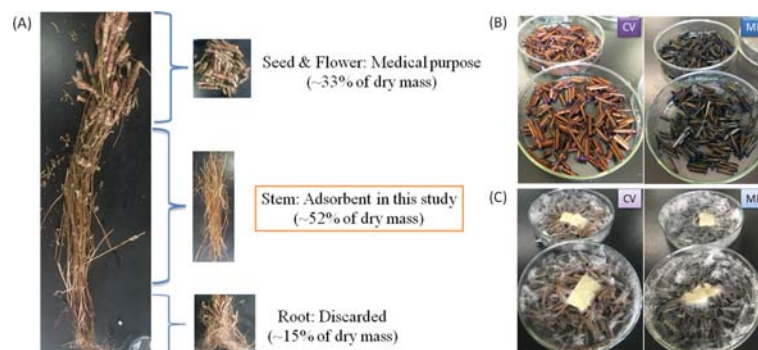


## RAPID COMMUNICATION

- Xueying Zhang, Jun Zhou, 1445 **Adsorption of dyes from water by *Prunella vulgaris* stem and subsequent fungal decolorization**  
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## TRANSPORT PHENOMENA

- Behzad Ebadi, 1453 **Fluid flow effects on diffusion layer and current density for electrochemical systems**  
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- Cong Qi, Tiantian Chen, Yuxing Wang, 1466 **Experimental study on thermo-hydraulic performance of nanofluids in diverse axial ratio elliptical tubes with a built-in turbulator**  
and Liyuan Yang

## CATALYSIS, REACTION ENGINEERING

- Shan Jiang, Zuoxiang Zeng, Weilan Xue, 1482 **Kinetic study on the reaction of palmitic acid with ethanol catalyzed by deep eutectic solvent based on dodecyl trimethyl ammonium chloride**  
Wei Zhang, and Zhiyuan Zhou
- Pajri Samsi Nasution, Jae-Won Jung, 1490 **Coke combustion kinetics of spent Pt-Sn/Al<sub>2</sub>O<sub>3</sub> catalysts in propane dehydrogenation**  
Kyeongseok Oh, and Hyoung Lim Koh

## ENVIRONMENTAL ENGINEERING

- Xu Zhou, Wenbiao Jin, Lan Wang, 1498 **Improving primary sludge dewaterability by oxidative conditioning process with ferrous ion-activated peroxymonosulfate**  
Wanqing Ding, Chuan Chen, Xijun Xu,  
Renjie Tu, Song-Fang Han,  
Xiaochi Feng, and Duu-Jong Lee
- Hao Huy Nguyen, Gobinda Gyawali, 1507 **Modified blue TiO<sub>2</sub> nanostructures for efficient photo-oxidative removal of harmful NO<sub>x</sub> gases**  
Adriana Martinez-Oviedo,  
Hoang Phuc Nguyen, and Soo Wahn Lee
- Tristan James Sim, Rose Mardie Pacia, 1515 **Preparation of CO<sub>2</sub> adsorbent with N<sup>1</sup>-(3-(trimethoxysilyl)propyl)-1,3-propanediamine and its performance**  
and Young Soo Ko

## BIOTECHNOLOGY

- Chijioke Nwoye Eze, Hideki Aoyagi, 1522 **Simultaneous accumulation of lipid and carotenoid in freshwater green microalgae *Desmodesmus subspicatus* LC172266 by nutrient replete strategy under mixotrophic condition**  
and James Chukwuma Ogbonna

- Samuel Pratavieira de Oliveira, 1530 **Solid-liquid extraction of cellulases from fungal solid-state cultivation in a packed bed bioreactor**  
Natalia Alvarez Rodrigues,  
Priscila Aparecida Casciotori-Frassatto,  
and Fernanda Perpétua Casciotori

#### SEPARATION TECHNOLOGY, THERMODYNAMICS

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- Shokoofeh Fakhrian and Hadi Baseri 1541 **Production of a magnetic biosorbent for removing pharmaceutical impurities**
- Samaneh Bandehali, Fahime Parvizian, 1552 **Improvement in separation performance of PEI-based nanofiltration membranes by using L-cysteine functionalized POSS-TiO<sub>2</sub> composite nanoparticles for removal of heavy metal ion**  
Abdolreza Moghadassi, Jiangnan Shen,  
and Sayed Mohsen Hosseini
- Moon Jeong, Seon Gyun Rho, 1565 **Optimization of heat exchanger network in the dehydration process using utility pinch analysis**  
Choon-Hyoung Kang, and In Ju Hwang
- Weiwen Wang, Yue Guo, Miyu Liu, 1573 **Porous nano-hydroxyapatites doped into substrate for thin film composite forward osmosis membrane to show high performance**  
Xiaokun Song, and Jihai Duan
- Jeonghyun Hwang, Hwa Jin Lee, 1585 **Structural control of polysulfone membrane by using dimethylacetamide and water-pressure for water treatment**  
and Sang Wook Kang

#### MATERIALS (Organic, Inorganic, Electronic, Thin Films)

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- Yen-Linh Thi Ngo, Jin Suk Chung, 1589 **Multi-functional NiO/g-C<sub>3</sub>N<sub>4</sub> hybrid nanostructures for energy storage and sensor applications**  
and Seung Hyun Hur
- Rasha Muneer Al Radadi 1599 **Nickel-cobalt alloy coatings prepared by electrodeposition Part I: Cathodic current efficiency, alloy composition, polarization behavior and throwing power**  
and Magdy Ahmed Mahmoud Ibrahim
- Iraj Jodan, Kitirote Wantala, 1609 **Fabrication of a sensitive electrochemical sensor based on Ag nanoparticles and alizarin yellow polymer: Application to the detection of an environmental pollutant thiourea**  
Nader Amini, Behzad Shahmoradi,  
Mona Ghaslani, Seung-Mok Lee,  
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and Shivaraju Harikaranahalli Puttaiah

#### POLYMER, INDUSTRIAL CHEMISTRY

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- Taehyun Park, Hyung Wook Choi, 1616 **ZnO/conducting polymer bilayer via sequential spin-coating for enhanced UV sensing**  
and Jaehyun Hur
- Sosan Hwang, Chae Lin Kim, 1623 **Filler size effect in graphite/paraffine wax composite on electromagnetic interference shielding performance**  
Yongha Kim, Min Gyu Song,  
Jaewon Lee, Sung-Hyeon Baeck,  
Sang Eun Shim, and Yingjie Qian