

International Journal of Chemical Engineering and Applications

CONTENTS

Volume 5, Number 1, February 2014

Mathematical Modeling of Drying of Black Liquor Droplets in Recovery Boilers.....1	1
<i>S. Ramesh, H. Mahalingam, and N. J. Rao</i>	
Catalyst Evaluation and Scale-up Studies for Polyethylene Production.....6	6
<i>Vinit D. Makwana, G. Sivalingam, and Suketu M. Vakil</i>	
Effects of RF Power and Treatment Time on Wettability of Oxygen Plasma-Treated Diamond-like Carbon Thin Films.....13	13
<i>C. Jongwannasiri and S. Watanabe</i>	
Thermodynamic Analysis for Liquefaction of Natural Gas Using the C3-MR Refrigeration Process.....17	17
<i>Clementino Pereira, Asep Handaya S., and Sutrasno K.</i>	
Statistical Optimization for Application of Nonionic Surfactants in Enzymatic Hydrolysis of Palm Fiber for Ethanol Production.....23	23
<i>Jatuporn Parnthong and Suratsawadee Kungsanant</i>	
Decolorization of Synthetic Dyes by Crude Laccase from <i>Lentinus Polychrous</i> Lev.26	26
<i>Karnika Ratanapongleka and Jirapa Phetsom</i>	
Effect of Curing Temperature on Pozzolanic Reaction of Fly Ash in Blended Cement Paste.....31	31
<i>Mongkhon Narmluk and Toyoharu Nawa</i>	
Synthesis and Characterization of Carboxymethyl Cellulose (CMC) from Water Hyacinth Using Ethanol-Isobutyl Alcohol Mixture as the Solvents.....36	36
<i>Asep Handaya Saputra, Linnisa Qadhayna, and Alia Badra Pitaloka</i>	
Hydrodynamic and Mass Transfer Study in a Mechanically Stirred Hybrid Airlift Bioreactor Based on Impeller Type.....41	41
<i>S érgio S. de Jesus, Aline Santana, and Rubens Maciel Filho</i>	
Comparative Study on Dynamics around a Single Rising Bubble through Different Computational Software46	46
<i>Ashraf Azmi, Periyasamy Balasubramanian, Bawadi Abdullah, Nurul Hasan, and Ehsan Zhalehrajabi</i>	
Partial Oxidation of Ethane to Acetic Acid Catalyzed by MoVNbPd Catalyst Supported on Titania.....50	50
<i>Yousef S. Al-Zeghayer</i>	
Effect of Particle Size and Coating Thickness on the Release of Urea Using Multi-Diffusion Model.....58	58
<i>Thanh H. Trinh, Ku Zilati Ku Shaari, Abdul Basit, and Babar Azeem</i>	
Gas Permeability Properties of Thermoplastic Polyurethane Modified Clay Nanocomposites.....64	64
<i>G. Shamini and K. Yusoh</i>	

The Application of Thermal Building Nano-Insulation Materials Based on the Diffusivity Characteristic of Polyurethane Nanocomposite.....69
Norayuni Azizi and Kamal Yusoh

Numerical Model to Predict Wax Crystal Size Distribution in Solvent Dewaxing Unit.....73
Nassir D. Mokhlif, Hussain H. Al-Kayiem, and Masri Bin Baharom