# WSEAS Transactions on Advances in Engineering Education

Contents: 2014 Print ISSN: 1790-1979 E-ISSN: 2224-3410

## Acceptance Rate (for the years 2013 and 2014): 42.62%

Acceptance Rate = C/D where: C = the number of accepted papers, D= the number of submitted papers. Withdrawn Papers are not considered for the numbers C and D.

# **Editorial Board:**

#### **Editor-in-Chief**

Professor Philippe Dondon
ENSEIRB-MATMECA, École Nationale Supérieure d'Électronique
Informatique et Radiocommunications de Bordeaux
1 avenue du Dr Albert Schweitzer, B.P. 99 33402
Talence, Cedex
France

E-mail: Philippe.Dondon@enseirb-matmeca.fr

### **Associate Editors:**

Prof. Giovanni Fulantelli, National Research Council of Italy, Institute for Educational Technologies Palermo, Italy

Prof. Cathy H. Qi, University of New Mexico, Albuquerque, NM, USA

Prof. Sara De Freitas, Coventry University, UK

Prof. Toshio Okamoto, The University of Electro-Communications, UEC & KCG, Japan

Prof. Xiang Bai, Huazhong University of Science and Technology, China

Prof. Konstantinos G. Arvanitis, Agricultural University of Athens, Athens, Greece

Prof. Cornelia Aida Bulucea, University of Craiova, Craiova, Romania

Prof. Alexander Gegov, University of Portsmouth, UK

Prof. Dimos Triantis, Technological Educational Institute of Athens, Greece

Prof. Imre Rudas, Obuda University, Hungary

## **Topics**

Basic Science in Engineering Education Continuing Education & Its Delivery Engineering Education Reforms International Recognition of Qualifications Studies in Engineering and the needs of the Production and Market New Technologies in Education Industry and Education Collaboration Research and Education Globalisation in engineering education. Challences and problems Management of engineering education. Know-how in engineering education Environment and engineering education Mobility of Scholars European Integration and Engineering Education Computers, Internt, Multimedia in Engineering Education National Technical Chambers and National Societies in Engineering Education International Organizations and Engineering Education New Changes and Challenges in Engineering Education New Changes and Challenges in Teaching in Technical Universities Organization of Laboratories Private Education and State Education Management of Educational Institutes Relations between teachers and students Minorities in Education Foreign Students' problems in Educational Institutes What is the role of retired professors and emeritus professors in Education? Methodologies in examinations and relevant problems Examinations and Tests via Internet Professors' Elections and promotions in the Universities Awards and Education Psycological Aspects Athletics and Social Activities in Higher Education Research and development in Engineering Education Resourses and Funds in Engineering Education Technical design of didactical tools Sustainable development education

#### **Articles:**

<b>Evolving Paper-Based Activities Approach</b>	(EPAA) to Promote Interest in Software
Engineering Education	

Authors: Shahida Sulaiman, Sarina Sulaiman, Sharifah Mashita Syed-Mohamad, Wahidah Husain

An Innovative Solar Production Simulator to Better Teach the Foundations of Photovoltaic Energy to Students

20

10

Authors: Sebastien Jacques, Zheng Ren, Sebastien Bissey, Ambroise Schellmanns, Nathalie Batut, Thierry Jacques, Eric Pluvinet

<u>Designing an ANOVA Experiment to Estimate the Impact of E-Learning System</u> <u>Upon Students' Performances within the University of Petrosani</u>

31

Authors: Codruţa Cornelia Dura, Sorin Mihăilescu

Exploration of Virtual Reality Modelling Language World and its Didactical Applications

43

Authors: Ph. Dondon, M. Marthiens Dagorette, J. M. Micouleau, A. Bulucea

Students English Language Proficiency and its Impact on the Overall Student's Academic Performance: An Analysis and Prediction using Neural Network Model	53
Authors: P. M. Arsad, N. Buniyamin, J. Ab. Manan	
Pedagogical Study of an Electric Bike with Low Energy Consumption, Management and Dimensioning of Onboard Energy: Eco Marathon Authors: Arnaud Sivert, Franck Betin, Thierry Lequeu	65
A Implementation Framework for Tutorial Based Learning (TBL) Authors: Bhawani Shankar Chowdhry, Syed M. Zafi S. Shah, Syed M. Z. Abbas Shah	72
Exploring the Technological Factors Affecting Creativity in Computational Thinking- centered Learning Context Authors: Soon-Hwa Kim, Ki-Sang Song, Se Young Park	79
A Prevalence Trend of Characteristics of Intelligent and Adaptive Hypermedia E- Learning Systems  Authors: Maja Gligora Marković, Alen Jakupović, Božidar Kovačić	101