

Contents

Volume 52/28–30

Fennel seed extract as green corrosion inhibitor for 304 stainless steel in hydrochloric acid solutions A.S. Fouda (El-Mansoura), S.M. Rashwan (Ismailia) and H.A. Abo-Mosallam (Dakahlia, Egypt).....	5175
Differences in the corrosion inhibition of water extracts of <i>Cassia fistula</i> L. pods and o-phenanthroline on steel in acidic solutions in the presence and absence of chloride ions A. El Nemr, G.F. El Said, A. Khaled, A. El Sikaily, A.A. Moneer and D.E. Abd-El-Khalek (Alexandria, Egypt)	5187
Status of membrane distillation for water and wastewater treatment—A review B.L. Pangarkar (Nashik), M.G. Sane (Pune), S.B. Parjane and M. Guddad (Nashik, India)	5199
Development of high flux thin-film composite membrane for water desalination: a statistical study using response surface methodology J.M. Gohil (London, Ont., Canada) and A.K. Suresh (Mumbai, India)	5219
Microalgae filtration by UF membranes: influence of three membrane materials X. Sun, C. Wang, Y. Tong, W. Wang (Wuhan, China) and J. Wei (Nakskov, Denmark)	5229
Greywater treatment using different designs of sand filters H.I. Abdel-Shafy, M.A. El-Khateeb and M. Shehata (Cairo, Egypt)	5237
Electrocoagulation coupled to activated carbon sorption/filtration for treatment of cleaning wastewaters from wood-based industry H. Hansson, M. Marques, S. Laohaprapanon and W. Hogland (Kalmar, Sweden)	5243
Cost-effective and sustainable solutions to enhance the solar disinfection efficiency improving the microbiological quality of rooftop-harvested rainwater M.T. Amin, A.A. Alazba (Riyadh, Saudi Arabia), M.N. Amin (Al-Ahsa, Saudi Arabia) and M.Y. Han (Seoul, Korea)	5252
The kinetics of the removal of organic pollutants from drinking water by a novel plasma-based advanced oxidation technology A. Mizrahi and I.M. Litaor (Upper Galilee, Israel)	5264
The analysis of salt production by a recrystallization method using the concentrated backflow effluent of the desalination units O. Mowla and D. Mowla (Shiraz, Iran)	5276
Assessment and comparison of conventional and modern irrigation systems to manage irrigation water supplies in the River Nile State of Sudan A. Elgilany, S. Jamalludin and M. Saidatulakmal (Pulau Pinang, Malaysia)	5284
Assessment of socioeconomic aspects in irrigation water use inefficiency in Sudan A. Elgilany, S. Jamalludin and M. Saidatulakmal (Pulau Pinang, Malaysia)	5295
Sludge characterization of an industrial water treatment plant, Iran M. Ahmadi (Ahvaz), P. Teymouri (Sanandaj), M. Ghalebi (Mahshahr), N. Jaafarzadeh, N. Alavi (Ahvaz), A. Askari (Mahshahr) and M. Foladivanda (Ahvaz, Iran)	5306
The reclamation of municipal effluent for irrigation by a pilot-scale advanced treatment plant Z. Talipoğlu, S.K.A. Solmaz and G.E. Ustun (Bursa, Turkey)	5317
Combined treatment of the municipal landfill leachate by fluidized bed Fenton process C. Chen and M. Qiu (Shaoxing, China)	5327
Modelling ion exchange kinetics in zeolyte-type materials using Maxwell–Stefan approach P.F. Lito, J.P.S. Aniceto and C.M. Silva (Aveiro, Portugal)	5333
A novel kinetic model for batch aqueous-solution/porous-solid adsorption systems A. Baraka (Cairo, Egypt)	5343
Optimization of photosynthetic bacteria wastewater treatment and study of microbial species diversity W. Zhao (Harbin) and G. Zhang (Beijing, China)	5357

Simultaneous formation and biodegradation of HAAs in slow sand filters: effects of residual chlorine in filter influent	
S.-T. Hsieh, H.-H. Tung and G.-S. Wang (Taipei, Taiwan)	5366
Treatment performances of a manganese ore constructed wetland for lignite-derived water	
C. Zhang, K. Ning, Y. Guo, J. Chen, C. Liang, X. Zhang, R. Wang and L. Guo (Beijing, China)	5374
Investigations of the mechanism and efficiency of bacteria abatement during electrocoagulation using aluminum electrode	
C. Ricordel, C. Miramon (Bruz), D. Hadjiev (Lorient) and A. Darchen (Rennes, France)	5380
Optimization of flocculation process by response surface methodology for diethyl phthalate removal using anionic polyacrylamide	
H. Zheng, J. Ma, J. Zhai (Chongqing), C. Zhu (Tianjin), X. Tang, Y. Liao, L. Qian and Y. Sun (Chongqing, China)	5390
Preparation and characterization of charcoal from feathers and its application in trimethoprim adsorption	
C. Cheng, J. Zhang, C. Zhang, H. Liu and W. Liu (Jinan, China)	5401
Review of bio-hydrogen production and new application in the pollution control via microbial electrolysis cell	
G. Zhu, T. Wu (Xiamen), A.K. Jha (Harbin), R. Zou, L. Liu, X. Huang and C. Liu (Xiamen, China)	5413
A high-capacity aluminum hydroxide-based adsorbent for water defluoridation	
E. Mulugeta, F. Zewge (Addis Ababa, Ethiopia), C.A. Johnson (Dübendorf, Switzerland) and B.S. Chandravanshi (Addis Ababa, Ethiopia)	5422
Combination of solid-phase extraction and flame atomic absorption spectrometry for simultaneous preconcentration and determination of some heavy metals in real samples	
A. Asghari, H. Farzinia, M. Rajabi (Semnan) and M. Ghaedi (Yasouj, Iran)	5430
Humic acid removal by electrocoagulation using aluminium sacrificial anode under influencing operational parameters	
S. Kourdali, A. Badis, A. Saiba, A. Boucherit and H. Boutoumi (Blida, Algeria)	5442
Effects of alumina trihydrate (ATH) on formation of biofilms settled on inert carriers of polyethylene terephthalate (PET)	
Z. Li (Guangzhou), I.C. Lou (Macau SAR), H. Lei and Y. Liu (Guangzhou, China)	5454
Influence of ultrasound irradiation on cadmium cations adsorption by montmorillonite	
Z. Danková, A. Mockovčiaková and S. Dolinská (Košice, Slovak Republic)	5462
Phthalate esters removal using modified fiber prepared by two-step electron beam irradiation of methacrylate monomer onto polypropylene substrate	
S. Li, J. Wei, L. Wang, H. Yang, A. Wang and Y. Nie (Tianjin, China)	5470
Photocatalytic degradation of acid red 14 from contaminated water using immobilized TiO ₂ nanoparticles on glass beads activated by UV/peroxydisulfate	
M.H. Rasoulifard, S.M.-M. Doust Mohammadi, A. Heidari (Zanjan) and G.H. Shahverdizadeh (Tabriz, Iran)	5479
Equilibrium and kinetic study of the adsorption of reactive blue, red, and yellow dyes onto activated carbon and barley husk	
A.H. Sulaymon and W.M. Abood (Baghdad, Iraq)	5485
Removal of Acid Red 299 dye on gold nanoparticles loaded on activated carbon: kinetic and thermodynamic investigation of the removal process	
M. Ghaedi, Z. Andikaey (Yasouj), A. Daneshfar, T. Akbari and R. Sahraei (Ilam, Iran)	5494
Kinetic and isotherm study of Bromothymol Blue and Methylene blue removal using Au-NP loaded on activated carbon	
M. Ghaedi (Yasouj, Iran), E. Nazari (Tehran, Iran), R. Sahraie (Ilam, Iran) and M.K. Purkait (Guwahati, India)	5504
Using Y-shaped microreactor for continuous decolorization of an Azo dye	
M. Rahimi, B. Aghel, M. Sadeghi and M. Ahmadi (Kermanshah, Iran)	5513
Kinetic studies for the adsorption of methyl violet by nano potassium zinc ferrocyanide powder from aqueous solution	
S. Viladkar and A. Hashmi (Dehradun, India)	5520
Decolourisation of Metanil Yellow by visible-light photocatalysis with N-doped TiO ₂ nanoparticles: influence of system parameters and kinetic study	
D. Chakrabortty and S.S. Gupta (Dhubri, India)	5528
Removal of reactive dyes by a solid waste product from food processing: crayfish carapace	
Y. Wang, S. Wang, J. Lei, H. Sun, W. Jin, T. Ye, B. Li and L. Wang (Wuhan, China)	5541

Performance of a novel HABR–CFASR system for the biological treatment of mixed printing and dyeing wastewater (MPDW)	
D.-X. Hu, M.-H. Cui (Harbin), Z.-B. Chen (Dalian), Y. Tian (Harbin), Y.-B. Cui (Dalian), N.-Q. Ren (Harbin), C.-Q. Ran and H.-J. Sun (Dalian, China)	5553
Adsorption of malachite green from aqueous solutions onto lotus leaf: equilibrium, kinetic, and thermodynamic studies	
X. Han, J. Yuan and X. Ma (Zhengzhou, China)	5563
Transport of methylene blue through bulk liquid membrane containing calix[8]arene derivative	
I.H. Gubbuk (Konya) and O. Gungor (Kocaeli, Turkey)	5575
Iron-clay as a reusable heterogeneous Fenton-like catalyst for decolorization of Acid Green 25	
N.H.M. Azmi, V.M. Vadivelu and B.H. Hameed (Nibong Tebal, Malaysia).....	5583
Decolorization of heterocycle dye Neutral Red by white-rot fungus <i>Perenniporia subacida</i>	
J. Si, X.-C. Li and B.-K. Cui (Beijing, China)	5594
Exclusion of Zn(II) from aqueous solution using corncob (<i>Zea mays</i> stalk) after chemical modifications with inorganic acids and bases	
H. Zafar, R. Nadeem (Faisalabad), R. Saeed (Sahiwal), R. Gill (Rawalpindi), T. Iqbal and K. Akhtar (Faisalabad, Pakistan)	5605
Regenerable hydrogels based on poly(acrylic acid-sodium acrylate-acrylamide) modified by sodium humate for high removal of Pb ²⁺ and Fe ²⁺ ions: metal adsorption kinetics and thermodynamic studies	
T. Singh and R. Singhal (Kanpur, India)	5611
Competitive biosorption of Pb(II), Cr(III), and Cd(II) from synthetic wastewater onto heterogeneous anaerobic biomass in single, binary, and ternary batch systems	
A.H. Sulaymon, S.E. Ebrahim and M.J. M-Ridha (Baghdad, Iraq)	5629
Development and photocatalytic activities of TiO ₂ doped with Ca–Ce–W in the degradation of acid red 1 under visible light irradiation	
U.G. Akpan and B.H. Hameed (Nibong Tebal, Malaysia)	5639
Modeling and simulation for the adsorptive removal of Cr(VI) from aqueous solution	
G. Surendran, B. Viswanat Sasank and S.S. Baral (Goa, India)	5652
Adsorption of nickel ions from seawater by modified chitosan	
Z. Cheng, W. Ma, L. Gao, Z. Gao, R. Wang, J. Xu and G. Xin (Dalian, China)	5663
Removal of nitrate–nitrogen from aqueous medium by adsorbents derived from pomegranate rind	
P.C. Mishra, M. Islam and R.K. Patel (Rourkela, India)	5673
Removal of Ni(II) from aqueous system by chemically modified sunflower biomass	
M. Jain, V.K. Garg (Hisar) and K. Kadirvelu (Bangalore, India)	5681
Release and recovery of phosphorus from wastewater treatment sludge via struvite precipitation	
A.A. Ahmad and A. Idris (Serdang, Malaysia)	5696
Kinetic and mechanistic study of photochemical degradation of 4-chlorophenol using peroxy acetic acid (PAA)	
M. Mukhopadhyay and D.P. Daswat (Surat, India)	5704
Author Index.....	5715