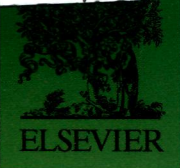
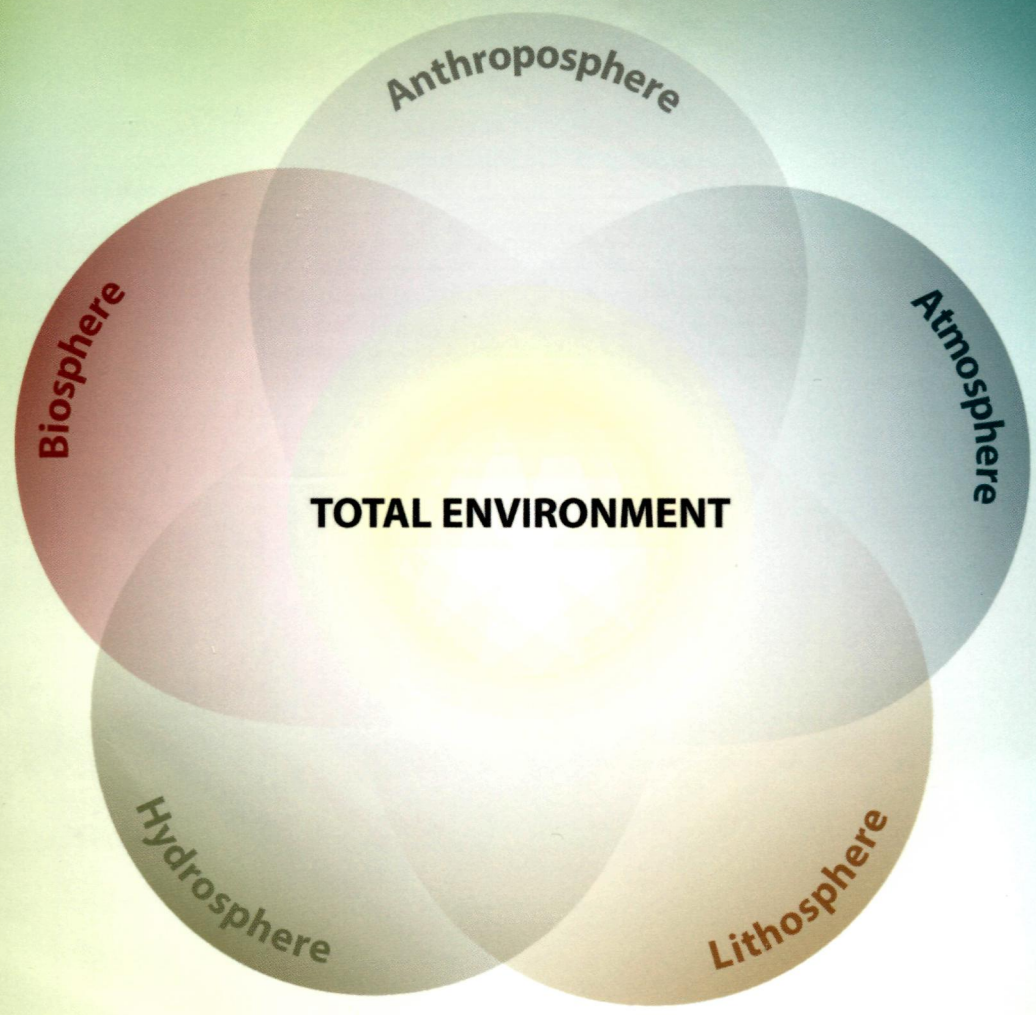


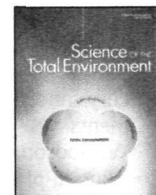
TM
S40/te



Published in 36 issues each year
Volumes 494-495 • 1 OCTOBER 2014 • ISSN 0048-9697

Science OF THE Total Environment





Contents

Exogenous treatments with phytohormones can improve growth and nickel yield of hyperaccumulating plants M.I. Cabello-Conejo, Á. Prieto-Fernández and P.S. Kidd (Spain)	1
A mini-review on the impacts of climate change on wastewater reclamation and reuse P. Tram VO, H.H. Ngo, W. Guo, J.L. Zhou, P.D. Nguyen, A. Listowski and X.C. Wang (Australia, Viet Nam, China)	9
Persistent toxic substances in Mediterranean aquatic species R. Miniero, V. Abate, G. Brambilla, E. Davoli, E. De Felip, S.P. De Filippis, E. Dellatte, S. De Luca, R. Fanelli, E. Fattore, F. Ferri, I. Fochi, A. Rita Fulgenzi, N. Iacovella, A.L. Iamiceli, D. Lucchetti, P. Melotti, I. Moret, R. Piazza, A. Roncarati, A. Ubaldi, S. Zambon and A. di Domenico (Italy)	18
Nitrogen sources, transport and processing in peri-urban floodplains D.C. Gooddy, D.M.J. Macdonald, D.J. Lapworth, S.A. Bennett and K.J. Griffiths (UK)	28
Risk assessment of total and bioavailable potentially toxic elements (PTEs) in urban soils of Baghdad–Iraq S.H. Hamad, J.J. Schauer, M.M. Shafer, E.A. Al-Rheem, P.S. Skaar, J. Heo and I. Tejedor-Tejedor (USA, Iraq)	39
Stereoisomeric profiling of drugs of abuse and pharmaceuticals in wastewaters of Valencia (Spain) P. Vazquez-Roig, B. Kasprzyk-Hordern, C. Blasco and Y. Picó (Spain, UK)	49
Potential bioactivity and association of 17 β -estradiol with the dissolved and colloidal fractions of manure and soil K.B. Chambers, F.X.M. Casey, H. Hakk, T.M. DeSutter and N.W. Shappell (USA)	58
Incorporation of inorganic mercury (Hg ²⁺) in pelagic food webs of ultraoligotrophic and oligotrophic lakes: The role of different plankton size fractions and species assemblages C. Soto Cárdenas, M.C. Diéguez, S. Ribeiro Guevara, M. Marvín-DiPasquale and C.P. Queimaliños (Argentina, USA)	65
Airborne pollutant characteristics in an urban, industrial and agricultural complex metroplex with high emission loading and ammonia concentration J.-H. Tsai, L.-P. Chang and H.-L. Chiang (Taiwan)	74
Thirteen years of air pollution hourly monitoring in a large city: Potential sources, trends, cycles and effects of car-free days M. Masiol, C. Agostinelli, G. Formenton, E. Tarabotti and B. Pavoni (United Kingdom, Italy)	84
Photocatalytic degradation of nicotine in an aqueous solution using unconventional supported catalysts and commercial ZnO/TiO ₂ under ultraviolet radiation M.A.E. de Franco, W.L. da Silva, M. Bagnara, M.A. Lansarin and J.H.Z. dos Santos (Brazil)	97
Uncertainty in multi-media fate and transport models: A case study for TNT life cycle assessment M. Mayo, Z.A. Collier, V. Hoang and M. Chappell (USA)	104
Measurement of partition coefficients for selected polycyclic aromatic hydrocarbons between isolated plant cuticles and water S.-J. Kim, H. Lee and J.-H. Kwon (Republic of Korea)	113
Environmental profile of paddy rice cultivation with different straw management A. Fusi, J. Bacenetti, S. González-García, A. Vercesi, S. Bocchi and M. Fiala (Italy, Spain)	119
Multiple data sets and modelling choices in a comparative LCA of disposable beverage cups E. van der Harst, J. Potting and C. Kroeze (The Netherlands, Sweden)	129
Trace element patterns in marine macroalgae P. Malea and T. Kevrekidis (Greece)	144
National study of illicit drug use in Slovakia based on wastewater analysis T. Mackuľak, J. Škubák, R. Grabic, J. Ryba, L. Birošová, G. Fedorova, V. Špalková and I. Bodík (Slovakia, Czech Republic)	158
Flux measurements in the surface marine Atmospheric Boundary Layer over the Aegean Sea, Greece V.E. Kostopoulos and C.G. Helmis (Greece)	166
Beyond the transect: An alternative microchemical imaging method for fine scale analysis of trace elements in fish otoliths during early life N. McGowan, A.M. Fowler, K. Parkinson, D.P. Bishop, K. Ganio, P.A. Doble, D.J. Booth and D.J. Hare (Australia)	177
Sensitivity analyses of MAGIC modelled predictions of future impacts of whole-tree harvest on soil calcium supply and stream acid neutralizing capacity T. Zetterberg, S.J. Köhler and S. Löfgren (Sweden)	187
Assessment of arsenic concentration in stream water using neuro fuzzy networks with factor analysis F.-J. Chang, C.-H. Chung, P.-A. Chen, C.-W. Liu, A. Coynel and G. Vachaud (Taiwan, ROC, France)	202

Emerging organic contaminants in vertical subsurface flow constructed wetlands: Influence of media size, loading frequency and use of active aeration C. Ávila, J. Nivala, L. Olsson, K. Kassa, T. Headley, R.A. Mueller, J.M. Bayona and J. García (Spain, Germany, Denmark, Oman)	211
Mercury concentrations in amphipods and fish of the Saint Lawrence River (Canada) are unrelated to concentrations of legacy mercury in sediments P.V. Hodson, K. Norris, M. Berquist, L.M. Campbell and J.J. Ridal (Canada)	218
Modeling of pH-dependent adsorption and leaching of MCPA in profiles of Polish mineral soils T. Paszko (Poland)	229
Feeding strategies for groundwater enhanced biodenitrification in an alluvial aquifer: Chemical, microbial and isotope assessment of a 1D flow-through experiment G. Vidal-Gavilan, R. Carrey, A. Solanas and A. Soler (Spain)	241
Performance and storage integrity of dried blood spots for PCB, BFR and pesticide measurements S. Batterman and S. Chernyak (USA)	252
Dispersion and fate of ⁹⁰ Sr in the Northwestern Pacific and adjacent seas: Global fallout and the Fukushima Dai-ichi accident V. Maderich, K.T. Jung, R. Bezhenar, G. de With, F. Qiao, N. Casacuberta, P. Masque and Y.H. Kim (Ukraine, Republic of Korea, The Netherlands, China, Switzerland, Spain)	261
Factorization of air pollutant emissions: Projections versus observed trends in Europe P. Rafaj, M. Amann and J.G. Siri (Austria)	272
Effect of atmospheric mixing layer depth variations on urban air quality and daily mortality during Saharan dust outbreaks M. Pandolfi, A. Tobias, A. Alastuey, J. Sunyer, J. Schwartz, J. Lorente, J. Pey and X. Querol (Spain, USA, France)	283
Fish eyes and brain as primary targets for mercury accumulation – A new insight on environmental risk assessment P. Pereira, J. Raimundo, O. Araújo, J. Canário, A. Almeida and M. Pacheco (Portugal)	290
Latex paint as a delivery vehicle for diethylphthalate and di-n-butylphthalate: Predictable boundary layer concentrations and emission rates T. Schripp, T. Salthammer, C. Fauck, G. Bekö and C.J. Weschler (Germany, Denmark, USA)	299
Impact of compost process temperature on organic micro-pollutant degradation Y. Sadeq, T.G. Poulsen and K. Bester (Denmark, Pakistan, China)	306
Metal contamination of sediment by paint peeling from abandoned boats, with particular reference to lead A.B. Rees, A. Turner and S. Comber (UK)	313
Polar polycyclic aromatic compounds from different coal types show varying mutagenic potential, EROD induction and bioavailability depending on coal rank W. Meyer, T.-B. Seiler, J. Schwarzbauer, W. Püttmann, H. Hollert and C. Achten (Germany)	320
Influence of urban land development and subsequent soil rehabilitation on soil aggregates, carbon, and hydraulic conductivity Y. Chen, S.D. Day, A.F. Wick and K.J. McGuire (USA)	329
Trend analysis from 1970 to 2008 and model evaluation of EDGARv4 global gridded anthropogenic mercury emissions M. Muntean, G. Janssens-Maenhout, S. Song, N.E. Selin, J.G.J. Olivier, D. Guizzardi, R. Maas and F. Dentener (Italy, United States, the Netherlands)	337
Corrigendum to "Occurrence and exposure assessment of polychlorinated biphenyls and organochlorine pesticides from homemade baby food in Korea" [Sci. Total Environ. 470–471 (2014) 1370–1375] Y. Jeong, S. Lee, S. Kim, S.-D. Choi, J. Park, H.-J. Kim, J.J. Lee, G. Choi, S. Choi, S. Kim, S.Y. Kim, Y.D. Kim, G. Cho, E. Suh, S.K. Kim, S.-H. Eun, S. Eom, S. Kim, G.-H. Kim, K. Choi, S. Kim and H.-B. Moon (Republic of Korea)	351