



Smart water grid: desalination water management platform Junhee Hong, Wanhee Lee (Seongnam), Joon Ha Kim (Buk-gu, Gwangju), Jongwook Kim, Ieryung Park and Dongsoo Har (Daejeon, Korea) .....	2845
Incipient crystallization of calcium carbonate on desalination membranes: dead-end filtration with agitation S.T. Mitrouli, M. Kostoglou, A.J. Karabelas and A. Karanasiou (Thessaloniki, Greece) .....	2855
Investigation of a novel environmentally friendly inhibitor for calcium carbonate scaling in cooling water D.E. Abd-El-Khalek, B.A. Abd-El-Nabey, M.A. Abdel-Kawi and S.R. Ramadan (Alexandria, Egypt) .....	2870
Several salts of pyrophosphoric heteropoly acid: characterization and ion-exchange behavior for calcium removal from manganeseiferous water Huixin Zhang, Tingru Yang, Qian Dou, Dongxue Sun and Dongdong Wang (Tianjin, China) .....	2877
Operation and maintenance of sewerage systems: present challenges and possible solutions— an Indian experience A. Khursheed (Roorkee, India), V.K. Tyagi (Roorkee, India and Taipei, Taiwan, ROC), A.A. Khan, A. Bhatia, R.Z. Gaur, M. Ali, M. Sharma, A.A. Kazmi (Roorkee, India) and S.-L. Lo (Taipei, Taiwan, ROC) .....	2887
Application of WASP model and Gini coefficient in total mass control of water pollutants: a case study in Xicheng Canal, China Fei-er Wang, Ya-nan Li, Jia Yang and Zuolei Sun (Hangzhou, China) .....	2903
Evaluation of the effect of feed canal height on membrane clarification efficiency of pomegranate juice using computational fluid dynamics (CFD) R. Sharifanfar, H. Mirsaedghazi, A. Fadavi and M.H. Kianmehr (Pakdasht, Iran) .....	2917
A statistical study of the effect of preparation conditions on the structure and performance of thin film composite reverse osmosis membranes J.M. Gohil and A.K. Suresh (Mumbai, India) .....	2924
Effect of polymer addition to membrane phase to improve the stability of emulsion liquid membrane for phenol pertraction K. Abbassian and A. Kargari (Mahshahr, Iran) .....	2942
Diatomite- and polyvinyl alcohol-modified nonwoven fabric in membrane bioreactor for wastewater reclamation Yueling He, Wenqi Zhang, Pinhua Rao (Shanghai) and Peng Jin (Shenyang, China) .....	2952
Review of membrane distillation process for water purification B.L. Pangarkar (Nashik), S.K. Deshmukh (Nagpur), V.S. Sapkal and R.S. Sapkal (Amravati, India) .....	2959
Geostatistical estimation of risk for soil and water in the vicinity of olive mill wastewater disposal sites K. Komnitsas (Chania), K. Modis, M. Doula, V. Kavvadias, D. Sideri (Athens) and D. Zaharaki (Chania, Greece) .....	2982
A multihydrocyclone water pretreatment system to reduce suspended solids and the chemical oxygen demand Jong Hwa Son, Min Hong, Han Cheol Yoo, Young Im Kim, Hea Do Kim and Ji Tae Kim (Geonggi-do, Korea) .....	2996
Comparison of MBR/RO and UF/RO hybrid systems for the treatment of coke-oven effluents S. Pimple, S. Karikkat, M. Devanna, V. Yanamadni, R. Sah and S.M.R. Prasad (Bellary, India) .....	3002
A comprehensive approach to winery wastewater treatment: a review of the state-of-the-art G. Lofrano (Salerno, Italy) and S. Meric (Çorlu, Turkey) .....	3011
Batch adsorption of p-nitrophenol by ZSM-11: equilibrium, kinetic, and thermodynamic studies Mang Lu, Yue Cheng (Jingdezhen), Shun-long Pan (Nanjing) and Gui-ying Wei (Jingdezhen, China) .....	3029
Preparation and characterization of CTA/m-ZnO composite membrane for transport of Rhodamine B I. Akin and M. Ersoz (Konya, Turkey) .....	3037

Use of activated carbon prepared from <i>Prosopis spicigera</i> L. wood (PSLW) plant material for the removal of rhodamine 6G from aqueous solution M. Murugan, M. Jansi Rani, P. Subramaniam (Tuticorin) and E. Subramanian (Tirunelveli, India).....	3048
Biodegradation of p-cresol by <i>Pseudomonas</i> spp. A. Hamitouche, Z. Bendjama (Bab Ezzouar, Algeria), A. Amrane (Rennes, France) and F. Kaouah (Bab Ezzouar, Algeria) .....	3059
Adsorption of methanol from methanol–water mixture by activated carbon and its regeneration using photo-oxidation process S.K. Al-Dawery (Nizwa, Oman) .....	3065
Removal of dissolved inorganic phosphorus with modified gravel sand: kinetics, equilibrium, and thermodynamic studies Wei Huang, Liangjie Zhang, Junqi Gao, Jihua Li, Jibiao Zhang and Zheng Zheng (Shanghai, China) .....	3074
Sorption of aquatic phosphorus onto native and chemically-modified plant residues: modeling the isotherm and kinetics of sorption process M. Feizi and M. Jalali (Hamedan, Iran) .....	3085
Diazepam stability in wastewater and removal by advanced membrane technology, activated carbon, and micelle–clay complex S. Sulaiman (Potenza, Italy), M. Khamis (Jerusalem, Palestinian Authority), S. Nir (Rehovot, Israel), L. Scranò, S.A. Bufo and R. Karaman (Potenza, Italy) .....	3098
Determination of optimum isotherm and kinetic models for phosphate sorption onto iron oxide nanoparticles: nonlinear regression with various error functions Jeong-Ann Park, Jae-Hyun Kim, Jin-Kyu Kang, Jeong-Woo Son, In-Geol Yi, Song-Bae Kim, Sang-Hyup Lee, Jae-Woo Choi and Chang-Gu Lee (Seoul, Korea) .....	3107
Adsorption kinetics of phenol in aqueous solution onto activated carbon from wheat straw lignin Jianxin Shou and Muqing Qiu (Shaoxing, China) .....	3119
A novel preparation approach and denitrification performance of TiO <sub>2</sub> /Fe <sup>0</sup> photocatalysts Yuan Liu, Jianchao Lee, Yinghua Zhao, Meijuan Zhang, Liping Wang and Qiannan Duan (Xi'an, China) .....	3125
Sulfate-reducing anammox for sulfate and nitrogen containing wastewaters E. Rikmann, I. Zekker, M. Tomingas, Toomas Tenno (Tartu), L. Loorits (Tallinn), P. Vabamäe, A. Mandel, M. Raudkivi, L. Daija, K. Kroon and Taavo Tenno (Tartu, Estonia) .....	3132
Enhanced photodegradation of hazardous tartrazine by composite of nanomolecularly imprinted polymer-nanophotocatalyst with high efficiency N. Arabzadeh, A. Khosravi, A. Mohammadi and N.M. Mahmoodi (Tehran, Iran).....	3142
Synthesis of acrylic-acid-modified shorea sawdust and application in adsorbing toxic organic materials Shih-Tong Hsu, Ting-Nien Wu, Ren-Hao Tsai, Po-Li Ke, Dian-Han You and Ting-Chung Pan (Tainan, Taiwan, ROC) .....	3152
Development of a highly selective and sensitive sulfate–polymeric membrane sensor based on nickel(II)–dioxime complex as neutral carrier E.A. Assirey (Al-Madinah Al-Munawarah, Saudi Arabia) .....	3160
The effects of sunflower seed shell modifying process on textile dye adsorption: kinetic, thermodynamic and equilibrium study B. Kocadagistan and E. Kocadagistan (Erzurum, Turkey) .....	3168
Removal of methylene blue from aqueous solution by walnut carbon: optimization using response surface methodology S. Hajati, M. Ghaedi and H. Mazaheri (Yasouj, Iran) .....	3179
<i>Punica granatum</i> husk (PGH), a powdered biowaste material for the adsorption of methylene blue dye from aqueous solution M.S. Bretanha, M.C. Rochefort (Bagé), G.L. Dotto (Santa Maria), E.C. Lima, S.L.P. Dias (Porto Alegre) and F.A. Pavan (Bagé, Brazil) .....	3194
Reductive transformation and enhancement in biodegradability of mono-azo dye by high carbon iron filings (HCIF) R. Kumar and A. Sinha (Dhanbad, India).....	3205
Adsorptive removal of acid orange 7 from aqueous solution with metal–organic framework material, iron (III) trimesate Fang-Chang Tsai, Yue Xia, Ning Ma, Jing-Jing Shi, Tao Jiang (Wuhan, China), Tai-Chin Chiang (Taipei, Taiwan, ROC), Zuo-Cai Zhang (Wuhan, China) and Wen-Chin Tsen (New Taipei, Taiwan, ROC) .....	3218

Theoretical analysis of the adsorption properties of methyl violet dye on iron-doped mesoporous silica microspheres Yuan Cao, Junxia Zhao and Ping Li (Chongqing, China).....	3227
Efficiency of pecan shells and sawdust biochar on Pb and Cu adsorption K. Komnitsas, D. Zaharaki (Chania), G. Bartzas (Athens), G. Kaliakatsou and A. Kritikaki (Chania, Greece) .....	3237
Selective transport of copper(II) from zinc(II), lead(II), cadmium(II), nickel(II), and cobalt(II) ions mixture through bulk liquid membrane using 5-nitro-8-quinolinol as a carrier A. Nezhadali, Z. Es'haghi and H.A. Hosseini (Tehran, Iran) .....	3247
A statistical experimental investigation on arsenic removal using capacitive deionization Wei Zhang (Mawson Lakes, Australia), M. Mossad (Mansoura, Egypt), J.S. Yazdi and L. Zou (Mawson Lakes, Australia) .....	3254
Adsorption removal of Pb <sup>2+</sup> and Cd <sup>2+</sup> on lignocellulose-g-acrylic acid/montmorillonite nanocomposite from aqueous solutions Min Du, Qi Li and Li Wang (Huhhot, China).....	3261
Selective adsorption of lead(II) from aqueous solution by ion-imprinted PEI-functionalized silica sorbent: studies on equilibrium isotherm, kinetics, and thermodynamics Mingxuan Liu, Yang Sun, Sibona and Feng Yan (Shenyang, China) .....	3270
Cadmium removal from aqueous solution using nano/milli-sized particles of cedar leaf ash L. Divband Hafshejani, S. Boroomand Nasab, M. Moradzadeh (Ahvaz), S. Divband (Golestan) and J. Abedi Koupai (Ahvaz, Iran) .....	3283
Evaluation of mineral and organic acids on the selective separation of radioactive elements (U and Th) using modified carbon S.M. Yakout (Riyadh, Saudi Arabia) .....	3292
The effect of aging on thermomechanical and metal extraction properties of poly (vinyl chloride)/Aliquat 336 polymer inclusion membranes N.S. Abdul Halim, P.G. Whitten and L.D. Nghiem (Wollongong, Australia) .....	3298
A novel chromium selective electrode based on surfactant-modified Iranian clinoptilolite nanoparticles S. Hashemi and A. Nezamzadeh-Ejehieh (Isfahan, Iran) .....	3304
Author Index.....	3315