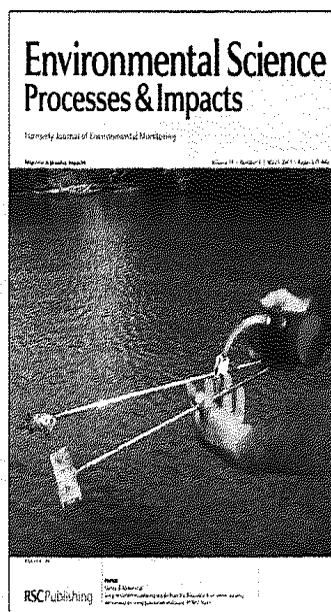




Cover
 See Richard J. C. Brown,
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 See Danny D. Reible *et al.*,
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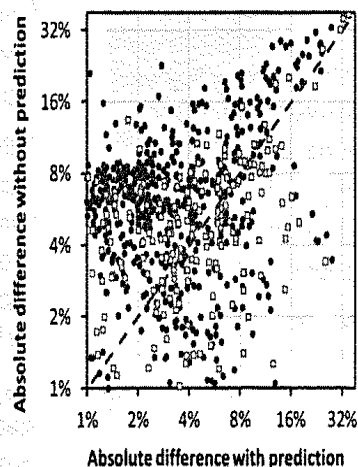
PAPERS

545

Data loss from time series of pollutants in ambient air exhibiting seasonality: consequences and strategies for data prediction

Richard J. C. Brown*

The effect of data loss on annual average concentrations of seasonal and non-seasonal pollutants in ambient air has been investigated.



554

Long-term PAH monitoring results from the Anacostia River active capping demonstration using polydimethylsiloxane (PDMS) fibers

David J. Lampert, Xiaoxia Lu and Danny D. Reible*

Long-term monitoring of caps in the field has demonstrated the need to quantify *in situ* pore water concentrations for assessing both contaminant migration and bioavailability of contaminants in sediments.

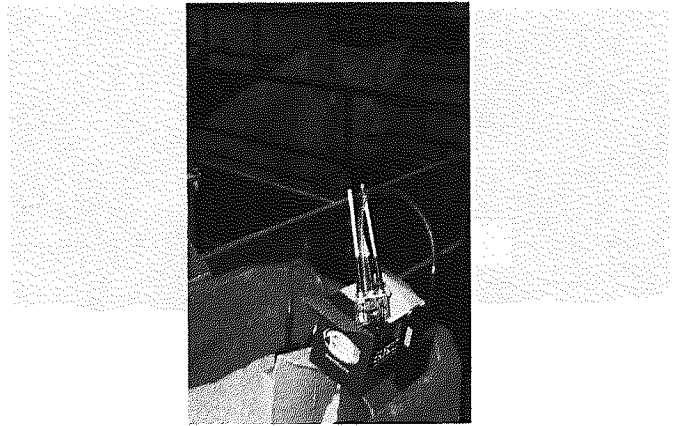


563

Health risk assessment of occupational exposure to hazardous volatile organic compounds in swine gestation, farrowing and nursery barns

Neslihan Akdeniz,* Larry D. Jacobson
and Brian P. Hetchler

Assessing health risks of occupational exposure to hazardous volatile organic compounds in swine production buildings using Monte Carlo simulation.

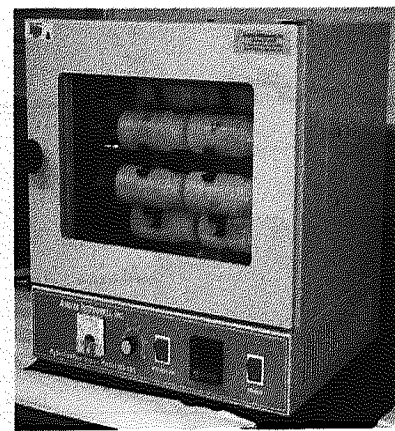


573

Evaluation of a low-cost commercially available extraction device for assessing lead bioaccessibility in contaminated soils

Clay M. Nelson,* Thomas M. Gilmore,
James M. Harrington, Kirk G. Scheckel, Bradley W. Miller
and Karen D. Bradham

A low-cost, commercially available soil extraction device was evaluated as an alternative to a custom-fabricated device required by EPA method 9200.1-86 to measure bioaccessible lead in contaminated soil.

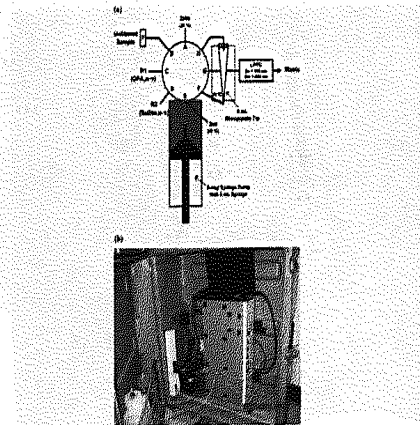


579

A portable analyser for the measurement of ammonium in marine waters

Natchanon Amornthammarong,* Jia-Zhong Zhang,*
Peter B. Ortner, Jack Stamates, Michael Shoemaker
and Michael W. Kindel

A portable ammonium analyser was developed and used to measure *in situ* ammonium in the marine environment.

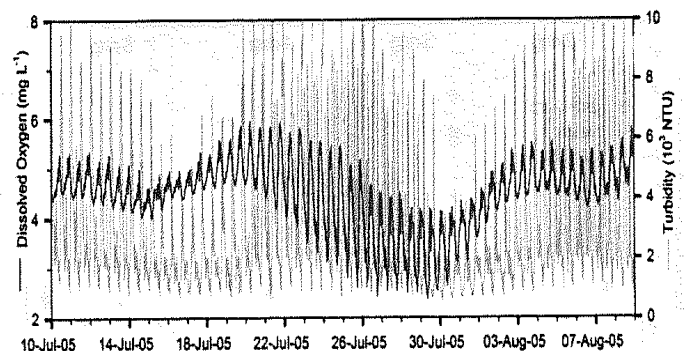


585

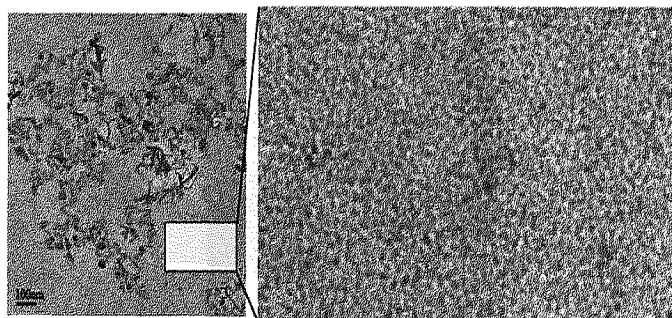
Factors contributing to hypoxia in a highly turbid, macrotidal estuary (the Gironde, France)

Aur lie Lanoux,* Henri Etcheber, Sabine Schmidt,
Aldo Sottolichio, G rard Chabaud, Marion Richard
and Gwena l Abril

A 7 year high-frequency monitoring of dissolved oxygen allows us to identify factors leading to hypoxia in the highly turbid Gironde Estuary.



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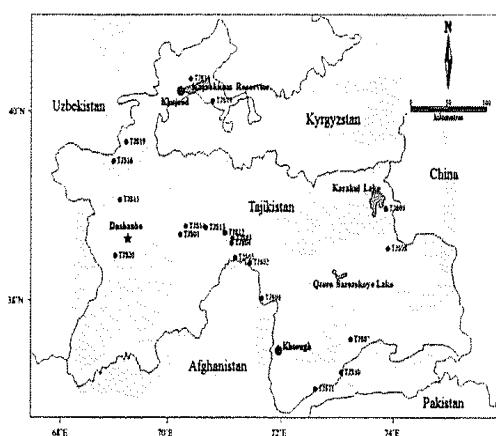


Size distribution effects of cadmium tellurium quantum dots (CdS/CdTe) immunotoxicity on aquatic organisms

A. Bruneau,* M. Fortier, F. Gagne, C. Gagnon, P. Turcotte, A. Tayabali, T. L. Davis, M. Auffret and M. Fournier*

The increasing use of products derived from nanotechnology has raised concern about their potential toxicity to aquatic life.

608

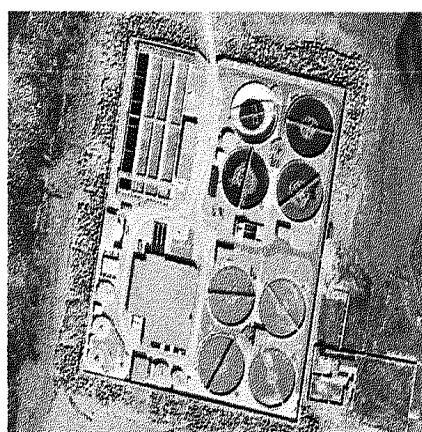


Organochlorine pesticide (OCP) residues in mountain soils from Tajikistan

Zhonghua Zhao,* Haiiao Zeng, Jinglu Wu and Lu Zhang

The concentrations and spatial distribution of organochlorine pesticides (OCPs) in surface soils of different altitudes (570–4656 m) from Tajikistan were determined.

617

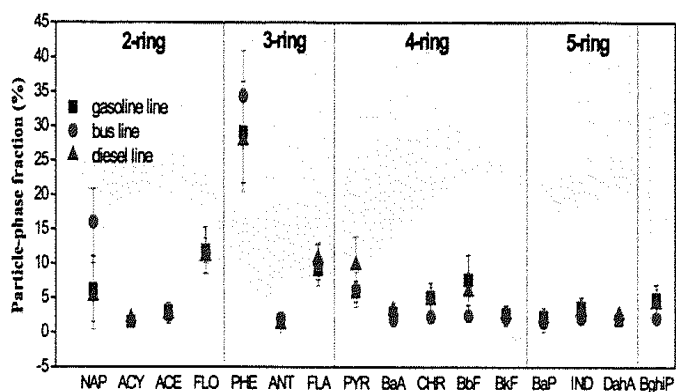


The effect of hospital effluent on antimicrobial resistant *E. coli* within a municipal wastewater system

S. Harris, C. Morris, D. Morris, M. Cormican and E. Cummins*

Evidence to support the mitigation of antimicrobial environmental release and hence prevent resistance dissemination and persistence in the environment.

623



Health risk assessment for vehicle inspection workers exposed to airborne polycyclic aromatic hydrocarbons (PAHs) in their work place

Peng-hui Li, Shao-fei Kong, Chun-mei Geng, Bin Han,* Bing Lu, Ru-feng Sun, Ruo-jie Zhao and Zhi-peng Bai

Inhalatory and dermal exposures of on-duty vehicle inspection workers to polycyclic aromatic hydrocarbons (PAHs) in Beijing were investigated from April 18 to May 17, 2011.

633

Characterization and validation of sampling and analytical methods for mycotoxins in workplace air

Danièle Jargot* and Sandrine Melin

Occupational exposure to airborne mycotoxins can occur when handling mould contaminated plants or foodstuffs. The paper presents how reproducible, user-friendly and reliable methods have been developed for personal workplace measurements.

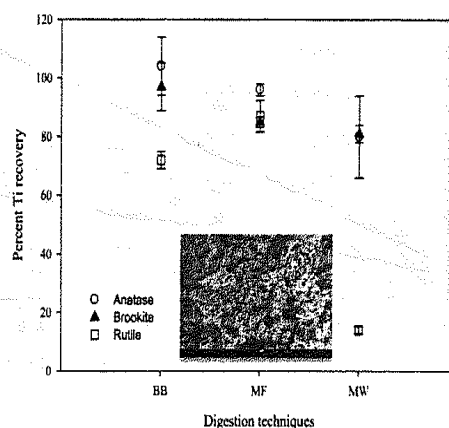


645

Examining the efficiency of muffle furnace-induced alkaline hydrolysis in determining the titanium content of environmental samples containing engineered titanium dioxide particles

R. G. Silva, M. N. Nadagouda, J. Webster, S. Govindaswamy, K. D. Hristovski, R. G. Ford, C. L. Patterson and C. A. Impellitteri*

A novel muffle furnace (MF)-based potassium hydroxide (KOH) fusion technique was developed and evaluated for titanium dioxide materials in solid matrices.

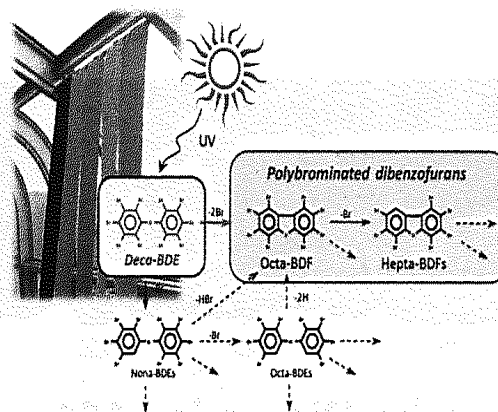


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Photolysis of brominated flame retardants in textiles exposed to natural sunlight

Natsuko Kajiwara,* Jennifer Desborough, Stuart Harrad and Hidetaka Takigami

PBDFs formed upon sunlight exposure during normal use of DecaBDE-treated textiles, while there was no marked loss of any of the HBCD diastereomers during the entire exposure period of 371 days.

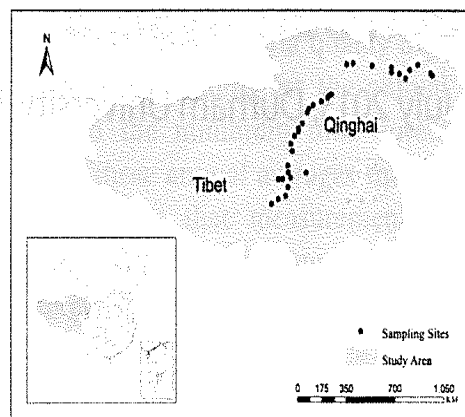


661

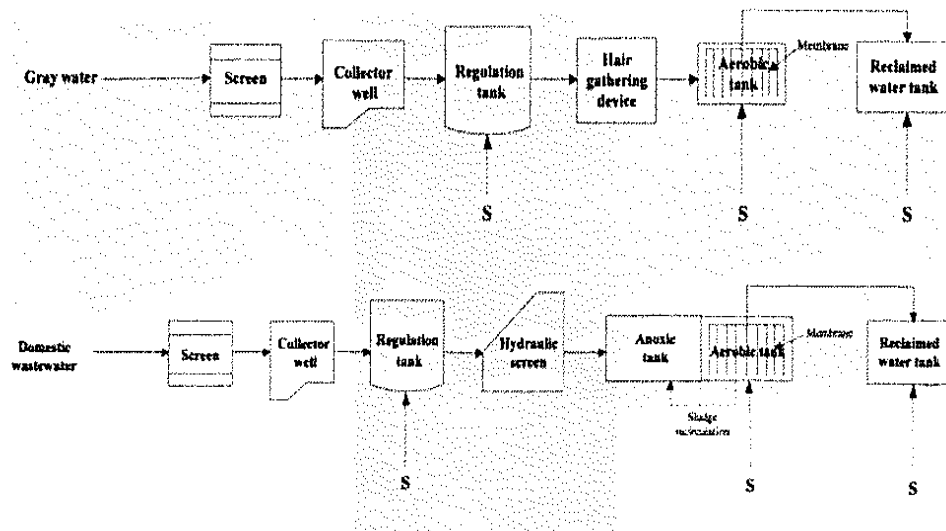
Polycyclic aromatic hydrocarbons in soils from the Tibetan Plateau, China: distribution and influence of environmental factors

Shuang Wang, Hong-Gang Ni, Jian-Lin Sun, Xin Jing, Jin-Sheng He and Hui Zeng*

The spatial (altitudinal and vertical) distribution of PAHs in soils was investigated. Meteorological factors influence the occurrences of PAHs in soil, and precipitation not only enhances air deposition but also promotes vertical transport.



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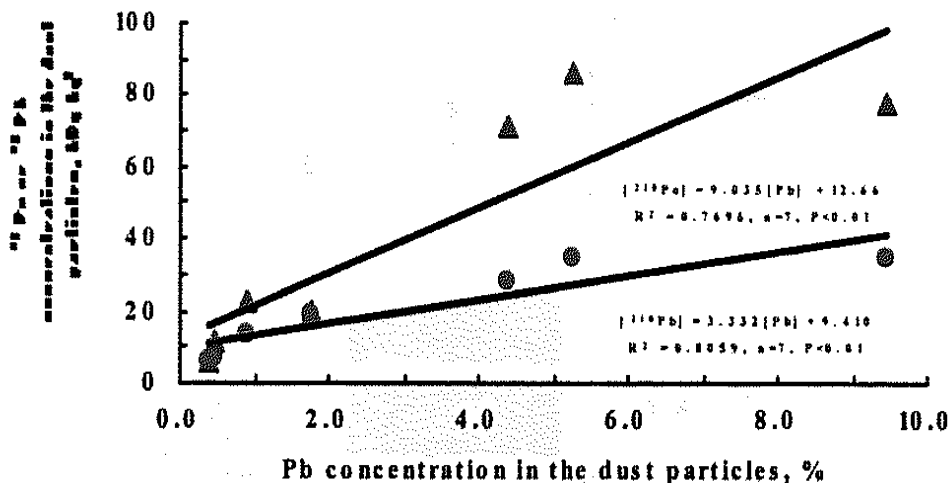


Decrease of antiandrogenic activity in gray water and domestic wastewater treated by the MBR process

Dehua Ma, Lujun Chen* and Rui Lui

In order to figure out the variation of the androgens/antiandrogens in wastewater treatment, androgenic/antiandrogenic activities were investigated in two membrane bioreactors (MBR) treating gray water and domestic wastewater, respectively, in Beijing city, China.

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A radiological survey and the impact of the elevated concentrations of ²¹⁰Pb and ²¹⁰Po released from the iron- and steel-making plant ILVA Taranto (Italy) on the environment and the public

Guogang Jia,* Giancarlo Torri, Damiano Centioli and Leandro Magro

A radiological survey on the iron- and steel-making plant ILVA Taranto (Italy) was mainly focused on contamination source-term investigation and exposure impact evaluation of the volatile radionuclides ²¹⁰Po and ²¹⁰Pb.