Nitrates removal on PUROLITE A 520E resin: kinetic and thermodynamic studies
T. Turki, S. Ben Hamouda, R. Hamdi and M. Ben Amor (Soliman, Tunisia) .............................. 1

Techno-economic analysis of combined concentrating solar power and desalination plant
configurations in Israel and Jordan
R. Olwig, T. Hirsch, C. Sattler (Cologne, Germany), H. Glade, L. Schmeken, S. Will (Bremen,
Germany), A. Ghermandi and R. Messalem (Beer Sheva, Israel) ........................................ 9

Study on the impact of particle size distribution on turbidity in water
W. He and J. Nan (Harbin, PR China) ................................................................................................ 26

Characteristic analysis on morphological evolution of suspended particles in water during dynamic
flocculation process
J. Nan and W. He (Harbin, PR China) ................................................................................................ 35

Mixed matrix membranes for pervaporative separation of isopropanol/water mixtures
O. Bakhtiari (Kermanshah, Iran), S. Mosleh, T. Khosravi and T. Mohammadi (Tehran, Iran) .... 45

Synthesis of new modified MCM-41/PSF nanocomposite membrane for improvement of water
permeation flux
A. Jomekian ( Mashhad, Iran), A. Shafiee and A. Moradian (Tehran, Iran) ................................ 53

Study on the adsorption of Pb2+ from aqueous solution by D113-III resin
X. Chunhua, C. Xinyi and Y. Caiping (Hangzhou, China) .......................................................... 62

Potential of activated carbon adsorption processes for the remediation of nuclear effluents: a recent
literature
K.Y. Foo and B.H. Hameed (Penang, Malaysia) ........................................................................... 72

On modeling chronic detachment of periphyton in artificial rough, open channel flow
M. Graba, A. Kettab (Alger, Algeria), S. Sauvage and J.M. Sanchez-Pérez (Tolosan, France) .... 79

Experimental study and cost evaluation for ethanol separation from fermentation broth using
pervaporation
P. Kaewkannetra, N. Chutinate, S. Moonamart, T. Kamsan (Khon Kaen, Thailand) and T.Y. Chiu
(Sheffield, UK) .............................................................................................................................. 88

Dynamic modeling of flux and total hydraulic resistance in nanofiltration treatment of regeneration
waste brine using artificial neural networks
F. Salehi and S.M.A. Razavi ( Mashhad, Iran) ............................................................................. 95

Production of l-lysine from l-lysine monohydrochloride by bipolar membrane electrodialysis
Y. Zhang, Y. Chen, M. Yue and L. Wang (Mianyang, P.R. China) .............................................. 105

Power generation with salinity gradient by pressure retarded osmosis using concentrated brine
from SWRO system and treated sewage as pure water
K. Saito (Tokyo, Japan), M. Irie, S. Zaitsu, H. Sakai, H. Hayashi and A. Tanioka (Nagasaki-shi,
Japan) ........................................................................................................................................... 114

Adsorption of Cd(II) on lotus stalks-derived activated carbon: batch and column studies
L. Huang, Y. Sun (Shangdong, China), Q. Yue (Hangzhou, China), Q. Yue, L. Li and B. Gao
(Shangdong, China) ..................................................................................................................... 122

Degradation of wastewaters containing organic dyes photocatalysed by zinc oxide: a review
S.-M. Lam, J.-C. Sin, A.Z. Abdullah and A.R. Mohamed (Pinang, Malaysia) ............................... 131

Adsorption of direct yellow 27 from water by poorly crystalline hydroxyapatite prepared via
precipitation method
K. Mahmud, (Ioannina, Greece), Md. Azharul Islam (Khulna, Bangladesh), A. Mitsionis,
T. Albanis and T. Vaimakis (Ioannina, Greece) ........................................................................... 170
A feasible study on the application of raw ostrich feather, feather treated with H$_2$O$_2$ and feather ash for removal of phenol from aqueous solution
M. Manshouri, H. Daraei and A.R. Yazdanbakhsh (Tehran, Iran) ............................................................179

Modeling and dynamic analysis of a membrane bioreactor with backwash scheduling
R. Alnaizy, N. Abdel-Jabbar, A. Aidan and N. Abachi (Sharjah, United Arab Emirates) ..................186

Performance of single-slope single-basin solar still with sensible heat storage materials
S. Shanmugan, B. Janarthanan and J. Chandrasekaran (Tamilnadu, India) ............................................195

Annual performance of evacuated tubular collector integrated solar still
R. Dev and G.N. Tiwari (New Delhi, India) ..........................................................................................204

Color and COD reduction from cotton textile processing wastewater by activated carbon derived from solid waste in column mode
A.A. Ahmad, A. Idris (Serdang, Malaysia) and B.H. Hameed (Penang, Malaysia) .................................224

Anaerobic biodegradation of personnel care products (PCPs) wastewater in an up-flow anaerobic sludge blanket (UASB) reactor
A. Tawfik (Alexandria, Egypt) and O. ElBatrawy (Egypt) ..............................................................232

Microbiological quality of drinking water in urban communities, Rawalpindi, Pakistan
I. Hashmi, S. Qaiser and S. Farooq (Islamabad, Pakistan) .................................................................240

Biofilter in leachate treatment processes
W.G. Shim, (Gwangju, Korea), J.M. Abdul, T. Mohammad, S. Vigneswaran, H.H. Ngo and J. Kandasamy (NSW, Australia) .........................................................249

Performance of a stainless steel membrane in membrane bioreactor process
R. Aryal, M.A.H. Johir, S. Vigneswaran, J. Kandasamy and R. Sleigh (NSW, Australia) ..................258

Start-up of decentralised MBRs Part II: the use of additives as initial inoculum
J.A. Gil, E. Dorgeloh (Aachen, Germany), J.B. van Lier (Delft, The Netherlands), J.H.J.M. van der Graaf (Deventer, The Netherlands) and D. Prats (Alicante, Spain) ..................265

Closed circuit desalination series No 6: conventional RO compared with the conceptually different new closed circuit desalination technology
A. Efraty (Har Adar, Israel) .............................................................................................................279

Potential use of CeO$_2$, TiO$_2$ and Fe$_3$O$_4$ nanoparticles for the removal of cadmium from water
A.R. Contreras, A. García, E. González, E. Casals, V. Puntes, A. Sánchez, X. Font and S. Recillas (Bellaterra, Spain) ..................................................................................296

Closed circuit desalination series No 7: retrofit design for improved performance of conventional BWRO system
A. Efraty and Z. Gal (Har Adar, Israel) ..........................................................................................301

Mathematical modeling of biosorption of safranin onto rice husk in a packed bed column using artificial neural network analysis
P.D. Saha (West Bengal, India) and S. Dutta (Jharkhand, India) ......................................................308

Chemically modified nano silica gel with 2-((3silylpropylimino) methyl)-2-hydroxy-1-naphthol (SPIMHN) as good and efficient adsorbent for solid phase extraction
M. Ghaedi (Yasouj, Iran) and E. Sharifpour (Gachsaran, Iran) ..........................................................315

Influence of carrier concentration on the control of *Galactomyces geotrichum* bulking and bacterial community of biofilm reactors

Natural zeolite—a versatile commodity—some retrospectives in water cleanup processes
E. Chmielewská (Braislava, Slovakia) .................................................................................................335

Adsorption of N-methylated diaminotriphenilmethane dye (malachite green) on natural rarasaponin modified kaolin
A.C. Suwandhi, N. Indraswati and S. Ismadji (Surabaya, Indonesia) ..................................................342

Simulation of constructed wetland treatment in wastewater polishing using PREWet model
C.W. Maina, B.M. Mutua and S.O. Oduor (Kenya) ...........................................................................356
Application of enhanced bioremediation for TCE-contaminated groundwater: a pilot-scale study
Y.C. Kuo (Kaohsiung, Taiwan), S.F. Cheng (Taichung City, Taiwan), P.W.G. Liu (Tainan, Taiwan),
H.Y. Chiou and C.M. Kao (Kaohsiung, Taiwan) ............................................................................................................................................364