Record Nr. UNINA9910782697803321 **Titolo** Elemental speciation in human health risk assessment [[electronic resource] /] / first draft prepared by P. Apostoli ... [et al.] Pubbl/distr/stampa Geneva,: World Health Organization, 2006 **ISBN** 1-281-30751-3 9786611307516 92-4-068249-X Descrizione fisica 1 online resource (256 p.) Collana Environmental health criteria, , 0250-863X;; 234 Altri autori (Persone) ApostoliP (Pietro) Disciplina 615.9515 Soggetti Trace elements - Speciation Health risk assessment Biological monitoring Bioavailability Analytical toxicology Chemical elements - Physiological effect Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "Published under the joint sponsorship of the United Nations Environment Programme, the International Labour Organization and the World Health Organization, and produced within the framework of the Inter-Organization Programme for the Sound Management of Chemicals." Includes bibliographical references and index. Nota di bibliografia Nota di contenuto TITLE; COPYRIGHT; CONTENTS; NOTE TO READERS OF THE CRITERIA MONOGRAPHS; PREAMBLE; WHO TASK GROUP ON ENVIRONMENTAL HEALTH CRITERIA FOR ELEMENTAL SPECIATION IN HUMAN HEALTH RISK ASSESSMENT; ACRONYMS AND ABBREVIATIONS; 1. SUMMARY; 2. DEFINITIONS OF SPECIES AND SPECIATION; 3. STRUCTURAL ASPECTS OF SPECIATION: 4. ANALYTICAL TECHNIQUES AND METHODOLOGY: 5. BIOACCESSIBILITY AND BIOAVAILABILITY; 6. TOXICOKINETICS AND BIOLOGICAL MONITORING; 7. MOLECULAR AND CELLULAR MECHANISMS OF METAL TOXICITY: 8. HEALTH EFFECTS: 9. CONCLUSIONS AND RECOMMENDATIONS; REFERENCES; RESUME; RESUMEN; INDEX OF

The purpose of this book is to assess, evaluate, and give guidance on

**ELEMENTS**;

Sommario/riassunto

the role of elemental speciation and speciation analysis in human health hazard and risk assessment. The book is directed at risk assessors and regulators, to emphasize the importance of consideration of speciation in their deliberations. To date, this issue has not been a part of most hazard and risk assessments. Further aims of the publication are to encourage the analysis of speciation of elements to increase knowledge on the effect of speciation on mode of action and to increase understanding of health effects.