

The Korean Journal of Chemical Engineering

December 2011
Volume 28, Number 12

Korean J. Chem. Eng. 28(12) 2227-2380
Print ISSN 0256-1115
Online ISSN 1975-7220

RAPID COMMUNICATION

- Jeonguk Byeon, Jin-Su Kim, 2227 **Fractional order integrator for the relay feedback identification of a process**
Su Whan Sung, and Jietae Lee **Nyquist point in the third quadrant**

TRANSPORT PHENOMENA

- Mohammad Nasiri, 2230 **Turbulent convective heat transfer of nanofluids through a square channel**
Seyed Gholamreza Etemad,
and Rohollah Bagheri

CATALYSIS, REACTION ENGINEERING

- Thuy-Duong Nguyen-Phan, 2236 **Influence of heat treatment on thermally-reduced graphene oxide/TiO₂ composites for photocatalytic applications**
Viet Hung Pham, Hyunran Yun,
Eui Jung Kim, Seung Hyun Hur,
Jin Suk Chung, and Eun Woo Shin
- Abdelhamid Ajbar, Khalid Alhumaizi, 2242 **Modeling and simulations of a reformer used in direct reduction of iron**
and Mustafa Soliman

INDUSTRIAL CHEMISTRY, POLYMER, FLUIDIZATION, PARTICLE TECHNOLOGY

- Yanjun Liu, Yiqian Jiang, Hengbo Yin, 2250 **Methylation of methyltrichlorosilane with methyl chloride over active metals and activated carbon**
Weiguang Chen, Yutang Shen,
Yonghai Feng, Lingqin Shen,
Aili Wang, Tingshun Jiang,
and Zhanao Wu
- Mehrorang Ghaedi, Javad Tashkhourian, 2255 **Equilibrium, kinetic and thermodynamic study of removal of reactive orange 12 on platinum nanoparticle loaded on activated carbon as novel adsorbent**
Arezoo Amiri Pebdani,
Batom Sadeghian,
and Fatemeh Nami Ana

ENERGY

- Piyarat Weerachanchai, 2262 **Characterization of products from slow pyrolysis of palm kernel cake and cassava pulp residue**
Chaiyot Tangsathitkulchai,
and Malee Tangsathitkulchai
- Seung-Tae Kim, Jeong-Won Kang, 2275 **Analysis of the heat of reaction and regeneration in alkanolamine-CO₂ system**
Jong-seop Lee, and Byoung-Moo Min
- Suk-Hwan Kang, Jae-Hong Ryu, 2282 **Co-methanation of CO and CO₂ on the Ni_x-Fe_{1-x}/Al₂O₃ catalysts; effect of Fe contents**
Jin-Ho Kim, Seok-Jung Seo,
Yong-Done Yoo,
Potharaju S. Sai Prasad, Hyo-Jun Lim,
and Chang-Dae Byun
- Mi Jin Yu, Yong-Beom Jo, 2287 **Synthesis of biodiesel from an oil fraction separated from food waste leachate**
Sang-Guk Kim, Young-Kwan Lim,
Jong-Ki Jeon, Sung Hoon Park,
Seung-Soo Kim, and Young-Kwon Park

ENVIRONMENTAL ENGINEERING

- Sudipta Chatterjee, Tania Chatterjee, 2293 **Effect of coagulant addition on the sedimentation of a surfactant-containing washing solution used for phenanthrene-contaminated soil**
and Seung Han Woo

BIOTECHNOLOGY

-
- Cheng Zhou, Xiumin Wu, 2300 **Immobilization strategy of accessible transmission for trypsin to catalyze synthesis of dipeptide in mesoporous support**
Bo Jiang, and Shubao Shen
- Hong Xian Li, Seong-Jun Kim, 2306 **Determination of the stoichiometry and critical oxygen tension in the production culture of bacterial cellulose using saccharified food wastes**
Yong-Woon Lee, Chang Doo Kee,
and Il Kwon Oh
- Lei Huang, Yijuan Xiang, Jin Cai, 2312 **Effects of three main sugars in cane molasses on the production of butyric acid with *Clostridium tyrobutyricum***
Ling Jiang, Zhengbing Lv,
Yaozhou Zhang, and Zhinan Xu
- Min Jeong, Ik-keun Yoo, 2316 **Evaluation of the reducing power effect on the enantioselective synthesis of methyl (R)-2-chloromandelate using *Saccharomyces cerevisiae***
Mee Jung Han, and Soon Ho Hong

SEPARATION TECHNOLOGY, THERMODYNAMICS

-
- Junhyuk Lim, Hwayong Kim, 2319 **Solubility of hinokitiol in supercritical fluids; measurement and correlation**
Hye Kyung Cho, and Moon Sam Shin
- Seol A Kim, Joon Hyuk Yim, 2324 **Isothermal vapor-liquid equilibria for the binary system of dimethyl ether (CH_3OCH_3)+methanol (CH_3OH)**
Hun-Soo Byun, and Jong Sung Lim

MATERIALS (Organic, Inorganic, Electronic, Thin Films)

-
- Gajanan Ghodake and Dae Sung Lee 2329 **Green synthesis of gold nanostructures using pear extract as effective reducing and coordinating agent**

THE 8th KOREA-CHINA CLEAN ENERGY WORKSHOP

-
- Zixue Luo, Fei Wang, 2336 **Principles of optimization of combustion by radiant energy signal and its application in a 660 MWe down- and coal-fired boiler**
Huaijun Zhou, Rutie Liu,
Wenchang Li, and Gengzhou Chang
- Yuwen Zhu, Jihui Gao, Yang Li, 2344 **Preparation and characterization of activated carbons for SO_2 adsorption from Taixi anthracite by physical activation with steam**
Fei Sun, and Yukun Qin