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February 2007 Korean Chem. Eng. Res., 45(1) 1-108(2007) Volume 45, Number 1 **ISSN 0304-128X** Articles Simulation of a Six-zone Simulated Moving Bed Chromatographic Process for NPK Fertilizer Production Youngil Lim and Aran Lee 1 Temperature Control in Autothermal Reforming Reactor Song Joo Kim, Ji Hoon Nam, Jietae Lee and Dong Hyun Kim 12 Modeling and Simulation of Drying Cylinders in Paper Processes Eun Ho Lee, Ki-Young Kwak and Yeong-Koo Yeo 17 Optimal Hydrogen Recycling Network Design of Petrochemical Complex Changhyun Jeong, Chul-Jin Lee, Dae-hyeon Kim and Chonghun Han 25 Fault Detection & SPC of Batch Process using Multi-way Regression Method 32 The Study of Structure Design for Dividing Wall Distillation Column Seung Hyun Lee and Moon Yong Lee 39 A Study on the Computer Simulation for the Complete Combustion Reaction of PCBs in Supercritical Water Jungho Cho, Kyeongsook Kim, Soon Hwan Son and Yeong-Cheol Kim 46 Design of TAME Process using a Commercial Design Software 52 A Comparison Study between Batch and Continuous Process Simulation for the Separation of Carbon-13 Isotope by Cryogenic Distillation Jong Hwan Kim, Doug Hyung Lee, Euy Soo Lee and Sang Jin Park 57 Identification of MIMO State Space Model based on MISO High-order ARX Model: Design and Application Wangyun Won, Jieun Yoon, Kwang Soon Lee and Bongkook Lee 67 Optimal Trajectory Finding and re-optimization of SBR for Nitrogen Removal Young-Whang Kim, ChangKyoo Yoo and In-Beum Lee 73 The Computer Simulation and Estimation of Membrane Mass Transfer Coefficients of Hollow Fiber Membrane G-L Contactors for SO₂ Removal Yong Kuk Kim, Hee Ouel Song, Hyung Keun Lee and In-Won Kim 81 Missing Value Estimation and Sensor Fault Identification using Multivariate Statistical Analysis Changkyu Lee and In-Beum Lee 87 Development of 3D DMFC Model for Flow Field Design 93

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