



JOURNAL OF ENVIRONMENTAL RADIOACTIVITY

SPECIAL ISSUE

ENVIRONMENTAL RADIOACTIVITY: LEGACY SITES, CHERNOBYL AND FUKUSHIMA; SELECTED PAPERS FROM THE 12TH INTERNATIONAL CONFERENCE ON THE BIOGEOCHEMISTRY OF TRACE ELEMENTS (ICOBTE)

GUEST EDITORS

THOMAS HINTON, FRANCOIS BRECHIGNAC, BRENDA HOWARD, ASTRID LILAND, STUART WALKER AND TAMARA YANKOVICH

EDITOR-IN-CHIEF

S.C. SHEPPARD

ASSOCIATE EDITORS

N. BERESFORD, F. BRECHIGNAC, S. HISAMATSU, S. LANDSBERGER, P. MARTIN, G. SHAW, J. TWINING, G. VOIGT



International Union
of Radioecology

Affiliated to the International Union of Radioecology

Special Issue: Environmental Radioactivity: Legacy Sites, Chernobyl and Fukushima; selected papers from the 12th International Conference on the Biogeochemistry of Trace Elements (ICOBTE)

Guest Editors: Thomas Hinton, Francois Brechignac, Brenda Howard, Astrid Liland, Stuart Walker and Tamara Yankovich

Preface

- 1 PREFACE to a Special Issue, Environmental radioactivity: legacy sites, Chernobyl and Fukushima
T. HINTON & G. DE WITH

Modelling

- 4 Regional long-term model of radioactivity dispersion and fate in the Northwestern Pacific and adjacent seas: application to the Fukushima Dai-ichi accident
V. MADERICH, R. BEZHENAR, R. HELING, G. DE WITH, K.T. JUNG, J.G. MYOUNG, Y.-K. CHO, F. QIAO & L. ROBERTSON
- 19 Modelling the behaviour of uranium-series radionuclides in soils and plants taking into account seasonal variations in soil hydrology
D. PÉREZ-SÁNCHEZ & M.C. THORNE
- 31 Application of TREECS Modeling System to Strontium-90 for Borschi Watershed near Chernobyl, Ukraine
B.E. JOHNSON & M.S. DORTCH

Speciation and Environmental Transport

- 40 Retention and chemical speciation of uranium in an oxidized wetland sediment from the Savannah River Site
D. LI, J.C. SEAMAN, H.-S. CHANG, P.R. JAFFE, P. KOSTER VAN GROOS, D.-T. JIANG, N. CHEN, J. LIN, Z. ARTHUR, Y. PAN, K.G. SCHECKEL, M. NEWVILLE, A. LANZIROTTI & D.I. KAPLAN
- 47 Pu(V) transport through Savannah River Site soils – an evaluation of a conceptual model of surface-mediated reduction to Pu(IV)
B.A. POWELL, D.I. KAPLAN, S.M. SERKIZ, J.T. COATES & R.A. FJELD
- 57 Radioiodine concentrated in a wetland
D.I. KAPLAN, S. ZHANG, K.A. ROBERTS, K. SCHWEHR, C. XU, D. CREELEY, Y.-F. HO, H.-P. LI, C.M. YEAGER & P.H. SANTSCHI

Contents continued on inside back cover

Abstracted/indexed in: BIOSIS [Biological Abstracts; BIOBASE/Current Awareness in Biological Sciences; Cambridge Scientific Abstracts/Pollution Abstracts; Agriculture, Biology & Environmental Sciences; Engineering Index; Environment Abstract; Environmental Periodicals Bibliography; EMBASE/Excerpta Medica; Geo Abstracts; Thomson Scientific/GeoSciTech]; Science Citation Index; Index Medicus/MEDLINE/Pubmed. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®



Available online at www.sciencedirect.com

ScienceDirect

