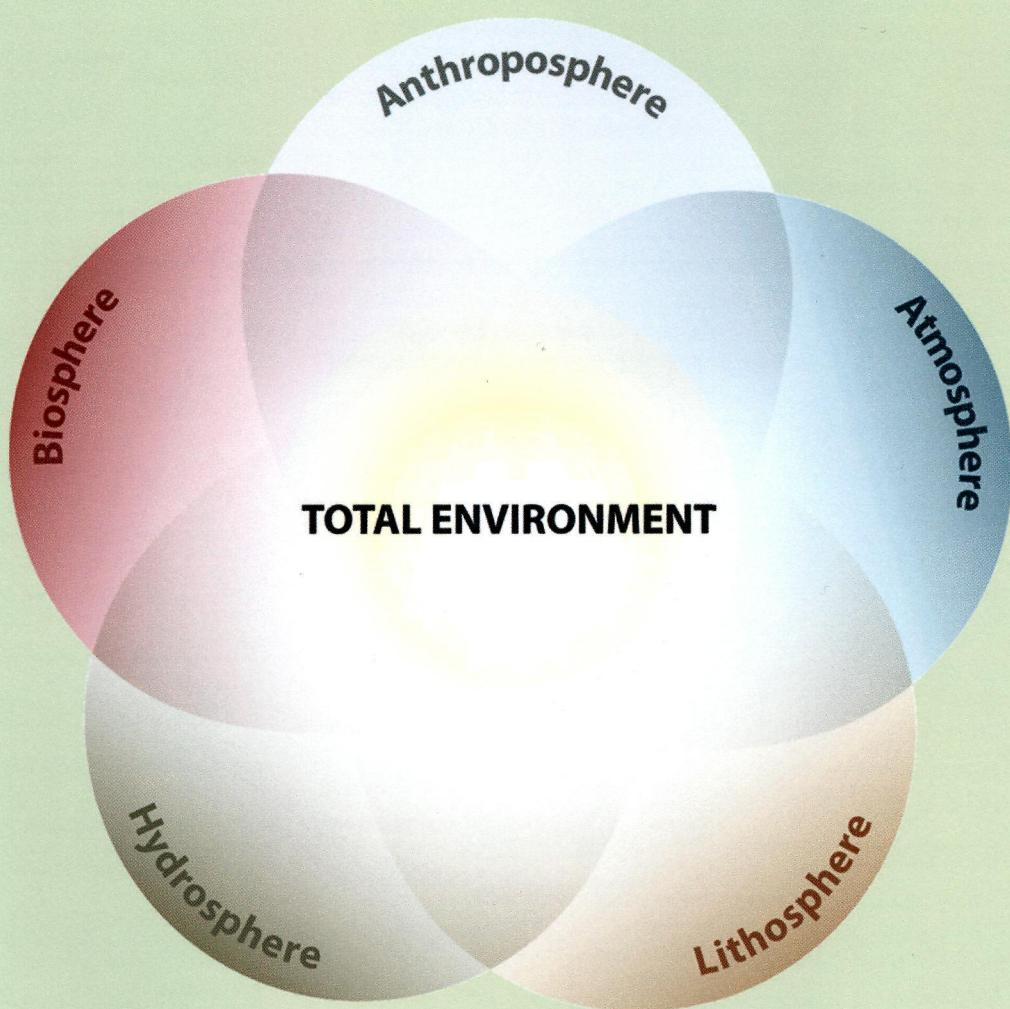


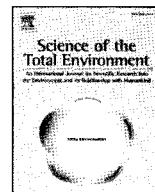


Volumes 445–446 • 15 February 2013 • ISSN 0048-9697
Published in 28 issues each year

Science of the Total Environment

An International Journal for Scientific Research into
the Environment and its Relationship with Humankind





Contents

Green production of zero-valent iron nanoparticles using tree leaf extracts S. Machado, S.L. Pinto, J.P. Grosso, H.P.A. Nouws, J.T. Albergaria and C. Delerue-Matos (Portugal)	1
Determination of multi-walled carbon nanotube bioaccumulation in earthworms measured by a microwave-based detection technique S. Li, F. Irin, F.O. Atore, M.J. Green and J.E. Cañas-Carrell (USA)	9
Ecotoxicity and risk to human fish consumers of polychlorinated biphenyls in fish near the Hanford Site (USA) D. Delistraty (USA)	14
Occurrence and removal of pharmaceutical and hormone contaminants in rural wastewater treatment lagoons X. Li, W. Zheng and W.R. Kelly (China, USA)	22
The impact of alternate weekly collections on waste arisings I.D. Williams and C. Cole (UK)	29
The influence of visual characteristics of barriers on railway noise perception L. Maffei, M. Masullo, F. Aletta and M. Di Gabriele (Italy)	41
Pesticide consumption and productivity and the potential of IPM in Bangladesh S. Rahman (UK)	48
Comparison of plant nutrient and environmental soil tests to predict Pb in urban soils K.K. Minca and N.T. Basta (USA)	57
Presence and hazards of nutrients and emerging organic micropollutants from sewage lagoon discharges into Dead Horse Creek, Manitoba, Canada J.C. Carlson, J.C. Anderson, J.E. Low, P. Cardinal, S.D. MacKenzie, S.A. Beattie, J.K. Challis, R.J. Bennett, S.S. Meronek, R.P.A. Wilks, W.M. Buhay, C.S. Wong and M.L. Hanson (Canada)	64
Monitoring and modelling to support wastewater system management in developing mega-cities J.P. Rodríguez, N. McIntyre, M. Díaz-Granados, J.P. Quijano and Č. Maksimović (UK, Colombia)	79
Fluoxetine alters adult freshwater mussel behavior and larval metamorphosis P.D. Hazelton, W.G. Cope, S. Mosher, T.J. Pandolfo, J.B. Belden, M.C. Barnhart and R.B. Bringolf (USA)	94
Increased lead availability and enzyme activities in root-adhering soil of <i>Lantana camara</i> during phytoextraction in the presence of earthworms M.D. Jusselme, E. Miambi, P. Mora, M. Diouf and C. Rouland-Lefèvre (France)	101
Investigation of speciated VOC in gasoline vehicular exhaust under ECE and EUJD test cycles J. Wang, L. Jin, J. Gao, J. Shi, Y. Zhao, S. Liu, T. Jin, Z. Bai and C.-Y. Wu (PR China, USA)	110
Spatial distribution and historical records of mercury sedimentation in urban lakes under urbanization impacts H.-B. Li, S. Yu, G.-L. Li, H. Deng, B. Xu, J. Ding, J.-B. Gao, Y.-W. Hong and M.-H. Wong (China)	117
Anthropogenic mercury signals in lake sediments from southernmost Patagonia, Chile Y.-M. Hermanns and H. Biester (Germany)	126
In situ fate and partitioning of waterborne perfluoroalkyl acids (PFAAs) in the Youngsan and Nakdong River Estuaries of South Korea S. Hong, J.S. Khim, J. Park, M. Kim, W.-K. Kim, J. Jung, S. Hyun, J.-G. Kim, H. Lee, H.J. Choi, G. Codling and J.P. Giesy (South Korea, Canada, USA, China)	136
Role of plants in metal cycling in a tidal wetland: Implications for phytoremediation J. Teuchies, S. Jacobs, L. Oosterlee, L. Bervoets and P. Meire (Belgium)	146
Ten years of continuous observations of stratospheric ozone depleting gases at Monte Cimone (Italy) – Comments on the effectiveness of the Montreal Protocol from a regional perspective M. Maione, U. Giostra, J. Arduini, F. Furlani, F. Graziosi, E. Lo Vullo and P. Bonasoni (Italy)	155
Particulate pollution in different housing types in a UK suburban location Z.A. Nasir and I. Colbeck (UK)	165
Associations between brominated flame retardants in house dust and hormone levels in men P.I. Johnson, H.M. Stapleton, B. Mukherjee, R. Hauser and J.D. Meeker (USA)	177
Integration of freshwater environmental policies and wastewater treatment plant management L. Corominas, V. Acuña, A. Ginebreda and M. Poch (Spain)	185

The potential of a salt-tolerant plant (<i>Distichlis spicata</i> cv. NyPa Forage) to treat effluent from inland saline aquaculture and provide livestock feed on salt-affected farmland A.J. Lymbery, G.D. Kay, R.G. Doupé, G.J. Partridge and H.C. Norman (Australia)	192
Geospatial modelling of electromagnetic fields from mobile phone base stations J. Beekhuizen, R. Vermeulen, H. Kromhout, A. Bürgi and A. Huss (The Netherlands, Switzerland)	202
Effects of short-term exposure to environmentally relevant concentrations of different pharmaceutical mixtures on the immune response of the pond snail <i>Lymnaea stagnalis</i> M. Gust, M. Fortier, J. Garric, M. Fournier and F. Gagné (France, Canada)	210
Human and veterinary pharmaceutical abundance and transport in a rural central Indiana stream influenced by confined animal feeding operations (CAFOs) M.J. Bernot, L. Smith and J. Frey (United States)	219
Degradation and structure change of humic acids corresponding to water decline in Zoige peatland, Qinghai-Tibet Plateau X. Guo, W. Du, X. Wang and Z. Yang (China)	231
Overview of in situ and ex situ remediation technologies for PCB-contaminated soils and sediments and obstacles for full-scale application H.I. Gomes, C. Dias-Ferreira and A.B. Ribeiro (Portugal)	237
Identification of selected organic contaminants in streams associated with agricultural activities and comparison between autosampling and silicone rubber passive sampling E.S. Emelouga, P. Pollard, C.D. Robinson, L. Webster, C. McKenzie, F. Napier, L. Steven and C.F. Moffat (UK)	261
Prenatal and postnatal residential usage of insecticides in a multicenter birth cohort in Spain S. Llop, L. Casas, L. Santa Marina, M. Estarlich, A. Fernández-Somoano, A. Esplugues, A. Jimenez, J.-P. Zock, A. Tardón, A. Marco and F. Ballester (Spain)	273
Removal of cytostatic drugs from aquatic environment: A review J. Zhang, V.W.C. Chang, A. Giannis and J.-Y. Wang (Singapore)	281
Relationship between urinary triclosan and paraben concentrations and serum thyroid measures in NHANES 2007–2008 E.S. Koeppe, K.K. Ferguson, J.A. Colacino and J.D. Meeker (United States)	299
Occurrence, distribution and potential affecting factors of antibiotics in sewage sludge of wastewater treatment plants in China W. Li, Y. Shi, L. Gao, J. Liu and Y. Cai (China)	306
Deciduous vegetation (<i>Betula glandulosa</i>) as a biomonitor of airborne PCB contamination from a local source in the Arctic C. Luttmer, S. Ficko, K. Reimer and B. Zeeb (Canada)	314
Evaluation of growth, biochemical and bioaccumulation parameters in <i>Pelophylax perezi</i> tadpoles, following an <i>in-situ</i> acute exposure to three different effluent ponds from a uranium mine S.M. Marques, S. Chaves, F. Gonçalves and R. Pereira (Portugal)	321
Human health risk assessment of occupational and residential exposures to dechlorane plus in the manufacturing facility area in China and comparison with e-waste recycling site D.-G. Wang, M. Alaee, J.D. Byer, S. Brimble and G. Pacepavicius (PR China, Canada)	329
Degradation of flumequine by the Fenton and photo-Fenton processes: Evaluation of residual antimicrobial activity C. Rodrigues-Silva, M.G. Maniero, S. Rath and J.R. Guimarães (Brazil)	337
Bioremediation of diesel-polluted soil using biostimulation as post-treatment after oxidation with Fenton-like reagents: Assays in a pilot plant G.A. Silva-Castro, B. Rodelas, C. Perucha, J. Laguna, J. González-López and C. Calvo (Spain)	347
Atmospheric mercury incorporation in soils of an area impacted by a chlor-alkali plant (Grenoble, France): Contribution of canopy uptake S. Guédron, S. Grangeon, G. Jouravel, L. Charlet and G. Sarret (France)	356
Tritium in Japanese precipitation following the March 2011 Fukushima Daiichi Nuclear Plant accident T. Matsumoto, T. Maruoka, G. Shimoda, H. Obata, H. Kagi, K. Suzuki, K. Yamamoto, T. Mitsuguchi, K. Hagino, N. Tomioka, C. Sambandam, D. Brummer, P.M. Klaus and P. Aggarwal (Austria, Japan)	365
Toxic effects of ZnO nanoparticles towards marine algae <i>Dunaliella tertiolecta</i> S. Manzo, M.L. Miglietta, G. Rametta, S. Buono and G. Di Francia (Italy)	371
Contribution of microorganisms to non-extractable residue formation during biodegradation of ibuprofen in soil K.M. Nowak, C. Girardi, A. Miltner, M. Gehre, A. Schäffer and M. Kästner (Germany)	377
Cheese whey wastewater: Characterization and treatment F. Carvalho, A.R. Prazeres and J. Rivas (Portugal, Spain)	385