IJEE Contents Vol 25-2

Part I

Special Issue Simulators for Engineering Education and for Professional Development

Guest Editors:

Avraham Shtub, Technion-Israel Institute of Technology Avraham Parush, Carleton University Thomas T. Hewett, Drexel University

A. Ibrahim,	<u>Editorial</u>
A. Shtub, A. Parush and T. T. Hewett	Guest Editorial: The Use of Simulation in Learning and Teaching
A. Babich and K. Th. Mavrommatis	<u>Teaching of Complex Technological Processes Using Simulations</u>
A. García-Beltrán, S. Tapia, R. Martínez and J. A. Jaén	Simulator for a Multi-Programming Environment for Computer Science Learning and Teaching
C. Yehezkel, M. Eliahu and M. Ronen	Easy CPU: Simulation-based Learning of Computer Architecture at the Introductory Level
M. Gunes and A. F. Baba	Educational Tool for Design and Implementation of an Autonomous Mobile Robot
F. Ramos, S. López, E. Espinosa, J. Carlos Rebón, A. Hernández and A. Arredondo	Simulator for Learning Symbolically about the Behavior of Motion in Bipedal Robots
Z. Doulgeri and N. Zikos	<u>Development, Integration and Evaluation of a Web-based Virtual Robot</u> <u>Task Simulator in the Teaching of Robotics</u>
N. Fang, R. Cook and K. Hauser	<u>Lean Lego Simulation for Active Engagement of Students in Engineering Education</u>
E. Bautista, J. Echavarri, J. M. Munoz-Guijosa,A. Díaz-Lantada, P. Lafont, J. Muñoz-García,J. L. Muñoz-Sanz and H. Lorenzo-Yustos	Simulink Model for Teaching the 'Stick-Slip' Friction Phenomenon in 'Machine Vibration and Noise' course
B. Vahidi and M. R. Bank Tavakoli	Simulation of Synchronous Generator on MATLAB-SIMULINK for Teaching Performance Characteristics to Undergraduate Students
M. J. Saenz and J. L. Cano	Experiential learning through simulation games: An empirical study
B. D. Coller and D. J. Shernoff	<u>Video Game-Based Education in Mechanical Engineering: A Look at Student Engagement</u>
W-F. Chen	A Model for Assessing Web-Based Simulations in Engineering Education
R. Antón, H. Jonsson, J. C. Ramos, T. Gómez-Acebo and A. Rivas	Refrigerating Cycle Simulator: System Modelling, Educational Implementation and Assessment

Part II

Contributions in: Mechanical Engineering, Chemical Engineering, Computer Engineering, Aeronautical Engineering, Active Learning, and Enrollment Management

J. R. Serrano, S. Ruiz, J. J. López and <u>A Teaching Approach for Gas Turbines Using Spreadsheets</u>

C. Guardiola

M. Krajnc <u>E-learning Environment Integration in the Chemical Engineering</u>

Educational Process

M. E. Macías and E. D. Guridi <u>Emulation of Real Processes to Improve Training in Automation</u>

J. Pérez, F. Jiménez and S. Poveda

<u>Classroom Simulation of Cooperative Engineering Design Practice in an</u>

Aeronautical Company

J. Wren, J. Renner, R. Gårdhagen and Learning More with Demonstration Based Education?

K. Johansson

R. Salgado, N. Takeda and N. Roffe <u>Interdisciplinary Collaborative Active Learning: The `WOW!' Factor for</u>

Project Oriented Industrial Design and Electronic Engineering Courses

E. Kongar, T. M. Sobh and M. Baral <u>Two-Step Data Envelopment Analysis Approach for Efficient Engineering</u>

Enrollment Management