

<b>Preface</b> .....	<b>IX</b>
<b>Scientific Programme</b> .....	<b>1</b>
<b>Author Listing</b> .....	<b>211</b>

**SIMULATION METHODOLOGY**

<b>Solving Stochastic Project Selection Problems by combining Simulation and Neighborhood Search</b> M. Minoux .....	<b>5</b>
---	----------

<b>New Model for Asphaltene Precipitation with Modified Virile Equation of State</b> Sabbaghi S. Sh. Ayatollahi, M. Shariaty-Niassar and A. Jahanmiri .....	<b>8</b>
--	----------

**ENGINEERING SIMULATION**

<b>A Solution to the Low Damping Problem of Hydraulic Drive Systems</b> A. Chatzinikolaou and C. Angeli.....	<b>17</b>
---	-----------

<b>Dynamic Simulation Modeling of Landing Craft</b> Zdravko Terze, Hinko Wolf and Dubravko Matijašević.....	<b>22</b>
--	-----------

<b>Developing a Framework for Discrete Event Simulation of Aircraft Piston Engine Overhaul Procedures</b> Reza Azadegan and Maghsud Solimanpur.....	<b>27</b>
--	-----------

<b>Analyzing Overhaul Cycle Time of a Typical Aeroengine Obtained from Simulation</b> Maghsud Solimanpur and Reza Azadegan.....	<b>32</b>
--	-----------

<b>Using Physics of the System in Verification and Validation of simulating Overhaul Procedures of a Typical Aeroengine</b> Reza Azadegan and Maghsud Solimanpur.....	<b>37</b>
--	-----------

**SIMULATION IN CIM AND LOGISTICS**

<b>Using Simulation Modeling in Diagnostic of a Car Manufacturing Company Future Expansion: A Case Study</b> Reza Zanjirani Farahani and Nasrin Asgari .....	<b>45</b>
---	-----------

<b>Modeling the Dispersion of the Demand when Simulating the Newsboy Problem</b> P. Douilet and B. Rabenasolo .....	<b>51</b>
--	-----------

## CONTENTS

<b>Linking E-Commerce to Logistics Simulation Visiones: The Missing Chain</b> Naoufel Cheikhrouhou , Luca Canetta, Rémy Glardon, Roland Fischbach, and Ahmed El Mimouni.....	<b>56</b>
--	-----------

## ELECTRONIC NETWORKS SIMULATION

<b>A New Modeling and Analysis of Ethernet Network System</b> Y. Jayanta Singh and S.C. Mehrotra.....	<b>63</b>
--	-----------

<b>Switched Ethernet Response Time Evaluation via Colored Petri Net Model</b> Dmitry A. Zaitsev and Tatiana R. Shmeleva .....	<b>68</b>
--	-----------

<b>Mobility Based Routing for Mobile Ad Hoc Networks</b> M. Alchaita, M. Al-Akaidi and J. Ivins .....	<b>76</b>
--	-----------

<b>Simulation of Broadband Flattening Optical Communication System using Raman Amplifier</b> Sawsan Abdul Karim Abdul Majid and Abeer Dahfir Al_Rikabi.....	<b>83</b>
--	-----------

<b>Analytical Model for Resource Allocation in Multimedia Communication Networks</b> O. Alani, M. Al-Akaidi and J. Ivins .....	<b>88</b>
---	-----------

<b>MIMO-OFDM Channel Modeling and Performance</b> Omar Daoud, Marwan Al-Akaidi and Jonathan Ivins.....	<b>92</b>
---	-----------

## ELECTRONIC APPLICATIONS SIMULATION

<b>Evaluation Textile Fabrics Color Difference by Digital Camera</b> A. Shams-Nateri.....	<b>99</b>
--	-----------

<b>A Versatile Sonar Simulation Platform for Testing Seabed Estimation Algorithms</b> Ghedhban Swadi, Tahseen Rafik and Ivan Jordanov .....	<b>104</b>
--	------------

<b>Simulation and Experimental Calculations of Short Circuit Current of In-Doped Silicon Solar Cells</b> Wagah F. Mohamad and Omar Radaideh .....	<b>109</b>
--	------------

<b>Fast Energy Loss Computation and Fuzzy-Based Shunt Capacitor Insertion</b> W. F. Mohammad, N. Tawalbeh and K. M. Al-Aubidy.....	<b>116</b>
---	------------

**ELECTRONICS SIMULATION IN MEDICINE**

**A Scalable Authentication Scheme of the Stored and Transmitted Medical Images**  
 Atef Masmoudi and Mohamed Salim Bouhlel ..... 125

**Statistical and Neural Network Classification of Skin Lesion Images**  
 Khaled Taouil, Nadra Ben Romdhane and Med Salim Bouhlel..... 130

**Mammographic Microcalcifications Detection Using Discrete Wavelet Transform**  
 Nizar Ben Hamad, Khaled Taouil and Med Salim Bouhlel ..... 135

**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

**MULTIMEDIA SIMULATION**

**HiperJanela, an Upper Dimension for the Society of Information**  
 J. Manuel Feliz-Teixeira..... 147

**Experimental Web Content re-authoring System [EWCRS]**  
 May Haikel Riadh, Hilal M. Yousif and Akram M. Othman ..... 153

**Self learning using Web 3D Prototypes**  
 Jesus Félez; Maria L. Martínez, Gregorio Romero and Joaquin Maroto..... 160

**SCICOS**

**A survey of Scilab simulation tools**  
 François Delebecque ..... 169

**GreenScilab: A toolbox simulating virtual plants in the Scilab environment**  
 MengZhen Kang, Rui Qi, Philippe de Reffye and BaoGang Hu ..... 174

**SCICOS: Use of Hardware in the Loop Simulation in Control**  
 Simone Mannori and Ramine Nikoukhah..... 179

**Modeling and simulation of chaotic communication systems in Scilab/Scicos environment**  
 Alan Layec, Laurent Larger, Danièle Fournier-Prunaret and Raymond Quéré..... 186

**Scilab tools for simulation of systems with non stationary modal parameters**  
 Maurice Goursat and Laurent Mevel..... 193

## **CONTENTS**

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

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