

## Table of Contents

Volume 5 Number 3

August 2014

### Regulation of the Reacted Layer Thickness in a Gas-Solid Reacting System

M. A. Barron, D. Y. Medina, G. Plascencia.....91

### Mathematical Models of Receptivity of a Robot and a Human to Education

O. G. Pensky, V. O. Michailov, K. V. Chernikov.....97

### A Study on Autotuning Controller for Servo System

N. H. Giap, J.-H. Shin, W.-H. Kim.....102

### A Reference-Pulse Generator for Motion Control System

N. H. Giap, J.-H. Shin, W.-H. Kim.....111

### About a Method of Recognition of Race and Ethnicity of Individuals Based on Portrait Photographs

T. Kazimov, S. Mahmudova.....120

### Evaluation of Replacement Policies in Sow Farms Using Arena<sup>TM</sup> Simulation Software

M. A. M. Benítez, L. M. P. Aragones, M. A. S. Garcia, O. M. Arango, J. R. C. Armenta.....126

### Opportunities and Challenges of Robotics and Automation in Offshore Oil & Gas Industry

H. P. Chen, S. Stavinotha, M. Walker, B. Zhang, T. Fuhlbrigge.....136

### Constructive General Bounded Integral Control

B. S. Liu.....146

### A Parameter Varying PD Control for Fuzzy Servo Mechanism

N. J. Soufi, M. K. Moghaddam, S. S. Boroujeni, A. Vahidifar.....156

### Gradient Observability for Semilinear Hyperbolic Systems: Sectorial Approach

A. Khazari, A. Boutoulout.....170