

**THE 4TH SYMPOSIUM ON PROCESS CONTROL SPC – 2003**  
**OCTOBER 8 - 9, 2003, PLOIESTI, ROMANIA**

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## **PAPERS BY SECTIONS**

### **Control Engineering**

1. Gromov D., Mishra B., Raisch J., Kienle A. - Time optimal control of a batch reactor using Pontryagin's maximum principle
2. Perju D., Cziple F., Suta M. - The statistic interpretation with predictive model applied to the study of the ternary phase diagram Al-Cu-Si
3. Rădulescu G., Petre D. - Distillation processes modeling and dynamic simulation - a critical survey
4. Curteanu S., Petrila C., Ungureanu S., Leon F. - Genetic algorithms and neural networks used in optimization of a radical polymerization process
5. Cîrtoaje V., Guțu A., Frâncu S. - A practical decoupling method for linear multivariable systems
6. Frâncu S., Popescu M. - On the internal model control applied to propylene separation process
7. Creminescu G. - Voltage synthesis after pwm algorithm for inverter with alternative conductions
8. Pătrășcioiu C., Popescu M. - Models and programs for the simulation of the C<sub>5</sub>-C<sub>6</sub> fraction separation process control system
9. Pătrășcioiu C., Eftene C., Roșca P. - The models and control structures of fluid catalytic cracking process
10. Petre D., Rădulescu G., Tănăsescu C. - Computer-aided optimal method for lubricating oil mixtures

### **Applied Informatics**

1. Popescu D., Luican I.I., Stamatescu S., Petrescu C. - Numerical control and optimization for the cowpers of a steelmaking plant
2. Perju D., Cziple F., Suta M. - The CAD software utilization in the prognosis of the phase equilibrium diagram of the ternary system Al-Cu-Si
3. Paraschiv N. - A unitary approach to conversion into/from engineering units for digital control systems
4. Ianache C., Iordache S. - Monitoring equipment of water hydrocarbons traces
5. Cernega D., Mînzu V. - Communication system model for supervisory control
6. Bitzer M., Mihalcea A., Stoica C., Lengerer W., Eigenberger G., Zeitz M. - Software implementation of control scheme and laboratory experiment for a two-bed pressure swing adsorption plant
7. Vlădoi M. - MAD - a model for media objects' structure and content
8. Vlădoi M. - An indexing scheme for complex multimedia objects
9. Teodoriu C., Popa A., Reichetseder P. - Data acquisition system for real-time strain gauge measurement using DASYLab

10. Popa A., Teodoriu C., Reichetseder P. - Data management for small research network
11. Popovici S. - Universal Serial Bus (USB) and industrial interfaces

## **Robotics and Artificial Intelligence**

1. Caraman S., Barbu M. - Fuzzy models for alpha amylase biosynthesis process with *bacillus subtilis*
2. Voutriardis C., Boutalis Y., Moise A., Mertzios B. - Recurrent neural networks in behavioural tasks of mobile robots
3. Serbencu Adrian, Serbencu Adriana, Mînzu V., Cernega D. - Multiagent systems used for discrete optimization problems
4. Panaiteescu G.M. - Genetic algorithms used to solving problems of resource allocation
5. Oprea M., Tudor I., Pană L.N. - Applications of a handwritten character recognition system
6. Nicoară S. - Learning from insect societies for a wide range of optimizations
7. Moise A.G.V. - Adaptive versus Neural Adaptive Control in Robotics
8. Cangea O., Bucur G., Popescu C. - Modeling the arm of a robot manipulator for drilling plants
9. Bucur G., Cangea O., Popescu C. - Automatic WIG welding control using neural network
10. Popescu C., Cangea O., Bucur G. - Issues about kinematics and dynamics of mobile robots
11. Mihalcea A., Vlăsceanu C. - Design issues on mobile control architectures Unicorn framework
12. Mirodotescu B., Dinu O. - The study of the methods of subjective and under incertitude in relation with the tipology of the real systems of study
13. Mirodotescu B., Dinu O. - The applicability extension of the classic, experimental, subjective and statistical probabilities in modeling the expert system