

# Computers & Chemical Engineering

## Contents

- |                                                                                       |     |                                                                                                                         |
|---------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------|
| A. Kumar and S. Mazumder                                                              | 135 | Toward simulation of full-scale monolithic catalytic converters with complex heterogeneous chemistry                    |
| X. Li, R. Shaw, G.M. Evans and P. Stevenson                                           | 146 | A simple numerical solution to the Ward–Tordai equation for the adsorption of non-ionic surfactants                     |
| Z. Zhang, Z. Shao, X. Chen, K. Wang and J. Qian                                       | 154 | Quasi-weighted least squares estimator for data reconciliation                                                          |
| S.M. Elgsæter, O. Slupphaug and T.A. Johansen                                         | 163 | A structured approach to optimizing offshore oil and gas production with uncertain models                               |
| J.M. Ponce-Ortega, M. Serna-González and A. Jiménez-Gutiérrez                         | 177 | Optimization model for re-circulating cooling water systems                                                             |
| J. Carlos Cárdenas-Guerra, T. López-Arenas, R. Lobo-Oehmichen and E.S. Pérez-Cisneros | 196 | A reactive distillation process for deep hydrodesulfurization of diesel: Multiplicity and operation aspects             |
| A.C. Baughman, X. Huang, S.T. Sharfstein and L.L. Martin                              | 210 | On the dynamic modeling of mammalian cell metabolism and mAb production                                                 |
| M. Maestri, A. Farall, P. Groisman, M. Cassanello and G. Horowitz                     | 223 | A robust clustering method for detection of abnormal situations in a process with multiple steady-state operation modes |

(Contents continued on page I)

Available online at

 **ScienceDirect**  
www.sciencedirect.com

This journal is part of **ScienceDirect's** free alerting service that emails you tables of contents and favourite topics for Elsevier books and journals. You can register by clicking "Alerts" at [www.sciencedirect.com](http://www.sciencedirect.com)

*Computers Chem. Engrn* is indexed/abstracted in Cam. Sci. Abstr., Chem. Eng. & Biological Abstr., Chem Abstr. Serv., Curr. Cont. CompuMath, Curr. Cont. Eng. Tech & Appl. Sci., Comput. & Contr. Abstr., Comput. Cont., Eng. Ind., FLUIDEX INIST, INSPEC Data., Curr. Cont. Sci. Cit. Ind. Curr. Cont. SCISEARCH Data., Res. Alert. SSSA CISA ECA ISMEC. TCEA., SCOPUS



0098-1354 (20100208) 34:2;1-I

ISSN 0098-1354

*(Continued from back cover)*

<b>S. Zerkaoui, F. Druaux, E. Leclercq and D. Lefebvre</b>	232	Indirect neural control for plant-wide systems: Application to the Tennessee Eastman Challenge Process
<b>N.L. Rossing, M. Lind, N. Jensen and S.B. Jørgensen</b>	244	A functional HAZOP methodology
<b>M. Bassett and L. Gardner</b>	254	Optimizing the design of global supply chains at Dow AgroSciences