

Korean Journal of Chemical Engineering

September 2019
Volume 36, Number 9

Korean J. Chem. Eng. 36(9) 1389-1556
Print ISSN 0256-1115
Online ISSN 1975-7220

REVIEW ARTICLE

Oluranti Agboola 1389 **The role of membrane technology in acid mine water treatment: a review**

TRANSPORT PHENOMENA

Manju Rani, Sanjeev Maken, and So Jin Park 1401 **Measurement and modeling of viscosity for binary mixtures of diisopropyl ether with n-alkanes (C₇-C₁₀)**

CATALYSIS, REACTION ENGINEERING

Seong Chul Ryu, Jong Hwan Lee, and Hee Moon 1410 **Synthesis of mesoporous silica SBA-15 using a dropwise flow reactor**

Yangpil Jang, Hyobin Nam, Joseph Song, Seungyong Lee, Jae-Pyung Ahn, and Taekyung Yu 1417 **Synthesis RhAg bimetallic composite nanoparticles for improved catalysts on direct synthesis of hydrogen peroxide generation**

ENVIRONMENTAL ENGINEERING

Niyaz Mohammad Mahmoodi, Mahdieh Sadat Mirmohammad Ali Roudaki, Khadijeh Didehban, and Mohammad Reza Saeb 1421 **Ethylenediamine/glutaraldehyde-modified starch: A bioplatfrom for removal of anionic dyes from wastewater**

Liang Ma, Tingyu Yang, Yu Wu, Xiaoqing Yue, Jinrong Yang, Shuai Zhang, Qiang Li, and Jianbin Zhang 1432 **CO₂ capture and preparation of spindle-like CaCO₃ crystals for papermaking using calcium carbide residue waste via an atomizing approach**

Ahmet Aygun, Bilgehan Nas, and Mehmet Faik Sevimli 1441 **Treatment of reactive dyebath wastewater by electrocoagulation process: Optimization and cost-estimation**

Min-Ji Kim, Suk Soon Choi, Phani Brahma Somayajulu Rallapalli, Jeong Hyub Ha, Seung-Mok Lee, and Young-Seak Lee 1450 **Nitrate removal from water phase using *Robinia pseudoacacia* bark for solving eutrophication**

Gyeong Min Kim, Zhuo Wang, Su Bin Kang, and Sung Wook Won 1455 **Polyethylenimine-crosslinked chitin flake as a biosorbent for removal of Acid Blue 25**

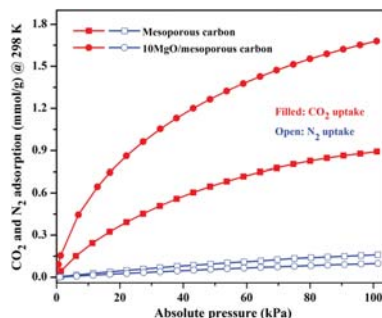
BIOTECHNOLOGY

Seok Ho Park and Jin-Chul Kim 1466 **Monoolein cubosomes for enhancement of *in vitro* anti-oxidative efficacy of *Bambusaе Caulis* in *Taeniam* extract toward carcinogenic fine dust-stimulated RAW 264.7 cells**

SEPARATION TECHNOLOGY, THERMODYNAMICS

Atefeh Roozitalab, Ahmadreza Raisi, and Abdolreza Aroujalian 1474 **A comparative study on pomegranate juice concentration by osmotic distillation and thermal evaporation processes**

- Harshitha Burri, Rumana Anjum, Ramesh Babu Gurram, Harisekhar Mitta, Suresh Mutyala, and Madhavi Jonnalagadda 1482 **Mesoporous carbon supported MgO for CO₂ capture and separation of CO₂/N₂**



- Ashlan Çalhan, Sennur Deniz, Julio Romero, and Ayça Hasanoğlu 1489 **Development of metal organic framework filled PDMS/PI composite membranes for biobutanol recovery**

- Dan Li, Yong Kang, Jie Li, and Xin Wang 1499 **Transformation and coagulation behaviors of iron (III) species of solid polymeric ferric sulfate with high basicity**

MATERIALS (Organic, Inorganic, Electronic, Thin Films)

- Dasom Kim and Byunghwan Lee 1509 **Fluorescence detection of bisphenol A in aqueous solution using magnetite core-shell material with gold nanoclusters prepared by molecular imprinting technique**
- Dongkyu Lee, Sungjun Koh, Da-Eun Yoon, Soho Lee, Whi Dong Kim, Dahin Kim, Wan Ki Bae, Jaehoon Lim, and Doh C. Lee 1518 **Synthesis of InP nanocrystals using triphenyl phosphite as phosphorus source**
- Paphada Limpachanangkul, Trin Jedsukontorn, Guoqiang Zhang, Licheng Liu, Mali Hunsom, and Benjapon Chalermstinsuwan 1527 **Comparative photocatalytic behavior of photocatalysts (TiO₂, SiC, Bi₂O₃, ZnO) for transformation of glycerol to value added compounds**
- Nulu Venugopal, Woo-Sik Kim, and Keun Yong Sohn 1536 **Room-temperature synthesis of Co₃O₄ nanoparticles self-assembled into meso/nanoporous microstructures and their application**
- Youn-Ki Lee, Sangchul Chung, Sang Youp Hwang, Sungho Lee, Kwang Sup Eom, Seung Bin Hong, Gwan Gyu Park, Byung-Joo Kim, Jung-Joon Lee, and Han-Ik Joh 1543 **Upcycling of lignin waste to activated carbon for supercapacitor electrode and organic adsorbent**

FLUIDIZATION

- Jae-Rang Lee, Naim Hasolli, Kang-San Lee, Kwan-Young Lee, and Young-Ok Park 1548 **Fluidization of fine powder assisted by vertical vibration in fluidized bed reactor**