

 **Contents**
Volume 20

Issues 1–3

Life-cycle cost analysis of adsorption cycles for desalination	
K. Thu, A. Chakraborty, B.B. Saha (Singapore), Won Gee Chun (Korea) and K.C. Ng (Singapore)	1
Numerical simulation and experimental validation of a controlled flow solar water disinfection system	
H.H. El Ghetany and A. Abdel Dayem (Cairo, Egypt).....	11
An overview of the localized corrosion problems in seawater desalination plants — Some recent case studies	
A.U. Malik, I. Andijani, M. Mobin, S. Al-Fozan, F. Al-Muaili and M. Al-Hajiri (Al-Jubail, Saudi Arabia)	22
Effect of some new diazole derivatives on the corrosion behaviour of steel in 1 M HCl	
Y. Abboud, B. Ihssane (Casablanca), B. Hammouti (Oujda), A. Abourriche, S. Maoufoud (Casablanca), T. Saffaj (Fès), M. Berrada, M. Charrouf, A. Bennamara and H. Hannache (Casablanca, Morocco).....	35
Nuclear desalination: A review on past and present	
V. Belessiotis, E. Papanicolaou and E. Delyannis (Aghia Paraskevi Attikis, Greece).....	45
A humidification–dehumidification process for produced water purification	
Xinhua Li, S. Muraleedaaran, Liangxiong Li and R. Lee (Socorro, NM, USA)	51
Solar energy integration in the treatment of industrial effluent by coagulation–electroflootation	
I. Ksentini, M.L. Aouadi, H. Ben Bacha and L. Ben Mansour (Sfax, Tunisia)	60
Removal of fluorions from trifluoroacetic acid by reverse osmosis	
S.J. Li (Hangzhou), Y.F. Wang (Daqing), T.Y. Wang, D.Z. Tian, L.J. Zheng and Q.X. Luo (Hangzhou, China)	66
Removal of heavy metal ions from aqueous solution by electrocoagulation	
using a horizontal expanded Al anode	
E.-S.Z. El-Ashtoukhy, T.M. Zewail and N.K. Amin (Alexandria, Egypt)	72
Removal of oily hydrocarbon contaminants from wastewater by γ -alumina nanofiltration membranes	
Z. Sadeghian, F. Zamani and S.N. Ashrafizadeh (Tehran, Iran)	80
Utilization of sugarcane bagasse for removal of basic dyes from aqueous environment	
in single and binary systems	
Siew-Teng Ong (Perak), Eng-Cheong Khoo, Siew-Ling Hii (Kuala Lumpur) and Sie-Tiong Ha (Perak, Malaysia).....	86
Organic dye removal by combined adsorption–membrane separation process	
H. Jirankova, J. Mrazek, P. Dolecek and J. Cakl (Pardubice, Czech Republic).....	96
Removal of reactive dye from aqueous solutions by adsorption onto activated carbons	
prepared from oak sawdust	
M.M. Abd El-Latif (Alexandria) and A.M. Ibrahim (Cairo, Egypt).....	102
Removal of copper ions by modified sepiolite samples	
E. Eren and B. Eren (Bilecik, Turkey).....	114
Utilization of shells of hazelnut modified with Reactive Orange 122 as adsorbent for the removal of Cu(II)	
H. Aydin and Ç. Yerlikaya (Diyarbakir, Turkey).....	123
Algae and cyanotoxins removal by coagulation/flocculation: A review	
B. Ghernaout (Laghouat), D. Ghernaout and A. Saiba (Blida, Algeria).....	133
Aspergillus niger is able to decolourize sepia ink contained in saline industrial wastewaters	
K. Lamia and G. Néji (Sfax, Tunisia)	144
Separation of nickel from cobalt using cation exchange membranes in the presence of chelating agents	
Y. Oztekin, Z. Yazicigil and A. Kadir Ince (Konya, Turkey)	154
Biosorption of cadmium(II) and lead(II) from aqueous solutions by fruiting body waste	
of fungus <i>Flammulina velutipes</i>	
Dan Zhang, Haijiang He, Wei Li, Tingyan Gao and Pei Ma (Beijing, China)	160

Experimental, kinetic, equilibrium and regeneration studies for adsorption of Cr(VI) from aqueous solutions using low cost adsorbent (activated flyash)	168
S. Gupta and B.V. Babu (Pilani, India)	168
Removal of Pb(II) from wastewaters by <i>Fontinalis antipyretica</i> biomass: Experimental study and modelling	
R.J.E. Martins (Bragança and Porto), V.J.P. Vilar and R.A.R. Boaventura (Porto, Portugal)	179
Anaerobic treatment of phenolic wastewater: Effect of phosphorous limitation	
A. Hussain, P. Kumar and I. Mehrotra (Roorkee, India).....	189
Photosonochemical degradation of phenol in water	
A.H. Mahvi (Tehran) and A. Maleki (Sanandaj, Iran)	197
Phosphate removal performance of acid pickling milling wastewater from high-phosphate hematite mineral processing by activated red mud	
Zhang Yi, Xia Shibin, Luo Ji and Zhang Yimin (Wuhan, China)	203
Inactivation of faecal bacteria in wastewater by methylene blue and visible light	
S. Sabbahi, Z. Alouini, L. Ben Ayed, M. Jemli and A. Boudabbous (Tunis, Tunisia)	209
Decolorization kinetic studies of Congo red catalyzed by Co-doped CdS nanoparticles	
H.R. Pouretedal, S.D. Mirghaderi and M.H. Keshavarz (Shahin-Shahr, Iran)	220
Study of malachite green adsorption onto natural zeolite in a fixed-bed column	
Xianli Wu, Yu Wang, Jiaolong Liu, Jiangyan Ma and Runping Han (Zhengzhou, China).....	228
Saving amberlite XAD4 by using inert material in adsorption process	
A.H. Sulaymon and S.E. Ebrahim (Baghdad, Iraq).....	234
Kaolin dispersion destabilization with microparticles of cationic starches	
R. Klimaviciute, D. Sableviciene, J. Bendoraite and A. Zemaitaitis (Kaunas, Lithuania)	243
Study and modeling of the separation characteristics of a novel alkali-stable NF membrane	
Liming Zhao, Wenshui Xia (Wuxi), Hefei Zhao and Jun Zhao (Shanghai, China)	253
Modeling and membrane resistance analysis of stainless steel membrane in alkali wastewater recovery processing	
Liming Zhao, Wenshui Xia, Hefei Zhao (Wuxi), Zhiwei Xu, Xiaoyan Wu and Jun Zhao (Shanghai, China).....	264
Equilibrium and kinetic studies of fluoride adsorption by chitosan coated perlite	
Y. Vijaya, M. Venkata Subbaiah, A. Subba Reddy and A. Krishnaiah (Tirupati, India)	272
Low temperature process to recover impaired waters	
V.G. Gude, N. Nirmalakhandan and Shuguang Deng (Las Cruces, NM, USA)	281
Adsorption of natural organic matter onto a composite adsorbent prepared with chitosan and powdered activated carbon	
Jingdong Zhang and Fenfen Liu (Wuhan, China)	291
Composition and structure of benthic macroinvertebrate community in two reservoirs in Hubei province, China: Response to eutrophication	
Guangjun Lv (Wuhan and Chongqing), Bangxi Xiong, Min Liu, Xuefen Yang, Liang Qin, Peng Chen, Wei Xu, Junli Liu and Kaijian Wei (Wuhan, China).....	297
Sorption characteristics of heavy metal ions by aquatic weed	
S. Dixit, S. Dhote, R. Dubey, H.M. Vaidya and R.J. Das (Bhopal, India).....	307
Investigation studies of vapor side corrosion in a multistage flash desalination pilot plant	
A. Al-Arifi, I.S. Al-Mutaz, M.A. Alodan and F. Abudaleem (Riyadh, Saudi Arabia)	313
Author Index.....	324