

# MESM'2006 FINAL PROGRAMME

Overhead and LCD Projector are standard

The underlined authors are usually the presenters.

Conference Site: Mercure Romance Hotel, 1677 303 Tareek El Gueisch Saba Pasha, Alexandria,  
Egypt, Tel. +20.3.58.40911-12, Fax: +20.3/5830526

## Monday, August 28, 2006

08.30 - 17.00 **Registration**

09.00 - 09.15 **Welcome:**

**Welcome Address**

Marwan Al-Akaidi, De Montfort University, Leicester, United Kingdom

09.15 - 10.00 **Session I**

### KEYNOTE SPEAKER

09.15-10.00

**Session Chairperson:**

Marwan Al-Akaidi, De Montfort University, Leicester, UK

**KEYNOTE:**

**Advanced Discrete HMM Network Structures for Classification and Prediction**

Prof. Costas Xydeas, Lancaster University, Lancaster, United Kingdom

10.00 - 10.30 **Coffee/Tea Break**

10.30 - 12.30 **Session II:**

### ELECTRONIC APPLICATIONS SIMULATION

10.30-12.30

**Session Chairperson:**

Marwan Al-Akaidi, De Montfort University, Leicester, UK

**ELEC-14**

**Evaluation Textile Fabrics Color Difference by Digital Camera**

A. Shams-Nateri..... 99

## Monday, August 28, 2006

### ELEC-03

**A Versatile Sonar Simulation Platform for Testing Seabed Estimation Algorithms**

Ghedhban Swadi, Tahseen Rafik and Ivan Jordanov ..... 104

### ELEC-07

**Simulation and Experimental Calculations of Short Circuit Current of In-Doped Silicon Solar Cells**

Wagah F. Mohamad and Omar Radaideh ..... 109

### ELEC-08

**Fast Energy Loss Computation and Fuzzy-Based Shunt Capacitor Insertion**

W. F. Mohammad, N. Tawalbeh and K. M. Al-Aubidy..... 116

12.30 - 14.00      **Lunch**

14.00 - 15.00      **Session III**

## SIMULATION METHODOLOGY

14.00-15.00

**Session Chairperson:**

**Amer Ghada, Benha University, Egypt**

### METH-01

**Solving Stochastic Project Selection Problems by combining Simulation and Neighborhood Search**

M. Minoux ..... 5

### METH-03

**New Model for Asphaltene Precipitation with Modified Virile Equation of State**

Sabbaghi S. Sh. Ayatollahi, M. Shariaty-Niassar and A. Jahanmiri ..... 8

15.00 - 15.30      **Coffee/Tea Break**

**Monday, August 28, 2006**

15.30 - 18.30 **Session IV**

**ENGINEERING SIMULATION**

15.30-18.30

**Session Chairperson:**

**Costas Xydeas, Lancaster University, Lancaster, UK**

**ENG-01**

**A Solution to the Low Damping Problem of Hydraulic Drive Systems**

A. Chatzinikolaou and C. Angeli..... 17

**ENG-04**

**Dynamic Simulation Modeling of Landing Craft**

Zdravko Terze, Hinko Wolf and Dubravko Matijašević..... 22

**ENG-03**

**Developing a Framework for Discrete Event Simulation of Aircraft  
Piston Engine Overhaul Procedures**

Reza Azadegan and Maghsud Solimanpur..... 27

**ENG-02**

**Analyzing Overhaul Cycle Time of a Typical Aeroengine Obtained  
from Simulation**

Maghsud Solimanpur and Reza Azadegan..... 32

**ENG-06**

**Using Physics of the System in Verification and Validation of simula-  
ting Overhaul Procedures of a Typical Aeroengine**

Reza Azadegan and Maghsud Solimanpur..... 37

**ELEC-N**

**MIMO-OFDM Channel Modeling and Performance**

Omar Daoud, Marwan Al-Akaidi and Jonathan Ivins..... 92

18.30 -

**FREE EVENING**

## Tuesday, August 29, 2006

08.30 - 17.00 **Registration**

09.00 - 10.00 **Session V**

### SCICOS I

09.00-10.00

**Session Chairperson:**

**Ramine Nikoukhah, INRIA, Rocquencourt, France**

**SCI-06**

**A survey of Scilab simulation tools**

François Delebecque ..... 169

**SCI-01**

**GreenScilab: A toolbox simulating virtual plants in the Scilab environment**

MengZhen Kang, Rui Qi, Philippe de Reffye and BaoGang Hu ..... 174

10.00 - 10.30 **Coffee/Tea Break**

10.30 - 12.30 **Session VI**

### SCICOS II

10.30-12.30-

**Session Chairperson:**

**François Delebecque, INRIA, France**

**SCI-02**

**SCICOS: Use of Hardware in the Loop Simulation in Control**

Simone Mannori and Ramine Nikoukhah..... 179

**SCI-03**

**Modeling and simulation of chaotic communication systems in Scilab/Scicos environment**

Alan Layec, Laurent Larger, Danièle Fournier-Prunaret and Raymond Quéré..... 186

**SCI-04**

**Scilab tools for simulation of systems with non stationary modal parameters**

Maurice Goursat and Laurent Mevel..... 193

**Tuesday, August 29, 2006**

**SCI-05**

**A Learning Based Stochastic Approach for Fault Diagnosis in a Continuous Stirred Tank Reactor**

T. Al Ani and Y. Hamam ..... 200

12.30 - 14.00 **Lunch Break**

14.00 - 15.00 **Session VII**

**MULTIMEDIA SIMULATION**

**14.00-15.00**

**Session Chairperson:**

**Marwan Al-Akaidi, De Montfort University, Leicester, UK**

**WEB-02**

**Experimental Web Content re-authoring System [EWCRS]**

May Haikel Riadh, Hilal M. Yousif and Akram M. Othman ..... 153

**WEB-01**

**Self learning using Web 3D Prototypes**

Jesus Félez; Maria L. Martínez, Gregorio Romero

and Joaquin Maroto ..... 160

15.00 - 15.30 **Coffee/Tea Break**

15.30 - 17.30 **Session VIII**

**ELECTRONIC NETWORKS SIMULATION**

**15.30-17.30**

**Session Chairperson:**

**Kasim Al-Aubidy, Philadelphia University, Amman, Jordan**

**ELEC-10**

**A New Modeling and Analysis of Ethernet Network System**

Y. Jayanta Singh and S.C. Mehrotra..... 63

**Tuesday, August 29, 2006**

**ELEC-11**

**Mobility Based Routing for Mobile Ad Hoc Networks**

M. Alchaita, M. Al-Akaidi and J. Ivins ..... 76

**ELEC-16**

**Simulation of Broadband Flattening Optical Communication System using Raman Amplifier**

Sawsan Abdul Karim Abdul Majid and Abeer Dahfir Al\_Rikabi ..... 83

**ELEC-13**

**Analytical Model for Resource Allocation in Multimedia Communication Networks**

O. Alani, M. Al-Akaidi and J. Ivins ..... 88

19.00 - 22.00      **CONFERENCE DINNER**

**Wednesday, August 30, 2006**

08.30 - 09.30 **Registration**

09.00 - 10.00 **Session IX**

**ELECTRONICS SIMULATION IN MEDICINE**

**09.00-10.00**

**Session Chairperson:**

**Tahseen Rafik, University of Wales, Cardiff, UK**

**ELEC-04**

**A Scalable Authentication Scheme of the Stored and Transmitted Medical Images**

Atef Masmoudi and Mohamed Salim Bouhlel ..... 125

**ELEC-05**

**Statistical and Neural Network Classification of Skin Lesion Images**

Khaled Taouil, Nadra Ben Romdhane and Med Salim Bouhlel..... 130

**ELEC-06**

**Mammographic Microcalcifications Detection Using Discrete Wavelet Transform**

Nizar Ben Hamad, Khaled Taouil and Med Salim Bouhlel ..... 135

**ELEC-17**

**Effect of High Frequency Electromagnetic Field on Human Head using multi-layer Model**

Ossama E. Gouda, Adel Zein E.M. and Ghada M. Amer..... 140

10.00 - 10.30 **Coffee/Tea Break**

10.30 - 12.00 **Session X**

**SIMULATION IN CIM AND LOGISTICS**

**10.30-12.00-**

**Session Chairperson:**

**Marwan Al-Akaidi, De Montfort University, Leicester, UK**

## Wednesday, August 30, 2006

### ENG-07

**Using Simulation Modeling in Diagnostic of a Car Manufacturing Company Future Expansion: A Case Study**

Reza Zanjirani Farahani and Nasrin Asgari ..... 45

### LOG-02

**Modeling the Dispersion of the Demand when Simulating the News-boy Problem**

P. Douilet and B. Rabenasolo ..... 51

### LOG-01

**Linking E-Commerce to Logistics Simulation VisionS: The Missing Chain**

Naoufel Cheikhrouhou , Luca Canetta, Rémy Glardon, Roland Fischbach and Ahmed El Mimouni..... 56

12.00 - 12.15

**Session XI**

### CLOSING SESSION

12.00-12.15

**Session Chairperson:**

**Philippe Geril, European Technology Institute, Belgium**

**SEE YOU NEXT YEAR**

**AT MESM 2007**



# NOTES

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