



**Contents**

**Volume 114**

Low diversity triggers harmful algae bloom (HAB) occurrence adjacent to desalination plants along the Red Sea M.N. Gomaa, I. Hannachi (Saudi Arabia), W.W. Carmichael (USA), M.A. Al-Hazmi, A.M. Abouwarda, E.A.H. Mostafa, H.E. Mohamed, K.M. Sheikho (Saudi Arabia), D.J. Mulla (USA) .....	1
Performance and microbial diversity of an upflow anaerobic sludge blanket reactor in fluorescent whitening agent wastewater treatment Wenjie Zhang, Luhan Wu, Yue Jin (China) .....	13
Optimization on the operating conditions of PRO process: towards improved net power density Hongliu Wang, Yue Wang, Dongya Ma, Qian Zhang, Shichang Xu (China) .....	19
Chlorination of oxybenzone and prediction of transformation products using non-equilibrium “forced” molecular dynamics H. Ridgway, J. Orbell, S. Gray (Australia) .....	31
Regional annual water consumption forecast model Xianqi Zhang, Mingliang Yue, Yuan Yao, Hao Li (China) .....	51
Enhancement of electrocoagulation process efficiency using activated carbon M. Fouad, M. El Amrety, M. Mossad (Egypt) .....	61
Solids removal from Balneo peat extracts A. Trusek-Holownia, J. Ciereszko (Poland) .....	69
Designing a process flow diagram of wastewater treatment F.R. Zhandauletova, T.S. Sanatova, A.A. Abikenova, K.G. Mustafin, T.S. Baipakbayev, S.E. Mananbaeva (Kazakhstan) .....	73
Leachate effluent COD removal using electrocoagulation: a response surface methodology (RSM) optimization and modeling A. Rabahi, D. Hauchard, S. Arris, M. Berkani, O. Achouri, A.H. Meniai, M. Bencheikh-Lehocine (Algeria) .....	81
Effect of guiding policy on urban residents’ behavior to use recycled water Bing Zhang, Hanliang Fu (China) .....	93
HR water consumption marginal benefits and its spatial-temporal disparities in Henan Province, China Subing Lü, Huan Yang, Fuqiang Wang, Pingping Kang (China) .....	101
Groundwater share quantification through flood hydrographs simulation using two temporal rainfall distributions K.S. Balkhair (Saudi Arabia), A. Masood (Saudi Arabia, Pakistan), M. Almazroui (Saudi Arabia), K. Ur Rahman (Saudi Arabia, China), O.A. Bamaga, A.S. Kamis, I. Ahmed, M.I. Al-Zahrani, K. Hesham (Saudi Arabia) .....	109
Effect of effluent and sludge recirculation ratios on integrated fixed films A2O system nutrients removal efficiency treating sewage S. Tabraiz (Pakistan, UK), S. Hassan (Pakistan), A. Abbas (UK), S. Nasreen, M. Zeeshan, S. Fida (Pakistan), B.A. Shamurad, K. Acharya, E. Petropoulos (UK) .....	120
Influence of poultry and swine blood shocks on the performance of microalgal heterotrophic bioreactor Aline Meireles dos Santos, Alberto Meireles dos Santos, R.B. Sartori, L.Z. Queiroz, E. Jacob-Lopes (Brazil) .....	128
Experimental and numerical analysis of heat transfer from main vessel to safety vessel using H <sub>2</sub> O/Al <sub>2</sub> O <sub>3</sub> nanofluid in a nuclear reactor vault M. Anish, B. Kanimozhi, N. Beemkumar, J. Jayaprapakar (India) .....	135
Shallow water proved higher levels of potentially harmful elements and human health risk along the Sadkal oil exploration and production S.A. Khan, H. Khan, M. Ishtiaq, U. Saddique, S. Muhammad, M. Farooq (Pakistan) .....	146
Investigation of locally available coffee residue as effective adsorbent for dye polluted water treatments J.M. Yassin (Ethiopia) .....	155

Citric acid removal from aqueous solutions using a polymer inclusion membrane based on a mixture of CTA and CA N. Benosmane, B. Boutemour (Algeria), S.M. Hamdi (France), M. Hamdi (Algeria) .....	163
A novel integrated ozone-SBR-ozone process for treatment of baker's yeast wastewater M. Arbabi, M.A. Ahmadi, M. Sadeghi, S. Hemati, A. Arbabi (Iran) .....	169
Thermal treatment of attapulgite for phosphate removal: A cheap and natural adsorbent with high adsorption capacity Mun-Ju Kim, Jung-Hun Lee, Chang-Gu Lee, Seong-Jik Park (Korea) .....	175
Chemical and physical characteristics of dune sand filters after operation Z. Badlis, B. Hamdi-Aissa, Y. Touil, M. Hadj-Mahammed (Algeria), A. Amrane (France) .....	185
Studies on the remediation of chromium (VI) from simulated wastewater using novel biomass of <i>Pinus kesiya</i> cone A. Abhishek, N. Saranya, P. Chandi, N. Selvaraju (India) .....	192
Photodeposition of silver on p-Cu <sub>2</sub> O/n-TiO <sub>2</sub> nanocomposite applied to visible light degradation of 2,4-dichlorophenol in synthetic wastewater A. Gharaee, A. Ebrahimian Pirbazari, Z. Khodae (Iran) .....	205
Copper removal by filamentous and yeast-like morphologies of <i>Mucor indicus</i> : surface characterization and biosorption mechanism S. Behnam, K. Karimi, A. Zamani, A. Mehrabani-Zeinabad (Iran) .....	221
Solid phase extraction of Pb(II) and Cd(II) using reduced graphene oxide-polychloroprene impregnated with magnetic nanoparticle (MNPs-RGO-PCP) Y. Iqbal, R. Ullah, M. Khan (Pakistan) .....	232
Nitrogen containing polymers-based triazine: synthesis, characterization and its applications for scavenging of copper(II) E.-R. Kenawy (Egypt), S.M. Osman (Egypt, Saudi Arabia), Z.A. AlOthman (Saudi Arabia), E.-S.A. Aly, S.N. Khattab (Egypt), A. El-Faham (Egypt, Saudi Arabia) .....	242
Visible-light active and magnetically recyclable Ag-coated Fe <sub>3</sub> O <sub>4</sub> /TiO <sub>2</sub> nanocomposites for efficient photocatalytic oxidation of 2,4-dichlorophenol N. Esmaili, A. Ebrahimian Pirbazari, Z. Khodae (Iran) .....	251
Preparation and photocatalytic activity of TiO <sub>2</sub> /PPy/GO for the degradation of Rose Bengal and Victoria Blue dye in visible light in aqueous solution A. Kumar, G. Pandey (India) .....	265
Efficient photocatalytic decolorization of methylene blue and victoria blue using reusable TiO <sub>2</sub> magnetic nanocomposite modified with zinc under UV irradiation: optimization via response surface methodology (RSM) M. Sadeghi, M. Irandoust, H. Azadi (Iran) .....	285
Modification of activated carbons by HNO <sub>3</sub> and H <sub>2</sub> O <sub>2</sub> for removal of methylene blue dye from aqueous solutions Liheng Liu, Hua Lin, Fei Pan, Geng Wang, Dunqiu Wang (China) .....	297
Tetracycline adsorption on steam alternative activated carbon: kinetic and thermodynamic parameters L.A. Soria-Serna, J. Torres-Pérez, S.Y. Reyes-López (Mexico) .....	307
Synthesis and characterization of rGO/Co <sub>3</sub> O <sub>4</sub> composite as nanoadsorbent for Rhodamine 6G-dye removal S.H.A. Altaa, H.A.H. Alshamsi, L.S.J. Al-Hayder (Iraq) .....	320
Preparation of eco-friendly activated carbon as a refining solution for the adsorptive treatment of analgesic acetaminophen K.Y. Foo (Malaysia) .....	332
Degradation of imidacloprid in aqueous solutions by zero valent iron nanoparticles in the nitrogen medium C. Gecgel, U.B. Simsek, M. Turabik (Turkey) .....	341
Author Index .....	356
Corrigendum to "Al-Fe exchanged natural clay as an efficient reusable catalyst for dye removal and real textile effluent treatment" by F. Ayari, S. Khelifi, A. Ben Othman, M. Trabelsi-Ayadi published in vol. 107 (2018) 305–315 (doi:10.5004/dwt.2018.22135) .....	357
Corrigendum to "Heavy metal removal by non-Newtonian emulsion liquid membrane dispersed in Taylor-Couette flow: experiments and modeling" by Y.-G. Park, Dooil Kim, Forney, A.H.P. Skelland published in vol. 61 (2017) pp. 58–67 (doi: 10.5004/dwt.2016.1710) .....	358