



Contents

Volume 89

| | |
|--|-----|
| Construction and validation of a long-channel membrane test cell for representative monitoring of performance and characterization of fouling over the length of spiral-wound membrane modules N. Siebdrath, Wei Ding, E. Pietsch (Germany), J. Kruithof (The Netherlands), W. Uhl (Germany, Norway), J. Vrouwenvelder (The Netherlands, Saudi Arabia) | 1 |
| Characterisation of organic foulants on full-scale UF membranes during filtration, backwash and chemical cleaning episodes O. Gibert, M. Vera, S. Cruz, M.R. Boleda, M. Paraira, J. Martín-Alonso, S. Casas, X. Bernat (Spain) | 17 |
| Experimental investigation of a novel passive solar still with additional condensation on sidewalls M.B. Shafii, A. Favakeh, M. Faegh, H. Sadrhosseini (Iran) | 29 |
| Performance study of a rotary vane pressure exchanger for SWRO Fanghua Ye, Jianqiang Deng, Kai Liu, Zheng Cao (China) | 36 |
| Performance of combined anoxic–aerobic fluidized bed bioreactors for the domestic wastewater treatment Yangyang Feng, Lei Zhang, Xiaoming Hu (China) | 47 |
| Direct contact and sweeping gas membrane distillation for process intensification – a comparative study L.M. Dinh, P. Jacob, C. Visvanathan (Thailand) | 53 |
| Solar-driven dual-purpose plant with hybrid desalination system for harsh desert farms A.S. Hassan (Qatar), H.E. Fath (Egypt) | 65 |
| Effect of plasma treatment on the surface properties and antifouling performance of homogeneous anion exchange membrane Zhijuan Zhao, Shaoyuan Shi, Hongbin Cao, Yuping Li (China) | 77 |
| Investigation of the flow characteristics of a falling film along an inclined surface with planar laser-induced fluorescence method X. Chen, C. Wang, Y. Song, X.L. Ouyang, P.X. Jiang, S.Q. Shen (China) | 87 |
| Treatment of municipal wastewater using <i>Scenedesmus abundans</i> and studies on saccharification of grown biomass using ultrasound assistance T. Sivakumar, P. Senthil Kumar (India) | 94 |
| Impact of soluble COD on grey water treatment by electrocoagulation technique K. Bani-Melhem, M. Al-Shannag, D. Alrousan, S. Al-Kofahi, Z. Al-Qodah, M.R. Al-Kilani (Jordan) | 101 |
| Combined chlorine dioxide oxidation and biological activated carbon processes for treatment of oxytetracycline wastewater Yanfang Liu, Guixia Li, Zhili Zhang, Huan Liu, Zaixing Li (China) | 111 |
| Influence of sand filter in wastewater treatment (a case study in Gaza city, Gaza Strip wastewater treatment plant) Y. El-Nahhal, O. El-Dahdouh, H. Al-Najar (Palestinian Authority) | 118 |
| Effects of loading rate, resin height, and bed volume on nitrate removal from drinking water by non-selective strong anion exchange resin (A400E) M. Pirsaeheb, T. Khosravi, M. Fazlzadeh, K. Sharafie (Iran) | 127 |
| Investigation of diazinon toxicity for water treated with electrochemical process using <i>Daphnia magna</i> F. Gharagazloo, H. Akbari, R. Dehghani, D. Rabbani (Iran) | 136 |
| Characterization of profenofos degradation by <i>Pseudomonas plecoglossicida</i> strain PF1 using surface response methodology C. Ploychankul, A.S. Vangnai, K. Wantala, S. Siripattanakul-Ratpukdi (Thailand) | 142 |
| Application of response surface methodology for statistical analysis, modeling, and optimization of malachite green removal from aqueous solutions by manganese-modified pumice adsorbent A. Karami, K. Karimyan, R. Davoodi, M. Karimaei, K. Sharafie, S. Rahimi, T. Khosravi, M. Miri, H. Sharafi, A. Azari (Iran) | 150 |

| | |
|---|-----|
| Removal of arsenic from aqueous solutions using MgFe ₂ O ₄ nano spinel and GO/MgFe ₂ O ₄ nanocomposite: an application of response surface methodology S.A. Hosseini, O. Gholipour (Iran) | 162 |
| Woody biomass fly ash as a low-cost sorbent for the removal of ionic dye from aqueous solution: isotherm, kinetic modelling and thermodynamics L. Ćurković, M. Jukić, Z. Šokčević, M. Majić Renjo (Croatia) | 171 |
| Photocatalytic removal of methyl orange from synthetic wastewater by ternary Fe ₃ O ₄ /TiO ₂ /MWCNTs nanocomposites under visible light M. Hadipour Bahambar, A. Ebrahimian Pirbazari, N. Gilani (Iran) | 181 |
| Degradation of Orange II by electrochemical activation of persulfate: performance and mechanism Shumin Zhu, Shiqing Zhou, Yanghai Yu, Naiyun Gao, Bingzhi Dong (China) | 189 |
| Preparation and characterization of magnetic CaFe ₂ O ₄ nanoparticles for efficient adsorption of toxic Congo Red dye from aqueous solution: predictive modelling by artificial neural network A. Deb, M. Kanmani, A. Debnath, K.L. Bhowmik, B. Saha (India) | 197 |
| Comparative studies on adsorption of dyeing industry effluents by activated carbon and polymer coated sawdust prepared from the fruit of <i>Cordia sebestena</i> A. Geetha, N. Palanisamy (India) | 210 |
| A discoloration study of a series of cationic organic dyes in acidic and alkaline pH using Mn-ferrite nanocatalyst P. Roonasi (Iran) | 217 |
| Removal of heavy metals in the presence of the biodegradable biosurfactant of sophorolipid from the municipal dewatered sludge Junguo He, Jian Tang, Tiantian Liu, Xiaodong Xin (China) | 225 |
| Cu and Co nanoparticle composites based on starch poly(acrylic acid) hydrogel: reusable catalysts for catalytic reduction of nitrophenol M. Ghorbanloo, S. Tarasi, R. Tarasi (Iran), Jun Tao (China) | 233 |
| Kinetics, equilibrium and thermodynamics of cerium removal by adsorption on low-rank coal T. Javed, N. Khalid, M.L. Mirza (Pakistan) | 240 |
| Removal/separation of Co(II) ion from environmental sample solutions by MnFe ₂ O ₄ /bentonite nanocomposite as a magnetic nanomaterial Arezoo Rahmani, G.R. Karimi, Abasat Rahmani, M. Hosseini, Ashkan Rahmani (Iran) | 250 |
| Random forest modeling for the kinetic and isotherm study of malachite green adsorption from aqueous environments using zinc sulfide nanoparticle loaded with activated carbon A. Ansari, M. Ghaedi, A.M. Ghaedi, F. Bahari, G. Azarian, K. Godini (Iran) | 258 |
| Characterization of phosphate removal from aqueous solution by manganese oxyhydroxyde L. Bouhouf, C. Boukhalfa (Algeria), L. Reinert, L. Duclaux (France) | 274 |
| Qualitative methods to identify potential strains for partial degradation of oil palm mesocarp fibre A. Yuzir, A. Sabri, H. Tijani, N. Abdullah, C. Shreeshivadasan (Malaysia) | 280 |
| Removal of human astroviruses from hospital wastewater by two biological treatment methods: natural oxidizing lagoons and rotating biodisks C. Ibrahim, I. Mehri, S. Hammami, S. Mejri, A. Hassen (Tunisia), P. Pothier (France) | 287 |
| Study survey of cupric oxide nanoparticles in removal efficiency of ciprofloxacin antibiotic from aqueous solution: adsorption isotherm study S. Ahmadi (Iran), A. Banach (Poland), F. Kord Mostafapour, D. Balarak (Iran) | 297 |
| Photocatalytic degradation of the antibiotic ciprofloxacin by ZnO nanoparticles immobilized on a glass plate M. Amiri Gharaghani, M. Malakootian (Iran) | 304 |
| Author Index | 315 |