



Contents

Volume 259

Mitigating salt accumulation in osmotic membrane bioreactors using ion exchange resins Hui Zhang, Jinrong Liu, Hongwei Song (China)	1
Commercial antiscalants used for scaling mitigation of CaCO ₃ during the membrane distillation treatment of reverse osmosis brine Chang Liu, Shanfu Tang, Liang Zhu, Rongping Ji (China)	17
Research on the preparation of a scale inhibitor PESA-ESA-AMPS based on polyepoxysuccinic acid Lian-gang Hou, Yi-tao Liu, Jun Li (China)	37
Desalination of seawater with pervaporation technology by using poly(vinyl alcohol)/chitosan-g-poly(N,N-dimethylacrylamide) membranes F. Kurşun Baysak, C. Özcan (Turkey)	45
Effect of hydraulic retention time on microbial community structure and nitrogen metabolism in anaerobic-anoxic-oxic process Jun Hao You, Ming Zhe Guo, Yong Chen Zong, Jun Wang, Chun Hui Fu (China)	54
Effect of organic loading on extracellular polymer secretion and phosphorus forms transformation in sludge Yajing Li, Shaopo Wang, Lu Liu, Wei-quan Li, Yaping Wu (China)	64
Fe ₂ O ₃ /g-C ₃ N ₄ /CNTs based nano-composites incorporated with neodymium and samarium nanoparticles for efficient photocatalytic vitiation of organic pollutants N. Farooq (Pakistan), M.I. Khan (UAE), A.M. Qureshi, M.A. Wattoo (Pakistan), A. Shanableh (UAE), S. Anjum, A. ur Rehman (Pakistan)	71
Improvement of treatments process by oily wastewaters coagulation and flocculation applied at Haoud Berkaoui production center, Algeria N. Chaouch, L. Lahrech, A. Meddour, L. Ayaidia (Algeria)	82
Microwave-assisted synthesis and characterization of polyacrylamide grafted cellulose derived from waste newspaper for surface water treatment N.A. Yusoff, N.M. Shahib, N.A. Zainol, K.S.A. Sohaimi, N.M. Rohaizad (Malaysia), E.A. Wikurendra, A. Andini, A. Syafiuddin (Indonesia)	90
Influence of salt on tie-line behavior for ternary (water + phenol + 2-butanol) system: experimental data and correlation L.B. Chaouch, A. Merzougui, C. Laiadi, H. Bouredji (Algeria)	98
Application of novel photocatalytic and adsorption fibers in water treatment Ya-Fei Yang (Taiwan)	107
A tris(hydroxymethyl)methyl aminomethane-functionalized SBA-15, SBA-16 and MCM-41 for recovery of boron from salt lake brine Qinglong Luo, Lei Liu, Ruiqiang Dong, Zhongfu Cheng, Mingzhe Dong, Zhijian Wu, Jun Li, Xueli Huang (China)	116
Evaluation of the changes of total petroleum hydrocarbons pollution in the coastal sediments of Pars-e Jonubi M. Taheri, F. Amiri, A. Pazira, N. Jaafarzadeh Haghighifard (Iran)	127
Minerals in tap water and bottled waters and their impact on human health E. Wysowska, I. Wiewiórska, A. Kicińska (Poland)	133
Co-Fe-B nanofilaments as high-performance catalysts for hydrogen generation from the hydrolysis of NaBH ₄ solution Honghui Chen, Xue Wang, Di Zhang, Yifan Wu, Ke Zhang, Zhongqiu Cao, Shiwei Wu, Kezhen Qi, Yan Wang, Guode Li, Peng Yu (China)	152
Performance evaluation of TMDLs in upstream Seomjin River basin using LOAD ESTimator model Don-Woo Ha, Kang-Young Jung, Jonghun Baek, Yeoungjae Lee, Eun Hye Na (Korea)	160

Comparative investigation of monomeric and micellar adsorption of cetyltrimethylammonium bromide and tetradecyltrimethylammonium bromide from their aqueous solutions Ö. Açıslı, S. Karaca, A. Gürses (Turkey)	170
A mathematical model for simulation the removal of cadmium and chromium from groundwater using scrap iron and aluminum as permeable reactive barrier A.A.H. Faisal, H.M. Rashid (Iraq), G. Sharma (China, India), N. Al-Ansari (Sweden), B. Saleh (Saudi Arabia)	186
Transparent nanoplates of Diaqua oxalato strontium(II) for adsorption uptake of Eriochrome Black T in aqueous solution A.M. Nassar, N.F. Alotaibi (Saudi Arabia)	197
Thermal based remediation technologies for soil and groundwater: a review M.Y.D. Alazaiza (Oman), A. Albahnasawi, N.K. Coptly (Turkey), G.A.M. Ali (Egypt), M.J.K. Bashir (Malaysia), T. Al Maskari, S.S. Abu Amr (Oman), M.S.S. Abujazar (Turkey, Palestinian Authority), D.E. Nassani (Turkey)	206
Catalytic ozonation combined electroflocculation for the removal of Reactive Black 5 in aqueous solution using $\text{CuMn}_2\text{O}_4/\text{RGO}$ coated zeolites A. Ikhlq, S. Shabbir, F. Javed, M. Kazmi, A. Yasir (Pakistan), U.Y. Qazi (Saudi Arabia), M. Zafar (Pakistan), Fei Qi (China)	221
New technology to treat leachate by low pressure reverse osmosis A. Pervov, T. Shirikova (Russia), V. Frenkel (USA)	230
Pilot plant evaluation of 95°C TBT MED-TVC desalination technology A.M. Mahmoud, K. Bamardouf, A. Al Ghamdi, S. Ahmed (Saudi Arabia)	244
Case study: reduction in energy consumption with second generation thin-film nanocomposite membranes in La Caleta SWRO (Canary Islands, Spain) A. Lagartos, R. Santos, E. Rozenbaum, J.C. de Armas, F.J. García Martín (Spain)	252
Industrial scale pilot at Maspalomas I desalination plant demonstrates the efficiency of DuPont™. B-Free™ pre-treatment – a new breakthrough solution against biofouling G. Massons, G. Gilabert-Oriol, S. Arenas-Urrera, J. Pordomingo, J.C. González-Bauzá, E. Gasia (Spain), M. Slagt (The Netherlands)	261
The importance of fouling-resistant membrane elements – the FilmTec™ SW30XFR-400/34 G. Gilabert-Oriol, D. Arias, J. Bacardit (Spain), V. García-Molina (Switzerland), G. Massons, C. Niewersch (Spain)	266
The importance of long term stable performance and durability of reverse osmosis elements G. Gilabert-Oriol (Spain), B. Salgado (France), V. Garcia Molina (Switzerland), D. Arias, J. Warczok (Spain)	273
Breakthrough dry seawater reverse osmosis elements M.A. Perez Macia, D.A. Peña, H. Al-Omar, V. García-Molina, G. Gilabert-Oriol (Spain)	280
Assessing the use of photovoltaic energy at a seawater reverse osmosis desalination plant: a case study of Porto Santo Desalination Plant (Madeira – Portugal) E.J. Medina Domínguez, R.P. Batista, J.M. de León Izquier (Spain)	285
Design of marine outfalls for reducing environmental impact of brine E. Pita, P. Pita, M. Sánchez-Barriga, L. Martín, J. Olalde (Spain)	300
Assessment of processes to increase the lifetime and potential reuse and recycling of reverse osmosis membranes towards a circular economy. Case of study of Cape Verde and Macaronesia area T. Tavares, J. Tavares (Cabo Verde), F.A. León-Zerpa, B. Peñate-Suárez, A. Ramos-Martín (Spain)	308
Advanced oxidation process for the removal of dyes from synthetic industrial wastewaters V. Innocenzi, A. Colangeli, M. Prisciandaro (Italy)	315
Author Index	321