri and Olfa Harrabi</i>
<b>B5 - Electrical Engineering-2 (Chair: Mohamed Hassan)</b>		
14.40-15.00	B5-1	Finite Element Modeling and Dynamic Simulation of Nonlinear VRM using MATLAB <i>Tariq Benamimour, Amar Bentounsi, Hind Djeghloud, and Ilhem Bouchareb</i>
15.00 - 15.20	B5-2	Modeling and simulation of single phase inverter connected to the grid based on the shifting phase and DPWM patterns <i>L.Hassaine, E.Ollas and J.Quintero</i>
15.20 - 15.40	B5-3	Optimal Power Flow with Emission Controlled using Firefly Algorithm <i>Ouafa Herbadji, Ketfi Nakhir, Linda Slimani and Tarek Bouktir</i>
15.40 - 16.00	B5-4	SCADA application of a Water Steam Cycle of a Thermal Power Plant <i>Mohamed Najeh Lakhoua</i>
<b>B6 - Applied Optimization-2 (Chair: Rim Kalai)</b>		
14.40-15.00	B6-1	A metaheuristic for solving the single-product/single-robot hoist scheduling problem under environmental costs <i>R. Ben Othmen, S. Hajri Gabbouj and T. Ladhari</i>
15.00 - 15.20	B6-2	A clustering based simulated annealing approach for solving an un-capacitated single allocation p-hub location problem <i>Zeinab Rasoulinejad, Mahdi Bashiri and Masoud Mehrbanfar</i>
15.20 - 15.40	B6-3	An efficient Branch and Bound algorithm to solve the permutation flowshop scheduling problem with blocking constraints <i>Said Toumi, Bassem Jarboui, Mansour Eddaly and Abdelwaheb Rebai</i>
15.40 - 16.00	B6-4	New lower bounds for the blocking flowshop scheduling problem to minimize the total completion time criterion <i>Said Toumi, Bassem Jarboui, Mansour Eddaly and Abdelwaheb Rebai</i>
16.00 - 16.20		<b>COFFEE BREAK</b>
<b>C1 - Applied Mathematics (Chair: Ismail Kucuk)</b>		
16.20 - 16.40	C1-1	Existence and uniqueness of the inversion of a generalized Radon transform <i>Rim Gouia-Zarrad</i>
16.40 - 17.00	C1-2	Active Control of Forced Vibrations in a Beam Via Maximum Principle <i>Ismail Kucuk, Kenan Yildirim, The Late Ibrahim Sadek and Sarp Adali</i>
17.00 - 17.20	C1-3	Equilibrium customers strategies in a single server M2/M1 queue <i>Fazia Rahmoune, Mohammed Said Radjef and Sofiane Ziani</i>
17.20 - 17.40	C1-4	Nonsmooth Newton's method for positive semi definite solution of nonlinear matrix equations <i>Boubakeur Benahmed, Khadra Nachi and Adnan Yassine</i>
<b>C2 - Mechanical Engineering-3 (Chair: Verica Radisavljevic-Gajic)</b>		
16.20 - 16.40	C2-1	Solar Tower Plant Implementation in northern Algeria: Technico economic assessment <i>Salah Boudaoud, Abdallah Khellaf and Kamel Mohammedi</i>
16.40 - 17.00	C2-2	Impact of aspect ratio on air renewal in a street canyon: Numerical study. <i>Remili Sadia, Azzi Abbes and Nemdili Fadela</i>
17.00 - 17.20	C2-3	Numerical Analysis of Flows and Heat Transfer Within Grooved Flat Mini Heat Pipes <i>Jed Mansouri, Samah Maalej, Mohamed Ben Hassine Sassi and Mohamed Chaker Zaghdoudi</i>
17.20 - 17.40	C2-4	Pseudo Bond graph Model of a Thermo-Hydraulic System <i>Emna Aridhi, Mehdi Abbes and Abdelkader Mami</i>
17.40 - 18.00	C2-5	On the effectiveness of the coupling FEM-BEM approach for solving the elasto-plastic problems <i>Aour Benaoumeur, Boumaiza Daho and Khelil Fodhil</i>

<b>C3 - Financial Engineering (Chair: El Fayedh Rimeh)</b>		
16.20 - 16.40	C3-1	Neural Network Design Parameters for Forecasting Financial Time Series <i>Assia Lasfer, Hazim El-Baz and Imran Zualkernan</i>
16.40 - 17.00	C3-2	Scenario Generation for Multi-objective Stochastic Portfolio Selection <i>El Fayedh Rimeh, Ben Abdelaziz Fouad and Aouni Belaid</i>
17.00 - 17.20	C3-3	Informational market efficiency in GCC region: A comparative study between Islamic and conventional markets <i>Leila Gharbi and Khamoussi Halioui</i>
17.20 - 17.40	C3-4	Multi-input Single-Output (MISO) Random System Modeling Using Methods of System Identification <i>Ameen El-Sinawi, Hazim El-Baz and Noha Tarek Amer</i>
<b>C4 - Neural Network &amp; Fuzzy Systems (Chair: Naveed Abbasi)</b>		
16.20 - 16.40	C4-1	A Dwi-Phase Fuzzy Control Structure for an Auto-mode Stair Climbing Wheelchair <i>N.M.A Ghani and M.O. Tokhi</i>
16.40 - 17.00	C4-2	Vibration characterization using gaussian laser beam <i>Naveed A. Abbasi, Taha Landolsi and Rached Dhaouadi</i>
17.00 - 17.20	C4-3	Nonlinear Multivariate Statistical Process Monitoring of a Water Treatment Plant <i>Khaled MENDACI, Messaoud RAMDANI and Toufik BENZARAA</i>
17.20 - 17.40	C4-4	Reliability estimation with Extrinsic and Intrinsic measure in belief function theory <i>Ahmed Samet, Eric Lefèvre and Sadok Ben Yahia</i>
<b>C5 - Water Resources Management-1 (Chair: Sihem Benabdallah)</b>		
16.20 - 16.40	C5-1	Assessing the impacts of climate change in Mediterranean catchments under conditions of data scarcity - The Gaza Case Study <i>David Gampe, Ralf Ludwig and Samir Afifi</i>
16.40 - 17.00	C5-2	Setting up the water balance simulation model WaSiM for the assessment of climate change impacts in Chiba basin, Tunisia <i>Franz Hummel, Joachim Post, Günter Strunz, Ralf Ludwig, Annemarie Hoffmann and Sihem Benabdallah</i>
17.00 - 17.20	C5-3	Assessment of the SWAT model prediction uncertainty using the GLUE approach: A case study of the Chiba catchment (Tunisia) <i>Haykel Sellami, Mamik Vanclooster, Sihem Benabdallah and Isabelle La Jeunesse</i>
17.20 - 17.40	C5-4	Considering tributaries to reconstitute an extreme event on a portion of the Medjerda river <i>Abidi Sahar, Habaieb Hamadi and Hermassi Taoufik</i>
<b>C6 - Applied Optimization-3 (Chair: Taicir Loukil)</b>		
16.20 - 16.40	C6-1	Selecting Configuration Of Reverse Logistics Network Using Sustainability Indicators <i>Soumaya Dhib, Taicir Loukil, Sid-Ali Addouche and Abderrahman El Mhamedi</i>
16.40 - 17.00	C6-2	Improvement Heuristic For Solving The One-Dimensional Bin-Packing Problem <i>Soffene Abidi, Saoussen Krichen, Enrique Alba and Juan M. Molina</i>
17.00 - 17.20	C6-3	Dynamic Group Transit Scheme for Corridor Transit <i>Ondrej Vanek and Michal Pechoucek</i>
17.20 - 17.40	C6-4	A new realistic modeling approach for two-echelon logistics network design <i>Fatma Moalla, Racem Mellouli and Habib Chabchoub</i>

MONDAY 29/04/2013		
8.00 - 9.00		Registration
9.00 - 9.40	P2-1	Task Scheduling for Multifunction Radar (Chair: Hatem Masri) <i>Hasan S. Mir</i>
		D1 - Supply Chain Management (Chair: Abdelkader Mazouz)
9.40 - 10.00	D1-1	Heuristics Approaches for the Industrial Storage Problem <i>Salma Mezghani and Ahmed Frikha</i>
10.00 - 10.20	D1-2	Sharing demand forecasts in a basic supply chain using game theory <i>Ilham SLIMANI and Said ACHCHAB</i>
10.20 - 10.40	D1-3	Dyadic supply chains efficiency: A new theoretical framework to consider members power relationship and decision makers preferences <i>Walid Abdelfattah and Abdelwaheb Rebai</i>
10.40 - 11.00	D1-4	Performance of Tunisian enterprises integrating quality system, ERP (Enterprise Resource Planning) and SCM (Supply Chain Management) <i>Ismahene Aouadni and Abdelwaheb REBAI</i>
		D2 - Particle Swarm and Bee Algorithms (Chair: Saoussen Krichen)
9.40 - 10.00	D2-1	A new Method for Improving Particle Swarm Optimization Algorithm (TriPSO) <i>Mohammed Qais and Zeyad AbdulWahid</i>
10.00 - 10.20	D2-2	A particle swarm optimization for solving the one dimensional container loading problem <i>Takwa Tlili, Sami Faiz and Saoussen Krichen</i>
10.20 - 10.40	D2-3	A discrete artificial bee colony algorithm for resource-constrained project scheduling problem <i>Nouha Nouri, Saoussen Krichen and Talel Ladhari</i>
10.40 - 11.00	D2-4	Particle swarm optimization for support vector clustering "Separating hyperplane of unlabeled data" <i>Souad Chaabouni, Salma Jammoussi and Yassine Benayed</i>
		D3 - Mathematical Modeling (Chair: Maurizio Boccia)
9.40 - 10.00	D3-1	Mixed Integer Lifted Cover Inequalities for knapsack problems with a single continuous variable <i>Pasquale Avella, Sara Mattia and Maurizio Boccia</i>
10.00 - 10.20	D3-2	Sustainable Supply Chains Optimization Mathematical Modeling Approach <i>Amin Chaabane</i>
10.20 - 10.40	D3-3	The inclusion interaction between an anti inflammatory with $\beta$ -cyclodextrin <i>Sahra Khalil, Dinar Karim and Kadri Mekki</i>
10.40 - 11.00	D3-4	New computational results with an exact knapsack separation procedure for structured Binary Integer Programming problems <i>Maurizio Boccia, Said Hanafi and Igor Vasilyev</i>
		D4 - Optimization & Information Security (Chair: Hatem Masri)
9.40 - 10.00	D4-1	Data Hiding in Spatial Domain Image Using Chaotic Map <i>Soumaya Zagbani and Rhouma Rhouma</i>
10.00 - 10.20	D4-2	Firefly algorithm based energy loss minimization approach for optimal sizing & placement of distributed generation <i>Ketfi Nadhir, Djabali Chabane and Bouktir Tarek</i>
10.20 - 10.40	D4-3	Solution to An Attack on Digital Signature in SMS Security <i>Neetesh Saxena, Narendra S. Chaudhari and Jaya Thomas</i>
10.40 - 11.00	D4-4	Genetic based Effective Column Generation for 1-D Cutting Stock Problem <i>Jaya Thomas, Narendra S. Chaudhari and Neetesh Saxena</i>
		D5 - Electrical Engineering-3 (Chair: Hasan S. Mir)
9.40 - 10.00	D5-1	A PSO Algorithm for Economic Scheduling of Power System Incorporating Wind Based Generation <i>F. Benhamida, Y. Salhi, S. Souag, A. Graa, Y. Ramdani and A. Bendaoud</i>
10.00 - 10.20	D5-2	Design and implementation of Direct Torque Control of Induction Machine on FPGA <i>Soufien Gdaim, Abdellatif Mtibaa and Mohamed Faouzi Mimouni</i>
10.20 - 10.40	D5-3	Modelling a Unified Power Flow Controller for the Study of Power System Steady state and Dynamic Characteristics <i>Djilani Kobibi Youcef, Hadjeri Samir, Zidi Sid Ahmed and Djehaf Mohamed</i>
10.40 - 11.00	D5-4	Steady-State and Dynamic Modeling of Asynchronous Back-To-Back High Voltage Direct Current Link With Voltage Source Converters <i>Djehaf M, Zidi S-A, Khatir M, Hadjeri S and Djilani Kobibi Y</i>

<b>D6 - Work-in-Progress Program (Chair: Taicir Loukil)</b>		
9.40 - 10.00	D6-1	Simulation of uranium recovery process in multistage extraction units <i>Khleifia Naima, Saanoun Siwar, Hamdi Rania, Hannachi Ahmed</i>
10.00 - 10.20	D6-2	Influence of Capacity Variation to Regulate Voltage Quality for Doubly Fed Induction Generator <i>Yahia Saoudi, Nizar Derbel and Hsan Hadj Abdallah</i>
10.20 - 10.40	D6-3	Studying the effectiveness of exploiting exhaust gases of gas turbine units <i>Ali Fadiel Ali, Mohamed Saleh Rezk</i>
10.40 - 11.00	D6-4	Supply chain configuration for diffusion of new products: An integrated optimization approach <i>Rim Jmal Feki and Abdelaziz Dammak</i>
<b>D7 - Simulation (Chair: Saleh Ben Abdallah)</b>		
9.40 - 10.00	D7-1	Development of Simulation-based optimization for controlling discharging operation of gasoil <i>Nosaibeh Nosrati Ghods</i>
10.00 - 10.20	D7-2	A Qualitative Modeling and Simulation Method Based on Cloud Model <i>Chenxi Shao, Kelu Sun and Zhenzhong Shao</i>
10.20 - 10.40	D7-3	Simulation docking of an anti-bacterial in $\beta$ -cyclodextrin <i>Dinar Karim, Sahra Khalil and Kadri Mekki</i>
10.40 - 11.00	D7-4	The flows of water pipe systems <i>A. Elaoud, E.Hadj Taieb, S. Chehaibi et M. Ben Amor</i>
11.00 - 11.20	<b>COFFEE BREAK</b>	
<b>E1 - Fuzzy Optimization (Chair: Olfa Meddeb)</b>		
11.00 - 11.20	E1-1	Hesitant-Fuzzy-Promethee method <i>Sonia Hajjaoui and Nesrin Halouani</i>
11.20 - 11.40	E1-2	Multicriteria Fuzzy Clustering for Brain Image Segmentation <i>Olfa Limam and Fouad Ben Abdelaziz</i>
11.40 - 12.00	E1-3	A characterization of fuzzy strategy-proof Social Choice Functions <i>Olfa Meddeb, Fouad Ben Abdelaziz and Jos Rui Figueira</i>
12.00 - 12.20	E1-4	Fuzzy relative importance of customer requirements in Improving Product Development <i>F. Bencherif, L. H. Mouss and M. Meguellati</i>
<b>E2 - Statistical and Probabilistic Modeling-1 (Chair: Hana Sulieman)</b>		
11.00 - 11.20	E2-1	The three Statistical Control Charts using Ranked Set Sampling <i>Mu'azu Ramat Abujiya and Muhammad Hisyam Lee</i>
11.20 - 11.40	E2-2	A consistent test for Unit Root against fractional alternative <i>Ahmed BENSALMA</i>
11.40 - 12.00	E2-3	Profile-based Sensitivity in the Design of Experiments for Parameter Precision <i>Hana Sulieman</i>
12.00 - 12.20	E2-4	The belief function theory within the framework of a localization of an object <i>Samah Yahia, Souhir Fierchi and Mohamed Nacer Abdelkrim</i>
<b>E3 - Operations Management-2 (Chair: Rim Kalai)</b>		
11.00 - 11.20	E3-1	A MILP formulation for a batch scheduling problem on parallel machines in the aircraft industry <i>Maurizio Boccia, Giuseppe Bruno and Claudio Sterle</i>
11.20 - 11.40	E3-2	Multi Agent based Joint Production and Maintenance Scheduling Considering Human Resources <i>Sabrina Bouzidi-Hassini and Fatima Benbouzid-Sitayeb</i>
11.40 - 12.00	E3-3	The Home Care Scheduling Problem: A modeling and solving issue <i>Jaber Jemai, Marouen Chaieb and Khaled Mellouli</i>
12.00 - 12.20	E3-4	Multi-Criteria Inventory Classification Problem: A consensus approach <i>Imen Lajili, Talel Ladhari and M.Zied Babai</i>

<b>E4 - Graph theory and Logistics (Chair: Ghassan Abu-Lebdeh)</b>		
11.00 - 11.20	E4-1	Graphs whose indecomposability graph is 2-covered <i>Rim Ben Hamadou and Imed Boudabbous</i>
11.20 - 11.40	E4-2	The Impact of Mid-Block Crossing on Urban Arterial Operational Charactersitics using Multimodal Microscopic Simulation Approach <i>Mohammad S. Ghanim and Sameer A. Abu-Eisheh</i>
11.40 - 12.00	E4-3	Modeling Historical Traffic Data using Artificial Neural Networks <i>Mohammad S. Ghanim, Ghassan Abu-Lebdeh and Kamran Ahmed</i>
12.00 - 12.20	E4-4	Microscopic Simulation Study of Transit Signal Priority Implementation Along an Arterial Corridor <i>Mohammad S. Ghanim, Ghassan Abu-Lebdeh and Kamran Ahmed</i>
<b>E5 -Electrical Engineering-4 (Chair: Mohamed Hassen)</b>		
11.00 - 11.20	E5-1	Design of a device for transferring power and data to a cochlear implant <i>Kaoula Tayari, Mondher Chaoui, Mongi Lahiani and Hamadi Ghariani</i>
11.20 - 11.40	E5-2	A Simplified Modelling Approach for AlGaIn/GaN HEMTs Using Pinched Cold S-parameters <i>Anwar Jarndal</i>
11.40 - 12.00	E5-3	Measurements Uncertainty and Modeling Reliability of GaN HEMTs <i>Anwar Jarndal</i>
<b>E6 -Work-in-Progress Program (Chair: Mouna Ben Brahim)</b>		
11.00 - 11.20	E6-1	Cooperative and non cooperative R&D equilibrium strategies with surfers <i>Mouna Ben Brahim, Fouad Ben Abdelaziz and Georges Zaccour</i>
11.20 - 11.40	E6-2	Financial and Tax Aggressiveness Optimization Modelling Based on Game Theory <i>Souhir Neifar and Halioui Khamoussi</i>
11.40 - 12.00	E6-3	Informational flows between managers and analyst <i>Radhouane Kammoun and Wissal Ayadi</i>
12.00 - 12.20	E6-4	A multi-scenario stochastic goal programming model to group decision making with fuzzy preference relations <i>Laila Messaoudi and Abdelwaheb Rebai</i>
<b>E7 - Water Resources Management-2 (Chair: Franz Hummel)</b>		
11.00 - 11.20	E7-1	Influence of spatio-temporal variability of soil surface states on the watershed hydrology behaviour - case study of El hnach watershed in Tunisian semi arid <i>Hajji Olfa, Hermassi Taoufik, Habaieb Hamadi and Mohamed Raouf Mahjoub</i>
11.20 - 11.40	E7-2	Effect of planned marina on Enfidha groundwater (Tunisia) A local-scale groundwater modeling <i>Faten Jarraya Horriche, Mounira Zammouri and Sihem Benabdallah</i>
11.40 - 12.00	E7-3	Implementation of a Hydrological modeling of groundwater recharge for the Chiba catchment (Cap-Bon, Tunisia) <i>Asma Chemingui, Faten Horriche and Claudio Paniconi</i>
12.00 - 12.20	E7-4	Sensitivity analysis of SWAT model to the spatial rainfall distribution and watershed subdivision in streamflow simulations in the Mediterranean context: a case study in the Joumine watershed, Tunisia. <i>Jalel Aouissi, Sihem Benabdallah, Zohra Lili Chabaâne and Christophe Cudenneq</i>
12.20 - 14.00		<b>LUNCH</b>
14.00 - 14.40	P2-2	<b>Uncertainty and Optimization: A Unified approach (Chair: Salah Ben Abdallah)</b> <i>Hatem Masri</i>
<b>F1 - Scheduling-1 (Chair: Talel Ladhari)</b>		
14.40-15.00	F1-1	Iterated Local Search and Iterated Greedy Local Search for Two machines Permutation Flowshop Scheduling Problem with Time Lag <i>Amdouni Hajer and Ladhari Talel</i>
15.00 - 15.20	F1-2	Genetic Local Search Algorithm for minimizing the total completion time in single machine scheduling problem with release dates and precedence constraints <i>Ichraf Zaidi, Mehdi Mrad and Talel Ladhari</i>
15.20 - 15.40	F1-3	A new lower bound for minimising the total completion time in two-machine flow shop under release dates <i>Sabrine Chalghoumi, Mehdi Mrad and Talel Ladhari</i>
15.40 - 16.00	F1-4	The Genetic algorithm with two-point crossover to solve the Resource-Constrained Project Scheduling Problems <i>Héla Ouerfelli and Abdelaziz Dammak</i>

<b>F2 - Multiobjective Optimization-1 (Chair: Belaïd Aouni)</b>		
14.40-15.00	F2-1	Manager's Preferences Modeling within the Bi-Objectives Bin Packing Problem <i>Salma Mezghani, Habib Chabchoub and Belaïd Aouni</i>
15.00 - 15.20	F2-2	An Interactive Goal Programming Model Based on the Satisfaction Functions <i>Aouni Belaïd, Martel Jean-Marc and Hassaine Amal</i>
15.20 - 15.40	F2-3	Vendor selection using Goal Programming with Satisfaction Functions <i>Smaoui Soulef and Jedidi Hichem</i>
15.40 - 16.00	F2-4	A multi-objective modeling of K-coverage problem under accuracy constraint <i>Mathieu Le Berre, Faycal Hnaïen and Hichem Snoussi</i>
<b>F3 - Transportation-2 (Chair: Nikiforos Stamatidis)</b>		
14.40-15.00	F3-1	Proposing a new mathematical formulation for modeling costs in a p-hub center problem <i>Masoud Rabbani, Saeed Zameni and Seyed Mahmood Kazemi</i>
15.00 - 15.20	F3-2	Heuristics for Rich Profitable Tour Problems <i>Rahma Lahyani, Khemakhem Mahdi and Frédéric Smet</i>
15.20 - 15.40	F3-3	Do CEOs Personal Characteristics Matter on Transport Firm Value? a Stochastic Frontier Model <i>Ezzeddine Ben Mohamed, Sami Jarboui, Amel Baccar and Abdelfettah Bouri</i>
15.40 - 16.00	F3-4	Implementation of four index transportation problem: Heuristic method determining the input database for the mathematical model from the industrial database <i>Tuyet-Hoa Pham and Philippe Dott</i>
<b>F4 - Classification and Clustering-1 (Chair: Zied Elouedi)</b>		
14.40-15.00	F4-1	A classification approach to extract biological events <i>Maha Amami, Rim Faiz and Aymen Elkhilfi</i>
15.00 - 15.20	F4-2	An Efficient Character Recognition Scheme Based on K-Means Clustering <i>Sajjad Pourmohammad, Reza Soosahabi and Anthony S. Maida</i>
15.20 - 15.40	F4-3	A New Compression Framework: 'A-M' adaptive Code <i>Ahmed Mokhtar, A.Mansour and M. A. Fouad</i>
15.40 - 16.00	F4-4	K-Means clustering based on Gower Similarity Coefficient: A comparative study <i>Bilel Ben Ali and Youssef Massmoudi</i>
<b>F5 - Stochastic Optimization-1 (Chair: Chefi Triki)</b>		
14.40-15.00	F5-1	Novel Adaptive Bacteria Foraging Algorithms for Global Optimization <i>A. N. K. Nasir and M. O. Tokhi</i>
15.00 - 15.20	F5-2	Combined optimization of shipping and storage costs in a multi-product and multi-level supply chain, under a stochastic demand <i>Tikito Kawtar, Achchab Said and Benadada Youssef</i>
15.20 - 15.40	F5-3	Inventory management with supplier selection problem: Supply uncertainty <i>Sourour Aouadni and Abdelwaheb Rebai</i>
15.40 - 16.00	F5-4	A fuzzy stochastic goal programming approach for solving portfolio selection problem <i>Laila Messaoudi and Abdelwaheb rebai</i>
<b>F6 - Work-in-Progress Program (Chair: Moncef Abbas)</b>		
14.40-15.00	F6-1	An algorithm with gain cycle for resolution the bi objective minimum cost flow problem <i>Moncef Abbas</i>
15.00 - 15.20	F6-2	Dynamics of Discrete Models of Biological Networks: An Algebraic Approach <i>Abdul Salam Jarrah</i>
15.20 - 15.40	F6-3	Multiobjective Stochastic Vehicle Routing Problem <i>Fouad Ben Abdelaziz, Houda Alaya and Hatem Masri</i>
15.40 - 16.00	F6-4	Managing intensive care unit and intra-hospital transport of critically ill patients <i>Hadhemi Saadouli, Abdelkarim Elloumi and Abdelaziz Dammak</i>
16.00 - 16.20		<b>COFFEE BREAK</b>



<b>G1 - Scheduling-2 (Chair: Talel Ladhari)</b>		
16.20 - 16.40	G1-1	A heuristic for the network migration scheduling problem <i>Ali Balma, Nejib Hadj-Alouane and Atidel B. Hadj-Alouane</i>
16.40 - 17.00	G1-2	An arc flow model for the two stages variable size cutting stock problem <i>Ines Meftehi and Mehdi Mrad</i>
17.00 - 17.20	G1-3	Logic-based Benders decomposition to solve the permutation flowshop scheduling problem with time lags <i>Imen Hamdi and Taicir Loukil</i>
<b>G2 - Multiobjective Optimization-2 (Chair: Jamil Razmak)</b>		
16.20 - 16.40	G2-1	Generating maximal efficient faces for the multiobjective multicommodity flow problem <i>Hela Masri, Saoussen Krichen and Adel Guitouni</i>
16.40 - 17.00	G2-2	An algorithm for the bi objective minimum cost flow problem with gain cycle <i>Salima Nait-Belkacem and Moncef Abbas</i>
17.00 - 17.20	G2-3	Multi-Criteria Decision Support Systems: A Glorious History and a Promising Future <i>Aouni Belaid and Jamil Razmak</i>
17.20 - 17.40	G2-4	On one approach for solving of some class of Multiobjective optimization problems with interval coefficients <i>Sharif E. Guseynov and Sergey V. Drobyshev</i>
<b>G3 - Statistical and Probabilistic Modeling-2 (Chair: Ismail Kucuk)</b>		
16.20 - 16.40	G3-1	Fluctuation and Scaling of Lyapunov Exponent in various system from one to two-dimensional with diagonal correlated disorder <i>Mokhtar Djelloul and Nouredine Zekri</i>
16.40 - 17.00	G3-2	Mixture Periodic GARCH models: Applications to Exchange Rate Modeling <i>Fayçal Hamdi and Said Souam</i>
17.00 - 17.20	G3-3	Comparison of proportional hazards models and accelerated failure time models Application to real data "lung cancer" <i>Goual Hafida and Seddik Ameur Nacira</i>
<b>G4 - Signal Processing-1 (Chair: Hassan Mir)</b>		
16.20 - 16.40	G4-1	Modelling of Polyaniline for Wi-Fi electromagnetic interference shielding <i>Whamid Al-Shabib and Stefan W. Lachowicz</i>
16.40 - 17.00	G4-2	On The Synthesis of digital two dimensional filters based on FIR filters approximation <i>Amel B. H. Adamou-Mitiche, Lahcène Mitiche and Vasile Sima</i>
17.00 - 17.20	G4-3	A Robust Detection and removal of beard from three dimensional human face <i>Dhahri Rokaya and Samir Belaid</i>
17.20 - 17.40	G4-4	A Fast New Method to Mitigate Amplifier-Induced ICI in OFDM systems Based on Predistortion in DFT Domain <i>Reza Soosahabi, Nasim Nasirian, Mort Naraghi-Pour and Magdy Bayoumi</i>
<b>G5 - Graphical models under uncertainty-1 (Chair: Nahla Ben Amor)</b>		
16.20 - 16.40	G5-1	Belief Hidden Markov Model for Speech Recognition <i>Siwar Jendoubi, Boutheina Ben Yaghlane and Arnaud Martin</i>
16.40 - 17.00	G5-2	On the modeling of causal belief networks <i>Imen Boukhris, Zied Elouedi and Salem Benferhat</i>
17.00 - 17.20	G5-3	A Compilation based Approach to Inference in Dynamic Evidential Networks <i>Laamri Wafa, Boutheina Ben Yaghlane and Christophe Simon</i>
17.20 - 17.40	G5-4	Evaluation of qualitative possibilistic influence diagrams using strong junction trees <i>Fatma Essghaier, Nahla Ben Amor and Hélène Fargier</i>
17.40 - 18.00	G5-5	Understanding soft evidence as probabilistic evidence : illustration with several use cases <i>Ali Ben Mrad, Véronique Delcroix, Sylvain Piechowiak, Mohamed Amine Maalej and Mohamed Abid</i>

G6 - Work-in-Progress Program (Chair: Hatem Masri)		
16.20 - 16.40	G6-1	The Mixed Orienteering Problem <i>Mariam Mekki Masmoudi and Abdelaziz Dammak</i>
16.40 - 17.00	G6-2	Molecular mechanics or quantum mechanics for the complexes of nanostructured inclusion <i>Khatmi djameleddine, Djémil Rayenne</i>
17.00 - 17.20	G6-3	Modeling ungauged rivers and wadis in arid and semi-arid regions of Algeria <i>Fares belagoune, Djamel Boutoutaou and Rahmani Kamel</i>
20.00 - 23.00		CONFERENCE DINNER

TUESDAY 30/04/2013		
		<b>H1 - Classification and Clustering-2 (Chair: Zied Elouedi)</b>
8.30 - 8.50	H1-1	Data Mining Techniques to Predict Protein Secondary Structures <i>Sondès Fayeche, Nadia Essoussi and Mohamed Limam</i>
8.50 - 9.10	H1-2	A RBN-based recommender system architecture <i>Mouna Ben Ishak, Nahla Ben Amor and Philippe Leray</i>
9.10 - 9.30	H1-3	Using clustering for maintaining case based reasoning systems <i>Abir Smiti and Zied Elouedi</i>
9.30 - 9.50	H1-4	A two-stage technique to improve intrusion detection systems based on data mining algorithms <i>Hachmi Fatma and Limam Mohamed</i>
		<b>H2 - Stochastic Optimization (2) (Chair: Chefi Triki)</b>
8.30 - 8.50	H2-1	An Evaluation of the Risk Impact of Device Heterogeneity on Critical Care Delivery <i>Mohamed Khedr Saad, Bilal Khan and Ghassen Ben Brahim</i>
8.50 - 9.10	H2-2	Novel Hybrid Bacterial Foraging and Spiral Dynamics Algorithm <i>A. N. K. Nasir and M. O. Tokhi</i>
9.10 - 9.30	H2-3	Optimal Control Approach Developed to Four-Wheel Active Steering Vehicles <i>Imen Amdouni, Nafaa Jeddi and Lilia EL Amraoui</i>
9.30 - 9.50	H2-4	A Dynamic Approach for the Two-decision Maker Selection Problem with Group Interviewing Options <i>Sihem Ben Jouida, Hajer Ben-Romdhane and Saoussen Krichen</i>
		<b>H3 - Graphical models under uncertainty-2 (Chair: Nahla Ben Amor)</b>
8.30 - 8.50	H3-1	Behavior of compiled bases in compilation-based inference methods for min-based possibilistic networks <i>Raouia Ayachi, Nahla Ben Amor and Salem Benferhat</i>
8.50 - 9.10	H3-2	Incremental Bayesian network structure learning in high dimensional domains <i>Amanullah Yasin and Philippe Leray</i>
9.10 - 9.30	H3-3	Benchmarking dynamic Bayesian network structure learning algorithms <i>Ghada Trabelsi, Philippe Leray and Mounir Ben Ayed</i>
9.30 - 9.50	H3-4	Particle Swarm Optimization based method for Bayesian Network Structure Learning <i>Saoussen Aouay, Salma Jamoussi and Yassine Ben Ayed</i>
		<b>H4 - Discrete Event Systems Formalisms-1 (Chair: Kamel Barkaoui)</b>
8.30 - 8.50	H4-1	On CPN-based Verification of Hierarchical Formalization of UML 2 Interaction Overview Diagrams <i>Aymen Louati, Chadlia Jerad and Kamel Barkaoui</i>
8.50 - 9.10	H4-2	Computation of Resource Circuits of Petri Nets by Using Binary Decision Diagrams <i>YuFeng Chen, Ding Liu, GaiYun Liu and Kamel Barkaoui</i>
9.10 - 9.30	H4-3	Verifying Web Services Substitutability Using Open Colored Nets Reduction Techniques <i>Sofiane Bourouz and Nadia Zeghib</i>
9.30 - 9.50	H4-4	Automatic Web Services Composition Using Maude Strategies <i>Latreche Fateh, Sebih Hacene and Belala Faiza</i>
		<b>H5 - Civil Engineering (Chair: Mongi Ben Ouezdou)</b>
8.30 - 8.50	H5-1	Simulating the effects of the passage of tractors on agricultural land <i>A. Elaoud, S. Chehaibi and K. Abrougui</i>
8.50 - 9.10	H5-2	Finite element simulations of the shear capacity of GFRP-reinforced concrete short beams <i>Farid H Abed, Abdullah Al-Rahmani and Ahmed H. Al-Rahmani</i>
9.10 - 9.30	H5-3	Modeling of creep in GFRP RC Beams <i>Abdelmonem Masmoudi, Mongi Ben Ouezdou and Mohamed Anouar BELDI</i>
9.30 - 9.50	H5-4	Numerical Investigation of Hybrid FRP Reinforced Beams <i>Abdullah Al-Rahmani and Farid H Abed</i>

H6 - IEEE TN CEDA contest		
8.30 - 8.50	H6-1	Arnoldi Model Reduction for Switched Linear systems <i>Mohamed Kouki, Mehdi Abbas and Abdelkader Mami</i>
8.50 - 9.10	H6-2	An optimised submicron Dual-Material gate (DM) GaAs-MESFETs design to improve the analog performance using multi-objective computation <i>N. Lakhdar, F. Djeflal, D. Arar, M. Meguellati and T. Bendib</i>
9.10 - 9.30	H6-3	An optimized junctionless GAA MOSFET design based on multiobjective computation for nanoelectronic applications <i>F. Djeflal, T. Bendib and M. Meguellati</i>
9.30 - 9.50	H6-4	Metaheuristic Algorithms Comparison for the LC - Voltage Controlled Oscillators Optimal Design <i>P. Pereira, M. Kotti, H. Fino and M. Fakhfakh</i>
9.50 - 10.10		COFFEE BREAK
		<b>I1 - Water Resources Management-3 (Chair: Sihem Benabdallah)</b>
10.10 - 10.30	I1-1	Simulation of air lift packed column <i>Adel Oueslati, Ahmed Hannachi and Mohamed Elmaaoui</i>
10.30 - 10.50	I1-2	Comparison of Green & Ampt and reservoir model effect on Rainfall-Runoff response (Study case: Skhira basin) <i>Hana Gharbi, Samah Chargui and Mohamed Slimani</i>
10.50 - 11.10	I1-3	A MATLAB program for identifying the rainfall variability in rainfall-runoff modeling in Semi arid region (Merguellil basin: Central Tunisia) <i>Sameh Chargui, Hana Gharbi and Mohamed Slimani</i>
		<b>I2 - Combinatorial Optimization-2 (Chair: Moncef Abbas)</b>
10.10 - 10.30	I2-1	An iterated greedy heuristic for the static empty vehicle redistribution problem for the Personal Rapid Transit system <i>Ezzeddine Fatnassi, Ofa Chebbi and Joughaina Chaouachi Siala</i>
10.30 - 10.50	I2-2	Linear Models for the Total Coverage Problem in Wireless Sensor Networks <i>Maher Rebai, Hichem Snoussi, Iyes Khoukhi and Faicel Hnaïen</i>
10.50 - 11.10	I2-3	A new web-based solver for Combinatorial Optimization Problems under Permutation Property <i>Lamia Trabelsi and Talel Ladhari</i>
		<b>I3 - Engineering Management-2 (Chair: Willem Brauers)</b>
10.10 - 10.30	I3-1	Towards a multi_agent system for manufacturing reconfiguration <i>Wiem Mrabet and Talel Ladhari</i>
10.30 - 10.50	I3-2	Effect of Wastes on Changeover Time in Garment Industry <i>Bessem Kordoghli and Ali Moussa</i>
10.50 - 11.10	I3-3	A multi-period supply chain design with product life cycle considerations <i>Besbes Khaoula, Loukil Taicir, Allaoui Hamid and Goncalves Gilles</i>
		<b>I4 - Discrete Event Systems Formalisms-2 (Chair: Kamel Barkaoui)</b>
10.10 - 10.30	I4-1	Modular Structural Analysis of Petri Nets for Distributed Causal Model-based Diagnosis <i>Hammadi Bennoui and Kamel Barkaoui</i>
10.30 - 10.50	I4-2	A Formal Task Model for Flexible Workflows Systems <i>Rim Hachicha</i>
10.50 - 11.10	I4-3	The Embedded Control System through Real-Time Task <i>Atef Gharbi, Mohamed Khalgui and Samir Ben Ahmed</i>
		<b>I5 - Signal Processing-2 (Chair: Hassan Mir)</b>
10.10 - 10.30	I5-1	Wavelets and Curvelets Transform for Detecting of Microcalcification in Mammograms <i>Mohamed Amine Harabi and Mohamed Ali Hamdi</i>
10.30 - 10.50	I5-2	Spatio-temporal representation of spectral signature <i>Rafika Ben Salem, Karim Saheb Ettabaï and Mohamed Ali Hamdi</i>
10.50 - 11.10	I5-3	Improved Frame Level Features and SVM Supervectors Approach for the Recognition of Emotional States from Speech <i>Imen Trabelsi, Dorra Ben ayed and Nouredine Ellouze</i>

<b>I6 - Electronic Design and Automation (Chair: Mourad Fakhfakh)</b>		
10.10 - 10.30	I6-1	An optimized GSDG MOSFET design for nanoscale circuit applications <i>D. Arar, F. Djeflal, M. Meguellati and M. Chahdi</i>
10.30 - 10.50	I6-2	Dual-Top-Gated Graphene field-effect transistors to improve the subthreshold swing for digital applications <i>K. Tamersit, F. Djeflal, D. Arar and M. Meguellati</i>
10.50 - 11.10	I6-3	ANFIS-based computation to study the nanoscale circuit including the hot-carrier and quantum confinement effects <i>T. Bentrcia, F. Djeflal, D. Arar and M. Meguellati</i>
11.10 - 11.30		<b>Closing Ceremony</b>
12.00 - 17.30		<b>Social Tour to Carthage/Sidi Bou Said *</b>

\* extra Paid tour with lunch and free entrance to the museum. Booking on-site.