

Contents

Volume 3

Issue 1

Equilibrium sorption of methylene blue using mansonia wood sawdust as biosorbent A.E. Ofomaja (Benin City, Nigeria)	1
Hybrid composite membranes of sodium alginate for pervaporation dehydration of 1,4-dioxane and tetrahydrofuran M.B. Patil, R.S. Veerapur, S.D. Bhat (Dharwad), C.D. Madhusoodana (Bangalore) and T.M. Aminabhavi (Dharwad, India)	11
Photochemical treatment for water potabilization. Influence of wavelength and hydrogen peroxide concentration on the reduction of trihalomethanes S. Navalon, M. Alvaro, H. Garcia and L. Monforte (Valencia, Spain)	21
Self-sealing evaporation ponds for small inland desalination facilities and containment equivalence concepts in Texas J.-P. Nicot and B. Gross (Austin, TX, USA)	29
Chromium(VI) sorption from dilute aqueous solutions using wool N. Balkaya (Istanbul) and N. Bektas (Kurupelit-Samsun, Turkey)	43
Ultrafiltration, chemical and biological oxidation as process combination for the treatment of municipal landfill leachate M.C. Cammarota, L. Yokoyama and J.C. Campos (Rio de Janeiro, Brazil)	50
Solar desalination unit with falling film M. Abu-Arabi, H. Mousa and R. Abdelrahman (Irbid, Jordan)	58
A comparative study on physicochemical properties and photocatalytic behavior of two different nanostructure composite TiO ₂ films coated on glass substrate M. Nasr-Esfahani (Najafabad) and M.H. Habibi (Isfahan, Iran)	64
Swelling and metal ion uptake characteristics of kaolinite containing poly [(acrylic acid)-co-acrylamide] hydrogels A.A. Atia, A.M. Donia (Minufiya), R.A. Hussin and R.T. Rashad (Giza, Egypt)	73
Autopsy of NF membranes after 5 years of operation at the Ummluj SWRO plant A.M. Farooque, T.N. Green, N.K. Mohammed and F.A. Al-Muali (Al-Jubail, Saudi Arabia)	83
Recovery of propionic acid by reactive extraction — 1. Equilibrium, effect of pH and temperature, water coextraction A. Keshav (Uttarakhand), K.L. Wasewar (Nagpur) and S. Chand (Uttarakhand, India)	91
Production of high-purity water by membrane processes R. Singh (Colorado Springs, CO, USA)	99
A new theoretical approach to estimate the specific energy consumption of reverse osmosis and other pressure-driven liquid-phase membrane processes A.O. Sharif, A.A. Merdaw, H. Al-Bahadili, A. Al-Tae, S. Al-Aibi, Z. Rahal and G.A.W. Derwish (Guildford, UK)	111
Hybridization — a new trend in desalination A.M. Helal (Abu Dhabi, UAE)	120
Transparent exopolymer particles: Potential agents for organic fouling and biofilm formation in desalination and water treatment plants E. Bar-Zeev, I. Berman-Frank (Ramat Gan), B. Liberman (Kadima), E. Rahav (Ramat Gan, Israel), U. Passow (Santa Barbara, CA, USA) and T. Berman (Migdal, Israel)	136

Issues 2 and 3, Selected papers from EuroMed 2008, Desalination for Clean Water and Energy Cooperation among Mediterranean Countries of Europe and the MENA Region

Water challenges in the MENA region — Keynote Address	
M.J. Haddadin (Amman, Jordan)	143
Use of ion-exchange membranes for the removal of tin from spent activating solutions	
M. García-Gabaldón, V. Pérez-Herranz, J. García-Antón and J.L. Guiñón (Valencia, Spain)	150
Estimation of the gel layer concentration in ultrafiltration: Comparison of different methods	
M.-C. Vincent-Vela, S. Álvarez-Blanco, J. Lora García (Valencia, Spain) and E. Bergantiños-Rodríguez (Havana, Cuba)	157
Ultrafiltration of oil-in-water emulsion: Comparison of ceramic and polymeric membranes	
G.N. Vatai (Budapest, Hungary), D.M. Krstić (Marsascula, Malta), A.K. Koris, I.L. Gáspár (Budapest, Hungary) and M.N. Tekić (Novi Sad, Serbia)	162
Economic evaluation of a small RO unit powered by PV installed in the village of Hartha, Jordan	
F. Banat (Irbid), H. Qiblawey (Irbid, Jordan; Doha) Q. Al-Nasser (Doha, Qatar)	169
Use of DBNPA to control biofouling in RO systems	
U. Bertheas, K. Majamaa, A. Arzu and R. Pahnke (Horgen, Switzerland)	175
Titan PX-1200 Energy Recovery device — test results from the Inima Los Cabos, Mexico, seawater RO facility	
R. Stover and J. Martin (San Leandro, CA, USA)	179
Pre-treatment optimisation of SWRO membrane desalination under tropical conditions	
R.J. Xie, E.K. Tan, S.K. Lim, E. Haw, C.P. Chiew, A. Sivaraman, A.N. Puah, Y.H. Lau and C.P. Teo (Singapore)	183
Oxidation reduction potential in saline water reverse osmosis membrane desalination and its potential use for system control	
R.J. Xie, E.K. Tan and A.N. Puah (Singapore)	193
ProDes methodology for supporting the use of renewable energy systems in desalination applications	
M. Papapetrou and C. Epp (Munich, Germany)	204
Removal and recovery of copper from aqueous solutions by <i>Streptomyces rimosus</i> biomass:	
Enhancement of regeneration by desorption-electrolysis coupling	
A. Tassist, H. Lounice, D. Belhocine (Alger), A. Khelifa (Blida) and N. Mameri (Alger, Algeria)	210
UNEP resource and guidance manual for environmental impact assessment of desalination projects	
S. Lattemann (Oldenburg, Germany) and H.N. El-Habr (Bahrain)	217
Small-scale reverse osmosis brackish water desalting system combined with greenhouse application for use in remote arid communities	
A.K. Hossain and P.A. Davies (Birmingham, UK)	229
Seeded crystallization of calcite and aragonite in seawater as a pretreatment scale control process, a study of supersaturation limits	
W. Omar (Tafila), H. Al-Zoubi (Ma'an, Jordan) and J. Ulrich (Halle, Germany)	236
Economic feasibility of grid-connected PV-RO and PV-MVC small desalination units for remote areas in The United Arab Emirates — A comparative study	
A.M. Helal, S.A. Al Malek, E.M. Al Hammadi and H.A. Al-Thani (Abu Dhabi, UAE)	241
A strategy for the introduction of desalination powered by renewable energy in Jordan	
H.M. Qiblawey (Doha, Qatar; Irbid, Jordan), M. Papapetrou (Munich, Germany) and F. Banat (Irbid, Jordan)	252
Study of a water desalination unit using solar energy	
K. Zhani (Sfax, Tunisia), H. Ben Bacha (Alkharj, Saudia Arabia) and T. Damak (Sfax, Tunisia)	261
Climate change and water desalination in MENA — World Bank involvement	
K. Al-Jamal (Palestinian Authority)	271
Author Index	276