



Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

SCIENCE @ DIRECT®

Journal of Hazardous Materials 110 (2004) ix

**Journal of  
Hazardous  
Materials**

[www.elsevier.com/locate/jhazmat](http://www.elsevier.com/locate/jhazmat)

## Foreword

This Special Issue of the *Journal of Hazardous Materials* results from papers selected among those presented and printed in the proceedings of the Fourth International Congress on Environmental Geotechnics held in Rio de Janeiro in August 2002. This congress was sponsored by the International Society of Soils Mechanics and Geotechnical Engineering (ISSMGE) and the Brazilian Geotechnical Society (ABMS) under the auspices of the Technical Committee on Environmental Geotechnics of the ISSMGE, TC5.

The presence of hazardous materials in soils and ground water is a topic of great concern at present. The hazards posed by materials are usually identified on the basis of pathogenicity, reactivity, corrosivity or ignitability. The collection of peer reviewed papers included in this Special Issue represents the interface of Hazardous Materials with Geoenvironmental Engineering. The topics selected for inclusion range from evaluation of different techniques for ground remediation, namely, vapour extraction, thermal desorption, air sparging, bioventing, reactive barriers, electro-

kinetics and biodegradation, amongst others. The contaminants studied include non-aqueous phase liquids, heavy metals, mining wastes and contaminated sediments. Laboratory and in situ studies and some case histories are herewith reported. We are indebted to the authors for their patience as the papers underwent a thorough review process. This Special Issue would not have appeared without the support of the journal editors and the staff of Elsevier.

M.S.S. Almeida\*

L.G. de Mello

M. Ehrlich

Graduate School of Engineering  
Federal University of Rio de Janeiro, COPPE-UFRJ  
C. Postal 68506, Rio de Janeiro 21945-970, Brazil

\*Corresponding author

E-mail address: [almeida@geotec.coppe.ufrj.br](mailto:almeida@geotec.coppe.ufrj.br)  
(M.S.S. Almeida)