

**Contents**  
**Volume 40**

40 (2012) v–vii  
February

Nanotechnology: the next revolution for wastewater treatment (TNT contaminate)	
A.M. Badawi, S.M. Ahmed, S.A. Shaban (Cairo, Egypt) and S.M.I. Morsy (Taif, Saudi Arabia) .....	1
Ion exchange study of some new biphenol-thiourea-formaldehyde terpolymer resins	
M.M. Jadhao, M. Thite (Raipur, India), L.J. Paliwal and N.S. Bhave (Nagpur, India) .....	7
Preparation and characterization of imino diacetic acid functionalized alginate beads for removal of contaminants from waste water: I. methylene blue cationic dye model	
M.S.M. Eldin, E.A. Soliman (Alexandria, Egypt), A.A.F. Elzatahry, M.R. Elaassar (Riyadh, Saudi Arabia), M.F. Elkady, A.M.A. Rahman, M.E. Yossef and B.Y. Eweida (Alexandria, Egypt) .....	15
Variation of organics, nitrogen and phosphorus within a cycle of a Bio-Deniphlo system	
J. Duan, W. Li, K. Zhao (Xi'an, PR China) and J. Krampe (Adelaide, South Australia) .....	24
Testing a <i>Pseudomonas putida</i> strain for 4-chlorophenol degradation in the presence of glucose	
M.D. Murcia, M. Gómez, E. Gómez, J.L. Gómez (Murcia, Spain), F.A. Sinada (Khartoum, Sudan) and N. Christofi (Edinburgh, Scotland).....	33
Photocatalytic reduction of phosphorus in the acid pickling milling wastewater from high-phosphorus hematite mineral processing	
Z. Yi (Beijing, PR China), H. Feng, X. Enrong, Z. Yimin, X. Shibin and W. Zhenbin (Wuhan, PR China) .....	38
Characteristics and simulation of soluble microbial products in membrane bioreactors coupled with moving carriers (MBR-MC)	
L. Chen and C. Cao (Harbin, PR China).....	45
Photochemical oxidation of phenolic wastewaters and its kinetic study	
A. Dixit, A.K. Mungray and M. Chakraborty (Surat, India).....	56
Degradation of diethyl phthalate (DEP) in aqueous solution using TiO <sub>2</sub> /UV process	
L. Mansouri and L. Bousselmi (Soliman, Tunisia) .....	63
Adsorption of boron from aqueous solutions by activated carbon impregnated with salicylic acid: equilibrium, kinetic and thermodynamic studies	
B.Z. Can, Z. Ceylan (Erzurum, Turkey) and M.M. Kocakerim (Çankırı, Turkey) .....	69
Photocatalytic removal of Cr(VI) and Ni(II) by UV/TiO <sub>2</sub> : kinetic study	
M.S. Siboni, M.-T. Samadi (Kurdistan Sanandaj, Iran), J.-K. Yang (Seoul, Korea) and S.-M. Lee (Gangnung, Korea) .....	77
Pretreatment of micro-polluted surface water with a biologically enhanced PAC-diatomite dynamic membrane reactor to produce drinking water	
H. Chu, Y. Zhang, B. Dong, X. Zhou, D. Cao (Shanghai, PR China), Z. Qiang (Beijing, PR China), Z. Yu and H. Wang (Shanghai, PR China).....	84
Efficient removal of humic acid in aqueous solution using polyaniline adsorbent	
J. Wang, S. Ding, C. Zheng, H. Ma and Y. Ji (Xi'an, PR China) .....	92
Sensitivity of SDI for experimental errors	
A. Alhadidi, B. Blankert, A.J.B. Kemperman (Enschede, The Netherlands), J.C. Schippers (Delft, The Netherlands), M. Wessling and W.G.J. van der Meer (Enschede, The Netherlands) .....	100
A simplified kinetic model for a full scale anaerobic wastewater treatment plant of a sugar factory under unsteady conditions	
N.A. Perendeci (Antalya, Turkey), A. Tanyolaç (Ankara, Turkey) and S.S. Çelebi (Istanbul, Turkey) .....	118
Adsorption of Astrazon Blue FGRL onto sepiolite from aqueous solutions	
A. Ongen, H.K. Ozcan, E.E. Ozbas and N. Balkaya (Istanbul, Turkey) .....	129

Kinetic of degradation of two azo dyes from aqueous solutions by zero iron powder: determination of the optimal conditions M.R. Samarghandi (Hamadan, Iran), M. Zarrabi (Karaj, Iran), A. Amrane (Rennes, France), M.N. Sepehr (Karaj, Iran), M. Noroozi (Qom, Iran), S. Namdari (Hamadan, Iran) and A. Zarei (Tehran, Iran) .....	137
Preparation and properties of hydrous bismuth oxides for nitrate removal from aqueous solutions P.K. Singh, A.L. Srivastav (Varanasi, India), D.K. Ghosh (Kanpur, India) and Y.C. Sharma (Varanasi, India) .....	144
Preparation of coagulant from red mud and semi-product of polyaluminum chloride for removal of phosphate from water F. Ni, X. Peng, Y. Zhao, J. He, Y. Li and Z. Luan (Beijing, PR China) .....	153
Adsorption of 4-nitrophenol on palm oil fuel ash activated by amino silane coupling agent H.A. Al-Aoh, M.J. Maah (Kuala Lumpur, Malaysia), A.A. Ahmad (Serdang, Malaysia) and M.R.B. Abas (Kuala Lumpur, Malaysia) .....	159
Evaluation of CaCO <sub>3</sub> clogging in emitters with magnetized saline waters U. Sahin, T. Tunc (Erzurum, Turkey) and S. Eroğlu (Istanbul, Turkey) .....	168
Modeling Fenton advanced oxidation process decolorization of Direct Red 16 using artificial neural network technique J. Saini, A.R. Soleymani and H. Bayat (Hamedan, Iran) .....	174
Statistical evaluation and comparison of the chemical quality of bottled water and flemish tap water S.W.H. Van Hulle (Gent, Belgium) and M.C. Ciocci (Kortrijk, Belgium) .....	183
Removal of copper (II) from wastewater by heartwood powder of <i>Areca catechu</i> : kinetic and equilibrium studies P. Chakravarty, D.C. Deka, N.S. Sarma and H.P. Sarma (Assam, India) .....	194
A new extraction method of fucoidan from the soaked water of brown seaweed ( <i>Laminaria japonica</i> ) X. Chen, R. Xing, H. Yu, S. Liu and P. Li (Qingdao, PR China) .....	204
Water quality monitoring by nanostructured films in a sensing unit system K.B. Cajuella (Gastão Vidigal, Brazil) P.G. Dauer (Campo Grande, Brazil), M.C. Rosa (São Jose do Rio Preto, Brazil), F.J.C. Teran (Goiânia, Brazil) and J.A. Giacometti (Presidente Prudente, Brazil) .....	209
Effects of initial chlorobenzene concentration, air flowrate and temperature on mass transfer of chlorobenzene by air stripping M.-l. Lin, Z.-w. Zhao, F.-y. Cui, Y. Wang (Harbin, PR China) and S. Xia (Shanghai, PR China) .....	215
Uptake of phosphorus from dairy wastewater by heterotrophic cultures of cyanobacteria J.G. Vieira, A.G.da Silva Manetti, E. Jacob-Lopes and M.I. Queiroz (Rio Grande, Brazil) .....	224
Arsenic speciation analysis and remediation techniques in drinking water V.K. Gupta (Dhahran, Saudi Arabia), A. Nayak, S. Agarwal (Roorkee, India), R. Dobhal, D.P. Uniyal, P. Singh, B. Sharma, S. Tyagi and R. Singh (Uttarakhand, India) .....	231
Removal of phenol and lead from synthetic wastewater by adsorption onto granular activated carbon in fixed bed adsorbers: prediction of breakthrough curves A.H. Sulaymon, D.W. Abbood and A.H. Ali (Baghdad, Iraq) .....	244
The evaluation of fouling effects in membrane process dealing with the biologically pre-treated textile effluents G. Kaykioglu (Corlu-Tekirdag, Turkey), A. Coban (Besiktas-Istanbul, Turkey), E. Debik (Esenler-Istanbul, Turkey), B.B. Kayacan (İstanbul, Turkey) and I. Koyuncu (Maslak-Istanbul, Turkey) .....	254
Design of experiments for Malachite Green dye removal from wastewater using thermolysis – coagulation–flocculation L.W. Man (Penang, Malaysia), P. Kumar (Varanasi, India), T.T. Teng (Penang, Malaysia) and K.L. Wasewar (Maharashtra, India) .....	260
Desalination at low temperatures: an exergy analysis V.G. Gude (Mississippi State, MS, USA), N. Nirmalakhandan (Las Cruces, NM, USA), S. Deng (Las Cruces, NM, USA) and A. Maganti (Marysville, CA, USA) .....	272
Membrane-based extraction with strip/organic dispersion methodologies for metals removal and recovery from wastewaters I. Padilla, I. Garcia-Diaz, A. Urien, O. Rodríguez, F. Lopez, and F.J. Alguacil (Madrid, Spain) .....	282

Natural dye from bixa seeds as a potential alternative to synthetic dyes for use in textile industry P.D. Saha and K. Sinha (Durgapur (WB), India).....	298
Assessment of fouling of an RO process dedicated to indirect potable reuse M. Raffin (Cranfield, UK), E. Germain (Reading, UK) and S. Judd (Cranfield, UK) .....	302
Determination of first flush criteria from an urban residential area and a transportation land-use area K. Gil and T.-w. Kim (Seoul, Korea) .....	309
Trapping efficiency with rainfall and seasonal changes in vegetative filter strips over a course of three years K. Gil and J.-W. Shin (Seoul, Korea) .....	319
Non-point sources analyses in paved areas using statistical methods: case study of vortex type K. Gil and S. Wee (Seoul, Korea).....	326
Author Index.....	334