

Contents

Volume 167

Management of algae bloom based on CBR-OSS model

Zhao-Yang Wang, Bai-Hai Zhang, Xiao-Yi Wang, Hui-Yan Zhang, Ji-Ping Xu, Yu-Ting Bai (China) 1
An alternative strategy for enhanced algae removal by cationic chitosan-based flocculants

Yongjun Sun, Jianwen Liu, Wenquan Sun, Huaili Zheng, K.J. Shah (China) 13
Impact of brine on the marine environment and how it can be reduced

Y. Fernández-Torquemada, A. Carratalá, J.L. Sánchez Lizaso (Spain) 27
Influence of coagulant Moringa oleifera seed extract on reduction of *Toxoplasma gondii* oocysts

and the viability of *Toxocara* spp. eggs in water

L.F. Beletini, L. Nishi, P.L. Sant'Ana, L.H.G. Muniz, F.F. Evangelista, S. Cardim,
J.L. Garcia, F.M. Mantelo, A.L. Falavigna-Guilherme (Brazil) 38

Dosage and settling time course optimization of *Moringa oleifera* in municipal wastewater treatment
using response surface methodology

B. Adelodun (Korea, Nigeria), F.O. Ajibade (Nigeria, China),
M.S. Ogunshina (Nigeria), Kyung-Sook Choi (Korea) 45

Techno-economic feasibility of a solar-powered reverse osmosis desalination system
integrated with lithium battery energy storage

M. Meratizaman, A.A. Godarzi (Iran) 57

Desalination by cooling and freezing of seawater and groundwater:
thermodynamic aspect of the liquid-solid equilibrium

A. Rich, S. Mountadar, F.Z. Karmil (Morocco), Y. Mandri, C. Cogné (France),
M. Siniti, S. Tahiri (Morocco), D. Mangin (France), M. Mountadar (Morocco) 75

Biological treatment of a saline and recalcitrant petrochemical wastewater
by using a newly isolated halo-tolerant bacterial consortium in MBBR

M. Ahmadi, M. Ahmadmoazzam, R. Saeedi, M. Abtahi, S. Ghafari, S. Jorfi (Iran) 84

Decrease in the chloride disinfection by-products (DBPs) formation potential in water
as a result of coagulation process

M. Włodarczyk-Makula, A. Nowacka-Klusek (Poland) 96

Synthesis of silver nanoparticles using *Prosopis juliflora* extract:
potential of antimicrobial and pollutants degradation performance

Y. Anwar, M.H. Fakieh, I. Ullah, N.A. Alkenani, M.A. Shareef (Saudi Arabia) 105

Scale inhibition properties of metallic cations on CaCO_3 formation using fast controlled precipitation
and a scaling quartz microbalance

M. Gritli (Tunisia, France), H. Cheap-Charpentier, O. Horner, H. Perrot (France),
Y. Ben Amor (Tunisia) 113

Advanced treatment technology for FGD wastewater in coal-fired power plants:
current situation and future prospects

Shuangchen Ma, Chang Liu, Yao Sun, Chunqin Gong, Baozhong Qu,
Lan Ma, Renhao Tang (China) 122

Characterisation and utilisation of fly ash for treatment of brine wastewater in sugar refineries

C. Ngasan, C. Areeprasert, G.R.E. Lionnet, P. Busayapongchai,

A. Pattamasuwan, U. Withayagiat (Thailand) 133

Households water quality in O'Kiep-South Africa and community perception of related health risks

I.G. Erdogan, E. Fosso-Kankeu, S.K.O. Ntwampe, F.B. Waanders (South Africa),

N. Hoth (Germany), A. Rand, T.J. Farrar (South Africa) 145

Degradation of ciprofloxacin in aqueous solution by activating the proxymonosulfate
using graphene based on CoFe_2O_4

H. Pourzamani, E. Jafari, M.S. Rozveh, H. Mohammadi, M. Rostami, N. Mengelizadeh (Iran) 156

Feasibility of using UV and persulfate in degrading ofloxacin in a large reactor Chia-Chang Lin, Hsin-Yi Lin (Taiwan)	170
Removal of thiocyanate from water by using weak base microporous resins of different matrix structure J.M. Karekar, S.V. Divekar (India)	176
Preparation and application of P84 copolyimide/GO mixed matrix membrane with improved permselectivity and solvent resistance Runlin Han, Yuhang Zhang, Xufeng Ma, Da Teng, Yongli Xie, Qibin Luan (China)	183
Enhanced photocatalytic degradation of phenol by immobilized TiO ₂ /dye loaded chitosan S. Sabar, M.A. Nawi, A.H. Jawad (Malaysia), R. Schneider (France)	190
Photocatalytic activity of natural ground hematite in heterogeneous photo-Fenton process Ö. Açışlı (Turkey)	200
Nitrogen removal by using sulfur-based carriers: a comparison of configurations for the denitrification process Thi-Kim-Quyen Vo, Ahyoung Jeong, Jiyoung Song, Jeong-Jun Lee, Joon-Seok Kang, Seo-Gyeong Park, Han-Seung Kim (Korea)	212
Removal of nitrate from water by modified nano-clay and comparison with nano-graphene, nano-Fe ₃ O ₄ and nano-clay – isotherm and kinetics study H. Masoudi, F. Ravari, H. Mosaddeghi (Iran)	218
Removal of heavy metals by tight γ-Al ₂ O ₃ ultrafiltration membrane at low pressure M. Breida, S.A. Younssi, M. El Rhazi, M. Bouhria (Morocco)	231
Green synthesis of ZnO nanoparticles by <i>Coriandrum sativum</i> leaf extract: structural and optical properties G. Yashni, A.A. Al-Gheethi, R.M.S.R. Mohamed, M.K. Amir Hashim (Malaysia)	245
Treatment of molybdenum(VI)-containing groundwater using chitosan nanoparticle: adsorption mechanism and performances Jian-jun Lian, Mei Yang, Shi-sheng Wang, Bo Chen, Fan-jie Zhou, Zai-liang Liu (China)	258
Modeling design parameters with Taguchi experimental method for obtaining optimal operating conditions of Cu(II) removal through adsorption process H. Serencam, A. Özdemir, Ç. Teke, M. Uçurum (Turkey)	269
Kinetic, equilibrium and thermodynamic studies for adsorption of nickel ions onto husk of <i>Oryza sativa</i> S. Zafar (Pakistan), M.I. Khan (Pakistan, China), M. Khraisheh (Qatar), M.H. Lashari, S. Shahida, M.F. Azhar, P. Prapamonthon, M.L. Mirza, N. Khalid (Pakistan)	277
Synthesis and low concentration Cr(VI) adsorption performance of chitosan/poly(vinyl alcohol)/Fe(III)/glutaraldehyde Yaoguo Wu, Jianghua Zhang, Sihai Hu, Yuanjing Zhang, Jiangwei Chan, Xu Xin (China)	291
Electrochemical oxidation treatment of leather dyeing wastewater using response surface methodology K. Oukili, M. Loukili (Morocco)	302
Kinetics and characteristics studies on biosorption of Acid Red 18 from aqueous solution by the acid-treated mycelia pellets of <i>Penicillium janthinellum</i> Lifang Zhang, Fan Wang (China)	313
Adsorption of hazardous dye crystal violet from industrial waste using low-cost adsorbent <i>Chenopodium album</i> C. Arora, D. Sahu, D. Bharti, V. Tamrakar, S. Soni, S. Sharma (India)	324
Experimental and mathematical modelling of cationic dye sorption in up-flow packed column using <i>Gracilaria corticata</i> J. Thivya, J. Vijayaraghavan (India)	333

**Special Issue on the Third EWaS International Conference on
"Insights on the Water-Energy-Food Nexus", June 27–30, 2018, Lefkada Island, Greece**

3rd EWaS International Conference on "Insights on the Water-Energy-Food Nexus" — Editorial	
V. Kanakoudis, S. Tsitsifli (Greece)	340
Fouling control, using various operating cleaning methods, applied on an MBR system through continuous TMP monitoring	
K. Azis, S. Ntougias, P. Melidis (Greece)	343
The water crisis in Libya: causes, consequences and potential solutions	
B. Brika (Libya)	351
The characteristics of annual, seasonal and monthly observed climate and hydrologic changes in Serbia in the last seventy years	
D. Dimkić (Serbia)	359
Evaluation of water management solutions for a river catchment under climate change and other pressures – case study of the Pek River	
D. Dimkić, B. Stanković, P. Pajić, V. Lukić (Serbia)	370
A hybrid fuzzy frequency factor based methodology for analyzing the hydrological drought	
C. Papadopoulos, M. Spiliotis, P. Angelidis, B. Papadopoulos (Greece)	385
A fuzzy AHP-outranking framework for selecting measures of river basin management plans	
M. Spiliotis, C. Skoulidakis (Greece)	398
Antibiotic resistance gene profiles at various treatment stages of a full-scale municipal sewage plant	
I. Zerva, I. Alexandropoulou, M. Panopoulou, P. Melidis, S. Ntougias (Greece)	412
Author Index	422