

Contents

Volume 53 Issue 5

CCD Series No-10: small compact BWRO closed-circuit desalination (CCD) units of high-recovery, low-energy and reduced fouling for supplied water upgrade to industry, irrigation, domestic, and medical applications A. Efraty (Har Adar, Israel)	1145
CCD Series No-11: single module compact SWRO-CCD units of low energy and high recovery for seawater desalination with solar panels and wind turbines A. Efraty (Har Adar, Israel)	1162
Artificial neural networks for modeling the reverse osmosis unit in a wastewater pilot treatment plant A. Salgado-Reyna, E. Soto-Regalado, R. Gómez-González, F.J. Cerino-Córdova, R.B. García-Reyes, M.T. Garza-González and M.M. Alcalá-Rodríguez (Nuevo León, Mexico)	1177
Treatment of reverse osmosis concentrate by biological aerated filter Hee-Jeong Choi and Seung-Mok Lee (Gangneung, Korea)	1188
Progress in membrane liquid-liquid reactor — a review Zhiqian Jia (Beijing, China)	1196
Preparation of low-cost microfiltration membranes from fly ash G. Singh and V.K. Bulasara (Patiala, India)	1204
Preparation and characterization of PVDF-PVP-TiO ₂ composite hollow fiber membranes for oily wastewater treatment using submerged membrane system C.S. Ong, W.J. Lau, P.S. Goh, B.C. Ng and A.F. Ismail (Skudai, Malaysia)	1213
Cost-benefit analysis of reclaimed wastewater reuses in Beijing Yupeng Fan, Weiping Chen, Wentao Jiao (Beijing, China) and A.C. Chang (Riverside, CA, USA)	1224
Second law and sensitivity analysis of large ME-TVC desalination units A. Binamer (Safat, Kuwait)	1234
Synergistic extraction of cobalt and nickel ions by supported liquid membranes with a mixture of TIOA and TBP Y. Yıldız, A. Manzak (Adapazari) and O. Tutkun (Istanbul, Turkey)	1246
The filtration performance and efficiency of olive mill wastewater treatment by integrated membrane process A. Zirehpour, A. Rahimpour and M. Jahanshahi (Babol, Iran)	1254
Slip flow heat transfer in micro-tubes with viscous dissipation N. Loussif (Monastir and Gafsa, Tunisia) and J. Orfi (Riyadh, Saudi Arabia)	1263
Effects of permanent magnetic field on calcium carbonate scaling of circulating water Lili Jiang (Lanzhou), Jianliang Zhang (Beijing) and Dongkui Li (Baotou, China)	1275
Solvent extraction of calcium ion from cation-exchange resin regeneration wastewater using D2EHPA and saponified D2EHPA Jian-Hong Luo, Jun Li (Chengdu) and Long-fei Lin (Shanghai, China)	1286
Dye adsorption using biomass wastes and natural adsorbents: overview and future prospects O.S. Bello, K.A. Adegoke, A.A. Olaniyan and H. Abdulazeez (Ogbomoso, Nigeria)	1292
Effective removal of non-biodegradable methyl orange dye by using CdS/activated carbon nanocomposite as a photocatalyst Y.V. Marathe and V.S. Shrivastava (Nandurbar, India)	1316
Adsorption of crystal violet from aqueous solution by chemically modified phoenix tree leaves in batch mode Xiaofeng Ren, Wei Xiao, Randi Zhang, Yu Shang and Runping Han (Zhengzhou, China).....	1324
The effect of operational parameters in the photocatalytic activity of synthesized Mg/ZnO-SnO ₂ nanoparticles M.A. Behnajady and Y. Tohidi (Tabriz, Iran)	1335

Application of low-cost fabricated column model for the adsorption analysis of pollutants from river water using coconut coir W.-P. Low, M.F. Md Din, M. Ponraj, M.A. Fulazzaky (Johor, Malaysia), K. Iwao (Nagoya, Japan), A.R. Songip (Kuala Lumpur, Malaysia) and S. Chelliapan (Johor, Malaysia)	1342
Sequential use of Fenton and electro-Fenton process for the oxidation of an effluent containing hypophosphite and phosphite A. Da Pozzo and E. Petrucci (Rome, Italy)	1352
Kinetics, isotherm and thermodynamics of tributyltin removal by adsorption onto activated carbon, silica and composite material of silica and activated carbon O.S. Ayanda, O.S. Fatoki (Bellville, South Africa), F.A. Adekola (Ilorin, Nigeria), B.J. Ximba and L.F. Petrik (Bellville, South Africa)	1361
The treatment of trace As(III) from water by modified spent grains Yunnen Chen (Jiangxi), Liyuan Chai (Jiangxi and Changsha), Jinxia Nie, Xianping Luo and Dongshuang Wang (Jiangxi, China)	1371
Groundwater protection from cadmium contamination by zeolite permeable reactive barrier A.A.H. Faisal and Z.A. Hmood (Baghdad, Iraq)	1377
Kinetic characteristics of biological simultaneous anaerobic sulfide and nitrite removal Jing Cai, Ping Zheng (Hangzhou, China), M. Qaisar (Abbottabad, Pakistan) and Yajuan Xing (Hangzhou, China)	1387
Characterization and sorption behavior of natural adsorbent for exclusion of chromium ions from industrial effluents M. Shahadat, M. Rafatullah and T.T. Teng (Penang, Malaysia)	1395
Waste citrus fruit peels for removal of Hg(II) ions T.J. Sahetya, F. Dixit (Varanasi) and K. Balasubramanian (Girinagar, India)	1404
Cadmium removal by activated carbon, carbon nanotubes, carbon nanofibers and carbon fly ash: a comparative study F.A. Al-Khaldi, B. Abu-Sharkh, A.M. Abulkibash and M.A. Atieh (Dhahran, Saudi Arabia)	1417
Author Index	1430