

## Session 6.2

### Optimization and Scheduling

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#### **Modeling of NLP Problems of Chemical Processes Described by ODE's**

M. T. de Gouvêa and D. Odloak

*Universidade Presbiteriana Mackenzie*

#### **Optimal Multi-period Design and Operation of Multi-product Batch Plants**

M. S. Moreno, J. M. Montagna, and O. A. Iribarren

*Instituto de Desarrollo y Diseño Avellaneda*

#### **Improved Tightened MILP Formulations for Single-Stage Batch Scheduling Problems**

P. A. Marchetti and J. Cerdá

*Instituto de Desarrollo Tecnológico para la Industria Química*

#### **Constraint Logic Programming for Non Convex NLP and MINLP Problems**

P. R. Kotecha and R. D. Gudi

*Indian Institute of Technology Bombay*

#### **Heuristics for Control Structure Design**

A. Heidrich and J. O. Trierweiler

*Universidade Federal do Rio Grande do Sul*

#### **Algorithms for Real-Time Process Integration: One Layer Approach**

M. C. A. F. Rezende, R. M. Filho and A. C. Costa

*University of Campinas*

#### **Steam and Power Optimization in a Petrochemical Industry**

E. G. de Fronza Magalhães, S. Tiago, and K. A. Wada,

*Copesul, Universidade Federal do Rio Grande do Sul*

#### **Multiperiod Optimization Model for Synthesis, Design, and Operation of Non-Continuous Plants**

G. Corsano, J. M. Montagna, P. A. Aguirre, and O. A. Iribarren

*Instituto de Desarrollo y Diseño Avellaneda*

**Dynamic Penalty Formulation for Solving Highly Constrained  
Mixed-Integer Nonlinear Programming Problems**

C. M. Silva and E. C. Biscaia Jr.  
*Universidade Federal do Rio de Janeiro*

**Application of Genetic Algorithms to the Optimization of an  
Industrial Reactor**

I. R. de Souza Victorino and R. M. Filho  
*State University of Campinas*