



**Contents**

**Volume 256**

The effect of air flow on solar stills performance: a review P. Azari, A. Mirabdollah Lavasani, N. Rahbar, M. Eftekhari Yazdi (Iran) .....	1
Scaling of low-temperature thermal desalination plants – design space exploration D. Gujjula, S.K. Raju Alluri, G. Dhinesh, S.V.S. Phani Kumar, M.V. Ramana Murthy (India) .....	18
Evaluation of the possibility to use wood-polymer composites for treatment of wastewater from the septic tank I. Kruszelnicka, D. Ginter-Kramarczyk, M. Michałkiewicz, M. Spychała (Poland) .....	26
Optimization of APTES/TiO <sub>2</sub> nanomaterials modification conditions for antibacterial properties and photocatalytic activity A. Sienkiewicz, P. Rokicka-Konieczna, A. Wanag, E. Kusiak-Nejman, A.W. Morawski (Poland) .....	35
Photocatalytic degradation of sulfonamide and its human metabolite by immobilized ZnO nanorods/TiO <sub>2</sub> nanoparticles J.R. de Melo, D.M. de Oliveira, A.V. Scalco, A.M. Ferrari, N.R.C. Fernandes, M.L. Gimenes (Brazil) .....	51
Fabrication and optimization of a new polyethersulfone membrane integrated with powder activated carbon for landfill leachate treatment S.M.A. Abuabdou (Palestinian Authority), Z.H. Jaffari (Taiwan), M.J.K. Bashir, N.C. Aun, S. Sethupathi (Malaysia) .....	65
MgCl <sub>2</sub> and MgSO <sub>4</sub> as draw agents in forward osmosis process for east Baghdad oilfield produced water treatment M.H. Salih, A.F. Al-Alawy (Iraq) .....	80
Vanadium-modified titania-supported CuO-Fe <sub>2</sub> O <sub>3</sub> systems and their efficiency in the Fenton-like degradation of phenol R. Ghanem, Y. Yousef, A. Hammoudeh (Jordan) .....	89
Optimization of <i>Moringa oleifera</i> seed extract and chitosan as natural coagulant in treatment of fish farm wastewater C.Y. Tong, F.H.B. Che Yusuf, C.J.C. Derek (Malaysia) .....	99
Removal of cadmium ions from polluted waters using low-cost adsorbents: process optimization study P. Kucharski, B. Białecka, M. Thomas (Poland) .....	114
Statistical model for comparing the performance of two coagulants using response surface model M.M.A. Ayash, A.F.M. Alkarkhi (Malaysia), S.S. Abu Amr (Oman, Turkey), M.N. Mahmud, M. Zulkifli (Malaysia) .....	125
Preparation and performance of CTS-AM-ETA as a modified chitosan flocculant Xu Yang, Xu Ji, Tao Xu, Xiao Liang, Weiwei Chen (China) .....	139
Comparative study of Cu-impregnated ZnO and Ag-impregnated ZnO visible light driven photocatalysts for the sonophotocatalytic degradation of cefpodoxime proxetil in aqueous solution F. Khitab, J. Shah, M.R. Jan (Pakistan) .....	149
Removal of oil spills by novel developed amphiphilic chitosan-g-citronellal Schiff base polymer: kinetic, isotherm, and thermodynamic studies B.Y. Eweida, T.M. Tamer, A.M. Omer, H.M.A. Soliman, A.A. Zaatot, M.S. Mohy-Eldin (Egypt) .....	163
The effect of activated carbon produced from remnants of walnut shell and ox tongue leftover on removing cadmium metal from water E. Mohseni, E. Rostami, Z. Hamdi, M. Mortezaei Mehrizi, A. Rahmani (Iran) .....	176
Utilization of composite adsorbents for polycyclic aromatic hydrocarbons adsorption from vehicle-wash wastewater and aqueous solutions M. Ilyas, W. Ahmad, H. Khan (Pakistan) .....	194
Investigation of rainwater quality at different rooftop types: a case study at the large Islamic boarding school in Madura Y. Okwitanti, A. Syafiuddin, E.A. Wikurendra, A. Ratnasari, E.B.P. Putri, M.Y. Anshori (Indonesia) .....	217

Understanding the role of the radiometric indices in temporal evapotranspiration estimation in arid environments S. Hussain, J. Bahrawi (Saudi Arabia), M. Awais (China), M. Elhag (China, Oman, Greece) .....	221
Effect of support columns under deflector on vortex settling basin performance Lin Li, Zhuoyun Mu, Yiyi Ma (China) .....	235
2, 2'-Dithiobis(2,3-dihydro-1,3-benzothiazole) as an effective inhibitor for carbon steel protection in acid solutions M.G.A. Saleh (Saudi Arabia), S. Abd El Wanees (Egypt, Saudi Arabia) .....	242
Kinetic and equilibrium studies of the activated carbon prepared from jackfruit leaves for the adsorption of methyl orange M.Z.B. Mukhlsh, S. Hossain, M.A. Rahman, M.T. Uddin (Bangladesh) .....	253
Photo-Fenton decolorization of dye with Cu solid state exchanged bentonite N. Hajipour, M. Ghorbanpour, A. Feizi .....	265
Removal of N-2RBL Nylosan Red dye from aqueous solution by Fenton using response surface methodology A. Belayachi-Haddad, N. Benderdouche, H. Belayachi, B. Bestani, C. Haddad (Algeria) .....	273
Application and mechanism study of TiO <sub>2</sub> /MXene nanocomposites in photocatalytic degradation of methyl orange Runlin Han, Yongli Xie (China) .....	282
High efficiency adsorption of Disperse Red 167 dye by Mg-Fe bimetallic oxide@biochar composites Huifang Wang, Boya Wang, Wenwen Zhou, Baowei Hu, Muqing Qiu (China) .....	289
Parameters optimization, kinetics, isotherm modeling of cationic and disperse dyes removal procedure using bi-polar iron electrocoagulation system A.A. Moneer, N.M. El-Mallah, M.M. El-Sadaawy, M. Khedawy, M.S.H. Ramadan (Egypt) .....	300
Degradation of Acid Orange II by sludge-derived biochar supported Cu/Fe bimetallic particles activating persulfate Yan Wang, Teng Jiang, Xingjun Fan, Haiming Zou, Jianrong Zhao (China) .....	314
Removal efficiency of Rhodamine B dye by atmospheric plasma J. Vergara Sánchez, C. Torres Segundo, E. Montiel Palacios, A. Gómez Díaz, P.G. Reyes Romero, H. Martínez Valencia (Mexico) .....	328
Development and application of sewage sludge biochar for the removal of methyl red from water environment K.S.A. Sohaimi, N. Nasaru, N.A. Zainol, N.A. Yusoff, N.M. Rohaizad (Malaysia), E.A. Wikurendra (Indonesia), A.A. Ghfar (Saudi Arabia), E.B.P. Putri (Indonesia), R. Boopathy (USA), A. Syafiuddin (Indonesia) .....	337
Assessment performance of three different water treatment processes in pilot-scale on the physicochemical quality of drinking water Z. Rezaei, S. Khanzadi, E. Shamloo, A. Salari (Iran) .....	347
Author Index .....	353