1 Phosphorus adsorption on water treatment residual solids / Meaghan K. Gibbons, Md. Maruf Mortula and Graham A. Gagnon
11 Pilot-scale assessment of the impacts of transient particulate water quality events on the UV disinfection of indigenous total coliform bacteria in drinking water treatment / Michael R. Templeton, Raymond E. Cantwell, Claire Quinn, Ron Hofmann and Robert C. Andrews
21 Effects of low temperature on floc fractal dimensions and shape factors during alum coagulation / Feng Xiao, Bao-jie Zhang, Jun Ma, Peng Yi and Chong-wei Cui
29 Assessment of chloramination control strategy based on free-ammonia concentration / Skadi Motzko, Rolando Fabris, Alexander Badalyan, Ralph Henderson, Christopher W. K. Chow and Dammika Vitanage
41 Magnetic ion exchange resin treatment for drinking water production / B. Sani, E. Basile, L. Rossi and C. Lubello
51 Research on removing selenium from raw water by using Fe/Se coprecipitation system / Yongsheng Shi, Lin Wang, Yuan Chen and Dawei Xu
57 Measurement of bubble bed depth in dissolved air flotation using a particle counter / Mooyoung Han, Tschung-il Kim and Dongheui Kwak

PRACTICAL PAPER
65 The practical application of computational fluid dynamics to dissolved air flotation, water treatment plant operation, design and development / Tony Amato and Jim Wicks
Is. 2

Call for papers

Evaluation of a tannin-based cationic polymer as a coagulant for coloured humic water / Nigel Graham, Gang Fang, Geoffrey Fowler, Mark Watts and Rob Camm


Leak detection in branched pipe systems coupling wavelet analysis and a Lagrangian model / Marco Ferrante, Bruno Brunone and Silvia Meniconi

Bromate, chlorate, chlorite and perchlorate in sodium hypochlorite solution used in water supply / Mari Asami, Koji Kosaka and Shoichi Kunikane

Assessment of rainwater quality from rainwater harvesting systems in Ontario, Canada / Christopher Despins, Khosrow Farahbakhsh and Chantelle Leidl

Degradation of N-nitrosodimethylamine (NDMA) in water by UV/O3 / Bingbing Xu, Zhonglin Chen, Fei Qi and Zhenzhen Xu

PRACTICAL PAPER

Gravity powered flow controllers for chlorine and alum dosing / Monroe Weber-Shirk

Flexible fibre filter: potential for algae removal / Jaehwan Cha, Jungjune Lee, Roger BenAim, Taesup Moon, Kibaek Han and Changwon Kim
Is. 3

159 Application of a novel polarity method for the characterization of natural organic matter during water treatment / Fernando L. Rosario-Ortiz, Fredrick W. Gerringer and I. H. (Mel) Suffet

170 Influence of hybrid coagulation-ultrafiltration pretreatment on trace organics adsorption in drinking water treatment / S. Müller and W. Uhl

181 On-line free-chlorine/total-chlorine monitors’ evaluation – a step towards a correct choice of residual disinfectant monitor / Alexander Badalyan, Joachim Buff, Mike Holmes, Christopher W. K. Chow and Dammika Vitanage

191 Gross alpha and gross beta particle activity in recycled water for augmentation of drinking water supplies / Clemencia Rodriguez, Brian Devine, Angus Cook, Philip Weinstein and Paul Van Buynder

203 Prognosis of urban water consumption using hybrid fuzzy algorithms / Gergely Bárdossy, Gábor Halász and János Winter

212 A CFD methodology for the design of rectangular sedimentation tanks in potable water treatment plants / Ghawi A. Hadi and Jozef Kriš

PRACTICAL PAPER

221 Economic evaluation of combined treatment for sludge from drinking water and sewage treatment plants in Japan / Tomoaki Miyanoshita, Naoki Oda, No Hayashi, Masahiro Fujiwara and Hiroaki Furumai

228 Arsenic crisis of Bangladesh and mitigation measures / M. Habibur Rahman and A. Al-Muyeed
247 Influence of iron on nitrification in full-scale drinking water trickling filters / W. W. J. M. de Vet, L. C. Rietveld and M. C. M. van Loosdrecht
257 Occurrence of citizen complaints concerning drinking water: a case study in Quebec City / Pablo Montenegro, Manuel J. Rodriguez, Luis Miranda, Florent Joerin and François Proulx
267 Combined natural organic and synthetic inorganic coagulants for surface water treatment / Kebreab Ghebremichael, Juliet Abaliwano and Gary Amy
277 The effects of different nitrogen compounds on the growth and microcystin production of Microcystis aeruginosa / Ruihua Dai, Huijuan Liu and Jiuhui Qu
285 Comparison of nanofiltration efficiency with GAC adsorption and air stripping processes for CHCl3 removal from Tehran drinking water / M. T. Samadi, S. Nasseri, A. R. Mesdaghi and M. R. Alizadehfard

PRACTICAL PAPER
291 Development and implementation of the software mEnCo© to predict coagulant doses for DOC removal at full-scale WTPs in South Australia / J. van Leeuwen, M. Holmes, U. Kaeding, R. Daly and D. Bursill
Performance assessment of urban utilities: the case of water supply, wastewater and solid waste / H. Alegre, E. Cabrera and W. Merkel
Wall decay of chlorine in water distribution system / G. R. Munavalli, M. S. Mohan Kumar and M. A. Kulkarni
Producing drinking water from hydrogen fuel cells / Kiril D. Hristovski, Brindha Dhanasekaran, Juan E. Tibaquirá, Jonathan D. Posner and Paul K. Westerhoff
A new simple equation for the prediction of filter expansion during backwashing / Elif Soyer and Omer Akgiray
A pilot-scale study on ultraviolet disinfection system for drinking water / Sun Wenjun and Liu Wenjun
Assessing the feasibility of a water treatment plant quality index / Marcelo Libânio and Vanessa Cristina Lopes

PRACTICAL PAPERS
Supplementing coagulation with powdered activated carbon as a control strategy for trihalomethanes: application to an existing utility / Annie Carrière, Murielle Vachon, Jean-Luc Bélisle and Benoit Barbeau
Effects of natural organic matter (MOM) character and removal on ozonation for maximizing disinfection with minimum bromate and AOC formation / A. W. C. van der Helm, A. Grefte, E. T. Baars, L. C. Rietveld, J. C. van Dijk and G. L. Amy

Taste and odour problems generated in distribution systems: a case study on the formation of 2,4,6-trichloroanisole / Andreas Peter and Urs von Gunten

Bioleaching of arsenic in a drinking water treatment process / Khondoker Mahbub Hassan, Kensuke Fukushima, Fumiyuki Nakajima and Kazuo Yamamoto

Determination of chlorinated organic compounds in aqueous matrices / B. Pavoni, A. Giacometti and M. Bragadin

Variation of assimilable organic carbon during coagulation by aluminum and iron in drinking water treatment / Tao Liang and Jun Ma

PRACTICAL PAPERS

Treatment selection guidelines for particle and MOM removal / M. T. Valade, W. C. Becker and J. K. Edzwald

Using a tracer to identify water supply zones in a distribution network / Andreanne Simard, Genevieve Pelletier and Manuel J. Rodriguez