



## Contents Volume 298

|   |     |
|---|-----|
| Biological and corrosion aspects of a multi-stage flash seawater desalination plant after deaerator modification<br>T.N. Green, A.A. Al-Sahary, F. Alt (Saudi Arabia), C.M. Fellows (Saudi Arabia, Australia),<br>N. Voutchkov, A. Alenazi (Saudi Arabia) .....   | 1   |
| Effects of varying weather parameters on solar still performance<br>S.Z. Issaq, S.K. Talal, A.A. Azooz (Iraq) .....   | 12  |
| Polyethersulfone ultrafiltration membrane modified with polyamic acid-stabilized silver nanoparticles<br>for enhanced filtration performance and antibacterial effects<br>Kaizhen Wang, Danrong Cai, Die Zou, Ruxue Duan, Wentao Yan, Yong Zhou, Congjie Gao (China) .....  | 23  |
| Monitoring some chemical properties and human health risk assessments of Cd and Pb<br>of Bardawil Lagoon water, north of Sinai, Egypt<br>M.S.M. EL-Bady, A.A.E. Galal, M.A. El-Khateeb (Egypt) .....  | 35  |
| Swelling behavior study of poly(methacrylic acid-co-acrylamide) nanocomposite hydrogel adsorbents<br>containing different nanoparticles<br>S.J. Peighambaroudoust, H. Safarzadeh (Iran) .....   | 44  |
| Bio-mediated synthesis of Cu-TiO <sub>2</sub> nanoparticles using <i>Phoenix dactylifera</i> lignocellulose as capping<br>and reducing agent for the catalytic degradation of toxic dyes<br>F. Hassan, A. Abbas, F. Ali, A. Nazir (Pakistan), M. Al Huwayz, N. Alwadai (Saudi Arabia),<br>M. Iqbal (Pakistan), Z. Ali (Pakistan, China) ..... | 53  |
| Excellent adsorption ability of Hg(II) by poly(o-phenylenediamine) modified mesoporous materials<br>Xuyin Lin, Jinwen Jiang, Jun Wang, Jiaofen Lin, A. Rehemani (China) .....   | 61  |
| Controlling two-phase foam through the Fenton oxidation process<br>Hongqiang Li, Zetong Lu, Wen Zhang, Yangge Zhu, Huifang Zheng, Qiushi Liao, Danzhang Liu,<br>Huihua Luo, Shaoxian Song (China), R.M. Kasomo (Kenya) .....  | 75  |
| Treatment of water contaminated by cadmium using low-cost and<br>eco-friendly alginate/Moroccan clay composite beads<br>Y. Rachdi, M. El Alouani, R. Bassam, E.H. Mourid, H. Saufi, E.H. El Khattabi,<br>F. El Makhroukhi, E.H. Khouya, S. Belaouad (Morocco) .....   | 81  |
| Comparative study of tetracycline degradation efficiency using peroxydisulfate<br>activated with sludge biochar and activated coke: the role of surface defects<br>Guoting Li, Huan Chen, Taiyang Cao, Xiangping Ran, Yujie Guo, Chenliang Shen,<br>Yingxu Liu (China), T. Pak (UK) .....   | 93  |
| Preparation and application of coconut shell-based skeleton particles<br>coupled with hydroxypropyltrimethyl ammonium chloride chitosan in sludge dewatering<br>Shici Zhang, Ying Zhang, Haohan Xu, Qi Liu, Xiang Wan, Jiajia Xia, Longkai Li,<br>Hui Zhang, Xujie Lu (China) .....   | 108 |
| Synthesis and characterization of iron-doped titania nanoparticles for the removal of DPP-IV inhibitor<br>from the aqueous samples<br>M.I. Jalees, Y. Rauf, A. Iqbal, N. Zahara (Pakistan), E. Cevik (Saudi Arabia) .....   | 117 |
| Fixed bed column adsorption of phenol onto locally available soil: linear kinetics modeling<br>B. Subramanyam (India) .....   | 127 |
| Phosphorus removal from wastewater: energy demand in electrochemical process<br>D. Rabbani, S. Dehghan, S. Gholipour, F. Ghadami, M. Bagher Miranzadeh (Iran) .....   | 136 |
| Removal behavior and mechanisms of reactive dyes from aqueous streams<br>using engineered nanocomposites of Barona marble waste<br>A. Mehmood, M.A. Hanif (Pakistan), N. AlMasoud, T.S. Alomar (Saudi Arabia),<br>M.I. Jilani (Pakistan) .....  | 141 |

|   |     |
|---|-----|
| The adsorption behaviors of industrial dyes by natural mordenite: isotherm, kinetic, thermodynamic, and Box–Behnken design study<br>K.A. Alibrahim (Saudi Arabia) .....   | 155 |
| One-pot solvothermal preparation of $MFe_2O_4$ (M=Ca, Mg and Ni) ferrite-graphene oxide nanocomposites for adsorption of acridine orange<br>Huan Wang, Ruixin Liu, Wei Zhao, Jiale Zhu, Youning Chen, Shan Wang (China) .....   | 174 |
| Hydroxyapatite/superparamagnetic iron oxide nanoparticles nanocomposite for Congo red adsorption<br>Do Thi Hai, Nguyen Thu Phuong, Pham Xuan Cong, Nguyen Hong Nam, Le Phuong Thu, Nguyen Thi Thu Trang, Nguyen Thi Thom, Pham Thi Nam (Vietnam), M. Osial (Poland), Dinh Thi Mai Thanh (Vietnam) ..... | 184 |
| Elucidation of the methylene blue adsorption mechanism at the interface of powder pumice and aqueous solution by electro-kinetic and static contact angle measurements<br>K. Güneş (Turkey) .....   | 199 |
| Development and validation of a coupled storm surge and wave model for the coast of Shanghai<br>Xiuji Zhang, Yunxiao Jin, Huijie Zhu, Huaihui Song, Yanhong Wang (China) .....  | 207 |
| The improvement approaches of water security through systematic thinking<br>Zhihui Xing, Fuhua Jiang (China) .....  | 216 |
| Assessment of wave energy resources in the Pearl River estuary of China<br>Zuchao Ye, Xin Ma, Na Yang, Liwei Cui (China) .....  | 222 |
| Multi-year carbon stock study of wetland ecosystem in Hengshui Lake national nature reserve<br>Wenzhe Guo, Chengzhen Meng, Yuting Zhang, Yueying Li (China) .....   | 233 |
| The approach to air pollution control and the utilization of marine renewable energy in the UK<br>Yang Wu (China) .....   | 242 |
| Author Index .....  | 248 |