



**European Association of Chemistry and the Environment**

Founded in 2000

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# **ENVIRONMENTAL CHEMISTRY**

**POLLUTION OF AIR, WATER, FOOD, SOIL AND SEDIMENTS.  
GREEN CHEMISTRY, ECOTOXICOLOGY, STABLE ISOTOPES,  
ANALYTICAL METHODS.**

Abstracts of the 2<sup>nd</sup> European Meeting on Environmental Chemistry,

December 12-15, 2001, Dijon, FRANCE

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Editor

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# CONTENTS

## 3 DETAILED CONTENTS

## 14 INVITED LECTURE

### ORAL SESSIONS (77 abstracts)

- 16 01. AIR POLLUTION - ORGANIC POLLUTANTS
- 22 02. WATER AND FOOD POLLUTION - ORGANIC POLLUTANTS
- 30 03. SOIL POLLUTION - TOXIC METALS
- 38 04. ANALYTICAL METHODS FOR ENVIRONMENTAL SCIENCE
- 46 05. GREEN CHEMISTRY
- 51 06. ECOTOXICOLOGY
- 59 07. STABLE ISOTOPES FOR ENVIRONMENTAL SCIENCE
- 67 08. WATER POLLUTION - TOXIC METALS
- 75 09. ANALYTICAL METHODS FOR ENVIRONMENTAL SCIENCE
- 83 10. SOIL POLLUTION - ORGANIC POLLUTANTS

### POSTER SESSIONS (161 abstracts)

- 91 01. AIR POLLUTION - TOXIC METALS
- 96 02. AIR POLLUTION - ORGANIC POLLUTANTS
- 109 03. WATER POLLUTION - TOXIC METALS
- 119 04. WATER POLLUTION - ORGANIC POLLUTANTS
- 148 05. SOIL POLLUTION - TOXIC METALS
- 166 06. SOIL POLLUTION - ORGANIC POLLUTANTS
- 173 07. SEDIMENT POLLUTION
- 180 08. STABLE ISOTOPES FOR ENVIRONMENTAL SCIENCE
- 192 09. GREEN CHEMISTRY
- 199 10. ECOTOXICOLOGY
- 221 11. ANALYTICAL METHODS - ORGANIC POLLUTANTS
- 240 12. ANALYTICAL METHODS - TOXIC METALS

**INVITED LECTURE**

- 14 Environmental biomonitoring by instrumental analysis and bioassays.  
A. A. KETTRUP

**ORAL SESSION 01 - AIR POLLUTION - ORGANIC POLLUTANTS**

- 16 Synthetic musks as new contaminant group in the Norwegian Environment.  
Roland KALLENBORN, Robert GATERMANN, Torgeir NYGÅRD
- 17 Atmospheric pollution from oil shale combustion in Estonia.  
Uuve KIRSO, Erik TEINEMAA, Michael R. STROMMEN, Richard M. KAMENS
- 18 Polycyclic aromatic hydrocarbons (PAHs) in French Alpine valleys.  
Nicolas MARCHAND, Jean-Luc BESOMBES, Pierre MASCLET, Jean-Luc JAFFREZO
- 19 The pyrolysis of catechol: characterisation of decomposition products and the formation of polycyclic aromatic hydrocarbons.  
Elmer B. LEDESMA, Nathan D. MARSH, Alyssa K. SANDROWITZ, Mary J. WORNAT
- 20 General reactive transport model for inter-reacting multiple air pollutants in non-conservation system and its application to toluene chemistry in urban areas.  
Koichi IINUMA, Yoshiyuki SATOH, Shunsuke UCHIDA
- 21 The influence of the Kostomuksha factory on the air pollution in Karelia and Finland.  
Albert LEBEDEV, Natalia SINIKOVA, Svetlana NIKOLAEVA, Olga POLIAKOVA, Maria HRUCHSHEVA, Sergey POZDNYAKOV

**ORAL SESSION 02 - WATER AND FOOD POLLUTION - ORGANIC POLLUTANTS**

- 22 Enzymatic treatment and recycling of textile effluents.  
Georg M. GUEBITZ
- 23 Risk assessment of polycyclic aromatic hydrocarbons (PAHs) transfer from feed to milk.  
Nathalie GROVA, Cyril FEIDT, Claire LAURENT, Pedro ARRONIZ-RIQUELEME, Guido RYCHEN
- 24 Control of halogenated by-products during surface water potabilisation.  
Eric CHAUVEHEID
- 25 Several ways to treat industrial wastewaters containing aprotic solvents: example of the dimethylsulfoxide.  
Patrick BALDONI-ANREY, Stephan PLISSON -SAUNE, Frederic PERIE
- 26 Quantification of in situ trichloroethene dilution versus biodegradation using a novel chloride concentration technique.  
Claudia WALECKA-HUTCHISON, James L. WALWORTH
- 27 Disappearance of polycyclic aromatic hydrocarbons (PAHs) during anaerobic digestion of naturally contaminated sewage sludges.  
E. TRABLY, N. DELGENES, D. PATUREAU, J. P. DELGENES
- 28 Transformation of carbendazim by UV/H<sub>2</sub>O<sub>2</sub> in aqueous solution.  
Patrick MAZELLIER, Emilie LEROY, Joseph DE LAAT, Bernard. LEGUBE
- 29 UV/H<sub>2</sub>O<sub>2</sub> chemical oxidation for high loaded effluents: application to surfactants in water. Kinetics of decomposition.  
J. SANZ, J. I. LOMBRAÑA, R. RODRÍGUEZ

**ORAL SESSION 03 - SOIL POLLUTION - TOXIC METALS**

- 30 Electrodialytic remediation of different heavy metal polluted soils.  
Lisbeth M. OTTOSEN, Arne VILLUMSEN, Anne J. PEDERSEN, Iben V. KRISTENSEN
- 31 Selection of microorganisms for their ability to bioremediation of agricultural soils contaminated by cadmium.  
Didier BAGOT, Thierry LEBEAU, Karine JEZEQUEL, Bernard FABRE
- 32 Preferential transport of strongly sorbing contaminants in structured soils; field evidence and modeling.  
Achim ALBRECHT, Tiziana CENTOFANTI, Anna FEHLMANN, Hannes FLÜHLER, Emmanuel FROSSARD, Jörg LEUENBERGER, Robin PENFIELD, Hannes WYDLER
- 33 New hydrometallurgical process for zinc and lead recovery from electric arc furnace dust.  
Eric MEUX, Nathalie LECLERC
- 34 Microstructural study of accelerated carbonated soil from a former pyrotechnic plant in S.E. England.  
Colin D HILLS, Kate WHITEHEAD, Cecilia L MACLEOD
- 35 Heavy metal mobilisation in soils covering ore mining dumps.  
Jörg DILLING, Klaus KAISER, Ludwig HAMAIER, Wolfgang ZECH
- 36 Centrifuge measurement of copper and nickel solute transport in London Clay.  
John D. MCKINLEY, Vasilis ANTONIADIS
- 37 Micro-total analytical systems (TAS) systems with electrogenerated chemiluminescence detection for environmental analysis.  
Gillian M. GREENWAY, Paul A. GREENWOOD

**ORAL SESSION 03. SOIL POLLUTION - TOXIC METALS****Centrifuge measurement of copper and nickel solute transport in London Clay.**

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Sorption of contaminants onto soil constituents significantly affects contaminant transport. The retardation factor is often used in contaminant transport modelling to quantify the mobility of the contaminant. Infiltration tests were conducted to study the transport of Cu and of Ni through consolidated London Clay. Centrifuge accelerations in the range of 1300 to 5280 gravities were used to attempt a prediction of the heavy metals' mobility in real field conditions. The retardation factor was estimated from the breakthrough curves and was compared with batch test findings on the same soil. The apparent retardation factor reduced as the centrifuge acceleration increased, indicating a reduction in sorption at the higher accelerations.

Keywords: heavy metals, contamination of soils, sorption, centrifuge.