

## Session 6.1

### Modeling and Identification

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#### **Control Orientated B-Spline Modelling of a Dynamic MWD System**

H. Yue, H. Wang, L. Cao  
*University of Manchester*

#### **Prediction of Glycosylation Site-Occupancy Using Artificial Neural Networks**

R. S. Senger and M. N. Karim  
*Texas Tech University*

#### **Real Time Tracking of Ladle Furnaces: An Analytical Approach**

J. R. Zabadal, R. L. Garcia, and M. G. Salgueiro  
*Universidade Federal do Rio Grande do Sul*

#### **Solving Water Pollution Problems Using Auto-Bäcklund Transformations**

J. R. Zabadal, R. L. Garcia, and M. G. Salgueiro  
*Universidade Federal do Rio Grande do Sul*

#### **Identification of Uncertain Wiener Systems**

J. Figueroa, S. Biagiola and O. Agamennoni  
*Universidad Nacional del Sur*

#### **A Comparative Study of Prediction of Elemental Composition of Coal using Empirical Modelling**

A. Saptoro, H.B. Vuthaluru and M.O. Tade  
*Curtin University of Technology*

#### **Energy Based Discretization of an Adsorption Column**

A. Baaiu, F. Couenne, L. Lefevre, Y. Le Gorrec and M. Tayakout  
*Université Lyon*  
*Le Centre National de la Recherche Scientifique*

#### **Inference of Oil Content in Petroleum Waxes by Artificial Neural Networks**

A. D. M. Lima, D. do C.S. Silva, V. S. Silva and M. B. De Souza Jr.  
*Petrobras*

## **Short and Long Timescales in Recycles**

H. A Preisig  
*Norwegian University of Science and Technology*

## **Finite Automata from First-Principle Models: Computation of Min and Max Transition Times**

H. A Preisig  
*Norwegian University of Science and Technology*

## **Neural Modeling as a Tool to Support Blast Furnace Ironmaking**

F. Tadeu, P. de Medeiros, A. Pitasse da Cunha and A. M. F. Fileti  
*Companhia Siderúrgica Nacional*  
*University of Campinas*  
*MetalFlexi*

## **An Inverse Artificial Neural Network Based Modelling Approach for Controlling HFCS Isomerization Process**

M. Yuceer and R. Berber  
*Ankara University*

## **An Algorithm for Automatic Selection and Estimation of Model Parameters**

A. R. Secchi, N. S. M. Cardozo, E. Almeida Neto and T. F. Finkler  
*Universidade Federal do Rio Grande do Sul*

## **Rigorous and Reduced Dynamic Models of the Fixed Bed Catalytic Reactor for Advanced Control Strategies**

E. C. Vasco de Toledo, J. M. F. da Silva, J. F. da C. A. Meyer,  
and R. M. Filho,  
*State University of Campinas*