



**Contents**

**Volume 261**

Transfer of ions in forward osmosis process using reverse osmosis rejects as draw solution and industrial wastewater as feed water I.A. Alsayer (Saudi Arabia), A.A. Merdaw (UK), I.S. Al-Mutaz (Saudi Arabia) .....	1
Experimental research of the horizontal tube falling film flow patterns— transitional flow patterns and critical transition Re Kingsen Mu, Shun Hu, Xiaowen Nie, Jiali Wu, Shanlin Liu, Shengqiang Shen (China) .....	11
Performance analysis of solar evaporation for treating coconut husk retting water M. Sandhiya, M. Kumar (India) .....	24
Forecast the artificial intelligence abetted desalination process with the aid of patent landscape analysis — a teeny review Priyadharshini M, B. Devarajan (India) .....	33
Modification and operational stability evaluation of a miniaturized reciprocating-switcher energy recovery device for SWRO desalination system Hui Zhang, Yue Wang, Zheng Sun, Jiaqi Guo, Jun Li, Shichang Xu (China) .....	42
Dewatering sludge from primary and secondary clarifiers in Jabal Asfar wastewater treatment plants — case study M.H. Moustafa, S.I. Ali, T.S. Metwaly, M. Al-Shazely, F.A. Samhan (Egypt) .....	57
Innovative approach of sewage water restoration with vetiver grass ( <i>Chrysopogon zizanioides</i> ) in North India K. Adhikary, T. Mandal, J. Majumder, R. Jat (India) .....	76
Role of desalination technologies and water reuse in Water-Energy-Food nexus: an opportunity for Algeria N. Drouiche (Algeria), O.R. Villarreal (Mexico, France), S. Ouali (France, Algeria), S.E.I. Lebouachera (France), R. Soni (UK) .....	83
Filtration model and its application progress in oilfield produced water treatment Zhongchen Yu, Ke Li, Song Wang (China) .....	94
A comparative study of landfill leachate treatment using advanced oxidation photochemical processes, ozonation process and hydrogen peroxide systems H.A. Zaki, K. Zaher (Egypt) .....	107
Preparation and estimation of some tetrahalometallate cationic surfactants modified by adding polyurethane as corrosion inhibitors M.T.A. El-Al, M.F. Zaki, M. Bekhit, N.R. A. El-Rahman, A.H. Fathy (Egypt) .....	120
Study and modeling of dairy effluents treatment using design of experiments methodology T. Rachiq, N. Samghouli, J. Mabrouki, K. El-Moustaqim, M. Rahmani, N. Al-Jadabi, S. El Hajjaji, S. Rahal (Morocco) .....	131
Organoarsenic compounds in water samples — the problem of hydride generation atomic absorption spectroscopic method K. Jaworek, M. Czaplicka (Poland) .....	141
Comparative assessments on wastewater treatment technologies for potential of wastewater recycling Z.Z. Loh, N.S. Zaidi, E.L. Yong (Malaysia), M.Y. Anshori (Indonesia), A.A. Al-Kahtani (Saudi Arabia), R. Boopathy (USA), A. Ratnasari, A. Syafiuddin (Indonesia) .....	151
Efficient adsorption of nitrate and phosphate from wastewater by the cost-effective Mg/Ca bimetallic oxide composites functionalized peanut shell Li Han, Renrong Liu, Huifang Wang, Baowei Hu, Muqing Qiu, Hao Zhang (China) .....	159
Performance of sequencing batch reactor for the removal of chemical oxygen demand from waste cooking oil N.B.A. Rashid, A.L.A. Rani, M.F.B. Omar, M.A.H. Abdullah (Malaysia), E.B.P. Putri, A. Syafiuddin (Indonesia) .....	170

Treatment of rice grain-based distillery effluent using hybrid electrocoagulation-microfiltration processes: performance and optimization S. Dubey, D. Sharma, S. Sen, C. Rekhate, N. Parmar, R.K. Kaushal, A.K. Prajapati (India) .....	175
Performance evaluation of immobilized micro green algae for heavy metals removal from water D.S. Ahmed, Y.M. El Ayouty (Egypt), A.S. Naje (Iraq), R.M. Wagdy (Egypt) .....	186
Watermelon peels biochar-S for adsorption of Cu <sup>2+</sup> from water M.A. El-Nemr (Egypt), M. Yilmaz (Turkey), S. Ragab, A. El Nemr (Egypt) .....	195
Surface ion-imprinted silica clay for adsorption of chromium(III) ions from aqueous with high selectivity Junwen Li, He Li, Qiao-e Wang, Haiming Cheng (China) .....	214
Characterisation of activated carbons for removal of organic and heavy metal pollutants from water in resource limited countries G. Kalaba, J. Nyirenda, O. Munyati (Zambia) .....	224
Intensive adsorption and degradation of environmental hormone micro-contaminated water by a new g-C <sub>3</sub> N <sub>4</sub> based composite photocatalyst coupled modified mesoscopic carbon Xiang Li, Wei Li, Shiyu Xie, Guoming Zeng, S. Khan (China) .....	234
Removal of Se(IV) from water with biochar-supported nanoscale zero-valent iron: optimization of preparation conditions and adsorption characteristics Meijing Chen, Wenfeng Liu, Baojun Yi, Yunlian Wu, Xiangdong Kong, Shiwei Zhang, Zhengshuai Sun (China) .....	241
A study on quantitative and qualitative characteristics of water obtained from the air conditioning systems M.B. Miranzadeh, D. Rabbani, G. Mostafaii, H. Akbari, M. Hesami Arani, F. Mohebbi (Iran) .....	249
Adsorption of murexide dye from aqueous solution using a novel Schiff base tin(IV) compound S. Karayünlü Bozbaş, B.C. Yıldız Aras, M. Karabulut, A. Kayan (Turkey) .....	256
Preparation of core-shell TiO <sub>2</sub> @ZIF-67 and its effective adsorption of methyl orange from water Jingli Zhang, Xi Yang, Shuijie Cheng, Decheng Zou, Fang Cheng (China) .....	266
Facile synthesis of silica nanoparticles with cationic surfactant and investigation of equilibrium, kinetics and thermodynamics of Reactive Yellow 42 dye removal from aqueous solutions A. Naghizadeh, N. Nourafrouz, E. Derakhshani, M. Asri, M. Esmati (Iran) .....	278
Vortex-assisted liquid-liquid microextraction of selected non-steroidal anti-inflammatory using supramolecular solvent A. Jan, J. Shah, M.R. Jan (Pakistan) .....	289
Degradation and mineralization of tetracycline and oxytetracycline by Fenton process: effect of inorganic anions E. Gürtekin, A. Çelik, E. Aydın (Turkey) .....	299
Removal of tetracycline antibiotic from aqueous solution using biosorbent M.S. Tunç, Ö. Hanay (Turkey) .....	308
Author Index .....	322