

# **WSEAS Transactions on Systems and Control**

**Print ISSN: 1991-8763**

**E-ISSN: 2224-2856**

**Contents: 2013**

**Impact factor according to the citations in Thomson Reuters (ISI Web of Knowledge) for 2014: 0,207**

Impact Factor = A/B where: A = the number of citations by Thomson Reuters (ISI Web of Knowledge) in 2014 for the published papers in this journal in 2012 and 2013. B = the total number of papers published by this journal in 2012 and 2013.

**Acceptance Rate (for the years 2013 and 2014): 20.03%**

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 Withdrawn Papers are not considered for the numbers C and D.

## **Editor-in-Chief**

Prof. Sorinel Adrian Oprisan, College of Charleston, SC, USA

[URL](#), Email: [oprisans@cofc.edu](mailto:oprisans@cofc.edu)

## **Associate Editors:**

Prof. Daniel Kammen, University of California, Berkeley, USA

[URL](#), Email: [kammen@berkeley.edu](mailto:kammen@berkeley.edu)

Prof. David A. Johnson, University of Waterloo, Canada

[URL](#), Email: [da3johns@uwaterloo.ca](mailto:da3johns@uwaterloo.ca)

Prof. D. Subbaram Naidu, IEEE Fellow, Idaho State University, USA

[URL](#), Email: [nайдудс@isu.edu](mailto:naiduds@isu.edu)

Prof. Tadeusz Kaczorek, IEEE Fellow, Warsaw University of Technology, Poland

[URL](#), Email: [kaczorek@ee.pw.edu.pl](mailto:kaczorek@ee.pw.edu.pl)

Prof. Wasfy B. Mikhael, IEEE Fellow, Vice President IEEE Circuits and Systems

University of Central Florida, Orlando, USA

[URL](#) and [URL](#), Email: [Wasfy.Mikhael@ucf.edu](mailto:Wasfy.Mikhael@ucf.edu)

Prof. Pierre Borne, IEEE France Section Chair, IEEE Fellow

IEEE/SMC Past President, Ecole Centrale de Lille, France

[URL](#), Email: [p.borne@ec-lille.fr](mailto:p.borne@ec-lille.fr)

Prof. George Vachtsevanos, Georgia Institute of Technology, Atlanta, Georgia, USA

[URL](#), Email: [giv@ece.gatech.edu](mailto:giv@ece.gatech.edu)

Prof. Yuriy S. Shmaliy (IEEE Fellow), Universidad de Guanajuato, MEXICO.

[URL](#), Email: [shmaliy@ugto.mx](mailto:shmaliy@ugto.mx)

Prof. Jan Awrejcewicz, Technical University of Lodz, Lodz, Poland

[URL](#), Email: [jan.awrejcewicz@p.lodz.pl](mailto:jan.awrejcewicz@p.lodz.pl)

Prof. Imre J. Rudas, Óbuda University, Budapest, Hungary

[URL](#), Email: [rudas@uni-obuda.hu](mailto:rudas@uni-obuda.hu)

Prof. Carla Pinto, Polytechnic of Porto, Porto, Portugal

[URL](#), Email: [cap@isep.ipp.pt](mailto:cap@isep.ipp.pt)

Prof. Ottavia Corbi, University of Naples Federico II, Italy

[URL](#), Email: [ottavia.corbi@unina.it](mailto:ottavia.corbi@unina.it)

Prof. Hamid Reza Karimi, University of Agder, Grimstad, Norway

[URL](#), Email: [hamid.r.karimi@uia.no](mailto:hamid.r.karimi@uia.no)

Prof. Hung-Yuan Chung, National Central University, Taiwan

[URL](#), Email: [hychung@ee.ncu.edu.tw](mailto:hychung@ee.ncu.edu.tw)

Prof. Alexander Gegov, University of Portsmouth, UK

[URL](#), Email: [alexander.gegov@port.ac.uk](mailto:alexander.gegov@port.ac.uk)

Prof. Elbrous M. Jafarov, Istanbul Technical University, Istanbul, Turkey

[URL](#), Email: [cafer@itu.edu.tr](mailto:cafer@itu.edu.tr)

Prof. Bosukonda Murali Mohan, Indian Institute of Technology Kharagpur, Kharagpur, India

[URL](#), Email: [mohan@ee.iitkgp.ernet.in](mailto:mohan@ee.iitkgp.ernet.in)

Prof. Dimitrios A. Karras, Sterea Hellas Institute of Technology, Greece

[URL](#), Email: [dakarras@teihal.gr](mailto:dakarras@teihal.gr)

## Topics

a) Systems Dynamical systems, Differential Equations: Ordinary Differential Equations Functional Differential Equations Partial Differential Equations Numerical Methods, Simulation Nonlinear analysis, Stability, Nonlinear oscillations, Bifurcations, Singular perturbations Fractals, Ergodic theory, Mathematical Systems Theory, Computational Intelligence (Neural Nets, Fuzzy Systems, Evolutionary Computing, Ant Colony Optimization etc...) Artificial Intelligence Knowledge Modelling, Decision Support Systems Hierarchical Control Systems Stochastic Systems, Non-linear Systems Multidimensional Systems, Multivariable systems Hybrid Systems, Multirate Systems Speech and Image Processing Systems Discrete Event Dynamic Systems Manufacturing Systems, Decentralised Systems Remote Sensing, Microelectromechanical Systems Human-Machine Systems, Image compression Scientific visualization. Applications and Special Topics

b) Control Mathematical Theory of Control Stability, Observability, Controllability, Factorizability, Reachability Linear Control, Non-Linear Control Optimal Control, Robust Control Computational Intelligence Neural Control, Fuzzy Control, Genetic Control Hybrid (Neural-Fuzzy-Evolutionary) Methodologies Intelligent Control, Stochastic Control, Discrete Control Hierarchical Control, Large Scale Systems, Adaptive Control Predictive Control, Process Control, H-infinity Control Multivariable Control, Multidimensional Control Multivariable Systems, Discrete Event Systems Re-configurable Systems, Real-Time Control Industrial Control, Control for Electric Machines Control for Power Systems, Fault Detection Simulation, Optimization, Identification Estimation, Kalman Filtering, Robotics Robotic Networks, Mechatronics Artificial Intelligence, Circuits, Devices and Systems for Automation and Control Electronics for Control, Electrical and Electronic Measurement Signal Processing for Control, Human-Machine Systems and Cybernetics Modeling and Simulation, Computer Networks for Control Internet Control, Microprocessors, Computer Architecture for Control Software tools for Control, CAD/CAM systems Applications and Special Topics

### **Articles:**

[Reduced-Order Observer-based Containment Control of General Linear Multi-agent Systems With Multiple Interaction Leaders](#)

Authors: Fang Yan, Dongmei Xie

[Deterministic and Stochastic Advertising Diffusion Model with Delay](#)

Authors: Nicoleta Sirghi, Mihaela Neamtu

[Control Design of a Nonlinear Multivariable Process](#)

Authors: Petr Dostal, Vladimir Bobal, Jiri Vojtesek

[Sensor Scheduling for Target Tracking Using Approximate Dynamic Programming](#)

Authors: Zining Zhang, Ganlin Shan

[4D Trajectory Generation and Tracking for Waypoint-Based Aerial Navigation](#)

Authors: K. Bousson, Paulo F. F. Machado

[Control Algorithms with Suppression of Measurable Disturbances: Comparison of Two Methods](#)

Authors: Marek Kubalcik, Vladimir Bobal

[Single-Phase M-Channel Interleaved and N-Switch Paralleled Power Factor Corrector using EL Model Passivity Control](#)

Authors: Wang Nan, Lu Fei, Yang Xi-Jun, Liu Ming-Lin, Lei Huai-Gang

[Modeling and Analysis of Multi-Phase Inverter Fed Induction Motor Drive with Different Phase Numbers](#)

Authors: G. Renukadevi, K. Rajambal

[Pole-Placement and LQ Hybrid Adaptive Control Applied Isothermal Continuous Stirred Tank Reactor](#)

Authors: Jiri Vojtesek, Petr Dostal

[A Convex Optimization Approach to Control Design for Switching Power Converters with Time Delays](#)

Authors: Mohammad Karimi

[An Adaptive Block Backstepping Controller for Attitude Stabilization of a Quadrotor Helicopter](#)

Authors: Hongtao Zhen, Xiaohui Qi, Hairui Dong

[Invariant Sets in Sliding Mode Control Theory with Application to Servo Actuator System with Friction](#)

Authors: Shibly Ahmed Al-Samarraie

[Co-Ordinated Average Consensus of Multi-agent Systems via Sampled Control](#)

Authors: Yongli Cheng, Dongmei Xie

[A Flow-Based Approximation of Observer Error Linearization for Non-Linear Systems](#)

Authors: Klaus Robenack

[Delay-Dependent State Estimation for Time Delay Systems](#)

Authors: Mohammad Ali Pakzad, Bijan Moaveni