

Contents

Volume 57 Issue 28

Development of a setup to enable stable and accurate flow conditions for membrane biofouling studies Sz.S. Bucs, N. Farhat, A. Siddiqui, R. Valladares Linares (Thuwal, Saudi Arabia), A. Radu (Delft and Leeuwarden, The Netherlands), J.C. Kruithof (Leeuwarden, The Netherlands) and J.S. Vrouwenvelder (Thuwal, Saudi Arabia and Delft and Leeuwarden, The Netherlands).....	12893
Compaction and relaxation of biofilms R. Valladares Linares (Thuwal, Saudi Arabia), A.D. Wexler (Leeuwarden, The Netherlands), Sz.S. Bucs (Thuwal, Saudi Arabia), C. Dreszer (Leeuwarden, The Netherlands and Essen, Germany), A. Zwijnenburg (Leeuwarden, The Netherlands), H.-C. Flemming (Essen, Germany), J.C. Kruithof (Leeuwarden, The Netherlands) and J.S. Vrouwenvelder (Leeuwarden, Saudi Arabia and Delft and Leeuwarden, The Netherlands)	12902
A new vacuum membrane distillation system using an aspirator: concept modeling and optimization M.I. Hassan, A.T. Brimmo (Abu Dhabi, UAE), J. Swaminathan, J.H. Lienhard V (Cambridge, MA, USA) and H.A. Arafat (Abu Dhabi, UAE).....	12915
Combined effects of evaporation and cavitation on the performance of a renewable energy powered natural vacuum desalination unit in Bahrain T. Ayhan and H. Al-Madani (Isa Town, Bahrain).....	12929
Manufacturing of antibiofouling polymeric membranes with bismuth-BAL chelate (BisBAL) S. Ovez, T. Turken, B. Kose-Mutlu, S. Okatan, G. Durmaz, M.C. Guclu, S. Guclu (Istanbul, Turkey), S. Chellam (Houston, TX, USA) and I. Koyuncu (Istanbul, Turkey).....	12941
Micellar-enhanced ultrafiltration of dairy wastewater with anionic and nonionic surfactants H. Jalaei Salmani (Mashhad, Iran)	12956
The application of ANNs and multivariate statistical techniques to characterize a relationship between total dissolved solids and pressure indicators: a case study of the Saf-Saf river basin, Annaba, Algeria B. Sakaa (Biskra and Annaba), S. Merdas, T. Mostephaoui (Biskra), H. Chaffai, A. Hani and L. Djabri (Annaba, Algeria)	12963
CFD modeling and analysis of brine spray evaporation system Lei Chen, Xuening Fei, Yuman Dai, Min Ji, Hongwei Zhang and Xiumei Jiao (Tianjin, China)	12977
Investigation of sludge conditioning performance and mechanism by examining the effect of charge density on cationic polyacrylamide microstructure Qingqing Guan, Mingfang Tang, Huaili Zheng (Chongqing), Houkai Teng (Tianjin), Xiaomin Tang and Yong Liao (Chongqing, China)	12988
Salt inhibition on anaerobic treatment of high salinity wastewater by upflow anaerobic sludge blanket (UASB) reactor S. Aslan and N. Şekerdağ (Elazığ, Turkey)	12998
Modeling and optimization by response surface methodology and neural network–genetic algorithm for decolorization of real textile dye effluent using <i>Pleurotus ostreatus</i> : a comparison study M. Venkatesh Prabhu (Chennai), R. Karthikeyan (Thiruvavur) and M. Shanmugaprasanth (Coimbatore, India)	13005
Carbon emissions and embodied energy as tools for evaluating environmental aspects of tap water and bottled water in Brazil P. Dias and A.M. Bernardes (Porto Alegre, Brazil).....	13020
Nano-iron oxide coated on sand as a new sorbent for removal of arsenic from drinking water D. Afzali, M. Rouhani, F. Fathirad, T. Shamspur and A. Mostafavi (Kerman, Iran)	13030
Arsenic contamination in groundwater in Zimapan, Hidalgo, Mexico F. Prieto García, O.A. Acevedo Sandoval, F. Pérez Moreno, J. Prieto Méndez and R.A. Canales Flores (Hidalgo, Mexico)	13038

Packed bed column investigation on hexavalent chromium adsorption using activated carbon prepared from <i>Swietenia Mahogany</i> fruit shells S. Rangabhashiyam, E. Suganya and N. Selvaraju (Kozhikode, India)	13048
Reduction of Cr(VI) utilizing biogenic sulfide: an experimental and mathematical modeling approach V. Peña-Caballero (Celaya), R. Aguilar-López (San Pedro Zacatenco), P.A. López-Pérez (Chimalpa) and M.I. Neria-González (Ecatepec de Morelos, Mexico)	13056
Factors affect on bioremediation of Co(II) and Pb(II) onto <i>Lonicera japonica</i> flowers powder L.P. Lingamdinne, J.R. Koduru (Seoul), R.K. Jyothi (Daejeon), Yoon-Young Chang and Jae-Kyu Yang (Seoul, Korea)	13066
Equilibrium and kinetic studies on the adsorption of copper onto paddy straw powder G. Varma V. (Bangalore) and A.K. Misra (Gurgaon, India)	13081
Sorption of cobalt(II) from an aqueous medium using Amberlite 200C and Dowex 88 resins: Equilibrium and kinetic studies Y. Aşçı and S. Kaya (Eskişehir, Turkey)	13091
Dry <i>Trichoderma</i> biomass: biosorption behavior for the treatment of toxic heavy metal ions N.N.N.A. Rahman, M. Shahadat (Versoix, Malaysia), F.M. Omar (Versoix, Switzerland), A.W. Chew and M.O.A. Kadir (Versoix, Malaysia)	13106
Advanced treatment of biologically treated heavy oil wastewater for reuse as boiler feed-water by combining ultrafiltration and nanofiltration Yi Liu (Jingzhou, China)	13113
Investigation on microwave and ultrasound-assisted cornhusk for the removal of emulsified engine oil from water P. Augusta and P. Kalaichelvi (Tiruchirappalli, India)	13120
Synthesis and physicochemical characterization of ZnMgNiAl-CO ₃ -layered double hydroxide and evaluation of its sodium dodecylbenzenesulfonate removal efficiency C. Tiar, M. Boutahala, A. Benhouria and H. Zaghoulane-Boudiaf (Sétif, Algeria)	13132
Enhancement of waste activated sludge reduction potential by amalgamated solar photo-Fenton treatment S. Kavitha, P. Karthika, J. Rajesh Banu (Tirunelveli, India), Ick Tae Yeom (Seoul, Korea) and S. Adish Kumar (Tirunelveli, India)	13144
Evaluation of wasted biomaterial, crab shells (<i>Portunus sanguinolentus</i>), as a coagulant, in paint effluent treatment S. Vishali, P. Rashmi (Chennai) and R. Karthikeyan (Thanjavur, India)	13157
Use of thermal coagulation, separation, and fermentation processes for dairy wastewater treatment M. Kasmi, M. Snoussi, A. Dahmeni, M. Ben Amor (Soliman), M. Hamdi (Tunis) and I. Trabelsi (Soliman, Tunisia)	13166
Evaluating the suitability of different parameters for qualitative analysis of groundwater based on analytical hierarchy process Z. Nourbakhsh, N. Mehrdadi, N. Moharamnejad, A.H. Hassani and H. Yousefi (Tehran, Iran)	13175
Effects of temperature on hydrolysis performance and short-chain fatty acids production during thermophilic micro-aerobic fermentation of waste activated sludge Chunxue Yang, Zhangwei He, Zechong Guo (Harbin), Aijuan Zhou (Taiyuan), Aijie Wang (Harbin and Beijing) and Wenzong Liu (Beijing, China)	13183
Utilization of <i>S. aureus</i> strain 502A in biodegradation of insecticide acetamiprid from wetland wastewater T. Kanjilal, C. Bhattacharjee and S. Datta (Kolkata, India)	13190
COD reduction by TiO ₂ /graphene photocatalytic treatment of ethylene dichloride in wastewater S.A. Maleki, M. Mirzaei and A. Azimi (Mahshahr, Iran)	13207
Evaluation of performance of <i>Planococcus</i> sp. TRC1 an indigenous bacterial isolate monoculture as bioremediator for tannery effluent M. Behera, D. Dhali, S. Chityala, T. Mandal (Durgapur), P. Bhattacharya (Kolkata) and D.D. Mandal (Durgapur, India)	13213
Coal-based granular activated carbon loaded with MnO ₂ as an efficient adsorbent for removing formaldehyde from aqueous solution Zheng Wang, Migui Zhong and Lei Chen (Nanjing, China)	13225
Hazardous waste landfill leachate treatment by combined chemical and biological techniques E. Kattel (Tallinn), A. Kivi, K. Klein, T. Tenno (Tartu), N. Dulova and M. Trapido (Tallinn, Estonia)	13236
Reuse of alum sludge for phosphorus removal from municipal wastewater N. Maqbool, Z. Khan and A. Asghar (Islamabad, Pakistan)	13246

Intensification of phosphate removal using electrocoagulation treatment by continuous pH adjustment and optimal electrode connection mode A. Attour, N. Ben Grich, M. Mouldi Tlili, M. Ben Amor (Soliman, Tunisia), F. Lopicque and J.-P. Leclerc (Nancy, France).....	13255
Utilization of reduced graphene oxide for the enhancement of photocatalytic property of TiO ₂ nanotube Huidi Liu, Yaling Wang, Lei Shi, Ruopeng Xu, Langhuan Huang and Shaozao Tan (Guangzhou, China).....	13263
Effect of zeolite application on potassium release in sandy soils amended with municipal compost D. Moraetis (Muscat, Oman), S. Papagiannidou, A. Pratikakis, D. Pentari and K. Komnitsas (Kounoupidiana, Greece).....	13273
A novel peat-based biosorbent for the removal of phosphate from synthetic and real wastewater and possible utilization of spent sorbent in land application A. Robalds, L. Dreijalte, O. Bikovens and M. Klavins (Riga, Latvia)	13285
Preparation of a novel polymeric adsorbent and its adsorption of phenol in aqueous solution Man Yang, Yun Huang, Qiudi Yue, Haijun Cao, Xing Li and Yuanhua Lin (Chengdu, China)	13295
Phenol removal by newly isolated <i>Acinetobacter baumannii</i> strain Serdang 1 in a packed-bed column reactor Z.H.M. Yadzir (Tronoh), M.Y. Shukor (Serdang), A. Ahmad (Tronoh, Malaysia), M.S. Nazir (Lahore), S.M.U. Shah (Islamabad, Pakistan) and M.A. Abdullah (Kuala Terengganu, Malaysia).....	13307
Adsorption of congo red from aqueous solution using various TiO ₂ nanoparticles T. Şişmanoğlu and G.S. Pozan (Istanbul, Turkey).....	13318
Adsorption of direct green 26 onto fix 3500 treated sawdust: equilibrium, kinetic and isotherms A. Hashem (Shaqra, Saudi Arabia and Cairo, Egypt), F. Ahmad (Jamshoro, Pakistan) and S.M. Badawy (Sakaka, Saudi Arabia and Cairo, Egypt)	13334
Removal of hazardous azo dye Metanil Yellow from aqueous solution by cross-linked magnetic biosorbent: equilibrium and kinetic studies S. Tural (Diyarbakir), T. Tarhan (Diyarbakir and Mardin) and B. Tural (Diyarbakir, Turkey)	13347
Optimization of Remazol Brilliant Blue adsorption process from aqueous solutions using multi-walled carbon nanotube A. Arab Markadeh, A. Rezaee, S.O. Rastegar, H. Hossini, S. Ahmadi and E. Hoseinzadeh (Tehran, Iran)	13357
Author Index	13366