

**THE 5TH SYMPOSIUM ON PROCESS CONTROL SPC – 2006**  
**May 17 - 19, 2006, PLOIESTI, ROMANIA**

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## PAPERS BY SECTIONS

### Control Engineering

1. D. Popescu, C. Lupu, C. Petrescu - Control and optimization for the wide heating instalations
  2. R. Roman, Z. Nagy, M. Cristea, S. Agachi - Catalytic cracking process control
  3. A. Filipescu, V. Chetroiu, G. Stamatescu - Sliding-mode observer-controller for multimachine power systems control
  4. N. Paraschiv, D. Mihăescu - Solutions for monitoring and control of slop processing in modern refineries
  5. M. Barbu, S. Caraman - Robust multivariable control of a wastewater treatment process based on the rga analysis of input-output influences
  6. V. Cîrtoaje - Process compensation-based control
  7. D. Panculescu - The annihilation of the atmospheric pollutants produced by oil refineries using an electrokinetic converter
  8. St. Dumitrescu - The quality control between optimum and necessity
  9. S. Iordache, C. Ianache - Monitoring system of process parameters in wastewater treatment plant
  10. C. Ianache, S. Iordache - About process parameters monitoring in oil transportation and storage
  11. D. Petre - An inferential method for vlle prediction - application for n-butene-water-secondary butanol mixtures
  12. C. Pătrășcioiu, C. Marinoiu - Algorithm for the calculus of the bi-dimensional approximation functions used in the chemical engineering
  13. C. Popa, C. Pătrășcioiu - The adaptation of the control model for fccu
  14. A. Ursache - New approach in tank gauging: reducing project cost and downtime
  15. M. Popescu, S. Frâncu - Using Dynsim<sup>®</sup> simulator for binary distillation column dynamics and control
  16. A. Băieșu - Model based control algorithms for a distillation process
  17. G. Rădulescu, I. Georgescu - An improved products quality control scheme for the crude oil unit
  18. A. Căta, M. Glevitzky, R.C. Moldovan, M. Calisevici, D. Perju - Optimization of heat exchangers ensemble operation in order to improve the technological indicators
  19. A. Poantă, D. Dojcsar, B. Sochircă - Fuzzy logic control system for the ventilation fans from the toxic and explosive areas
  20. R.C. Moldovan, D. Perju, M. Glevitzky, S. Marinescu - Mathematical modelling of the static behavior of the thermal boundary layer flowmeter operating with variable thermal flow
- Poster: Al. Cojan, C. Popa, N. Paraschiv - Process control in an horizontal smart well

## **Applied Informatics and Artificial Intelligence**

1. T. Melinte, A. Coman, A. Lorentz, E. Pricop - Biometric security of industrial critical processes control systems
2. S. Nicoară - Improved NSGA-II for job shop scheduling problems
3. C. Teodoriu, Al. Popa, M. Klaws - Optical system for leak measurement of premium threaded connections
4. Al. Popa, C. Popa - Centralized system for the computer inventory
5. E. Florea, S. Mihai - Low cost wireless control devices
6. I. Dumitrescu, C. Podina - Telecommunications management network
7. C. Bucur, C. Podina - Network management system
8. I. Tudor - A practical application of data mining in banking domain
9. M. Vlădoiu, C. Negoită - Internet research to support SMEs: why, how, where?
10. L. Tudor - Collision solving through linking in the simple uniform hashing
11. M. Olteanu - Using genetic algorithms in model predictive control
12. C. Stoica - Building-up labview human machine interface for data acquisition modules
13. D. Stoica - Artificial neural networks applied to fault diagnosis
14. S. Popovici - Wireless communications in industrial local network

## **Robotics and Artificial Intelligence**

1. Y. Boutalis, T. Kottas - On the adaptation abilities of a fuzzy cognitive network based control approach
2. E. Studineanu - Experimental microsystem for investigation of control algorithms for intelligent robots
3. A. Moise - About the optimal flow control of production lines
4. G. Bucur, L. Bucur - Neural network control for mag welding processes
5. L. Georgescu, D. Georgescu - The software analysis for the automatic drive systems with dc motors
6. L. Georgescu, I. Beldiman - The controllable electrical motion for a pumping system of petroleum products through main pipe lines
7. C. Popescu - Mobile robot navigation using fuzzy logic for obstacle avoidance
8. Al. Georgescu - Controlling a robot using biological patterns
9. D. Orhei - Increasing flexible manufacturing systems performance using fuzzy techniques
10. D. Orhei - Fuzzy control influence over resources utilization in flexible manufacturing systems
11. I. Savulescu, T. Bancu - Automatic start of dc motors with separated excitation
12. A. M. Stănescu, O. Cangea, J. Culiță - A new approach for hybrid technology based workflow management systems design

13. O. Cangea, A. M. Stănescu, J. Culiță - From post C.I.M systems towards virtual organization
14. O. Dinu - Mathematical model for analysis of the vibratory systems with n degrees of freedom
15. O. Dinu - The optimal balance of the absorbitor