Record Nr. UNINA9910877808203321 Environmental colloids and particles: behaviour, separation and **Titolo** characterisation / / edited by Kevin J. Wilkinson, Jamie R. Lead Pubbl/distr/stampa Chichester, England;; Hoboken, NJ,: John Wiley & Sons Ltd, 2007 **ISBN** 1-280-73952-5 9786610739523 0-470-02433-X 0-470-02453-4 Descrizione fisica 1 online resource (707 p.) Collana IUPAC series on analytical and physical chemistry of environmental systems;; v. 10 Altri autori (Persone) WilkinsonKevin J LeadJamie R Disciplina 541/.345 Soggetti Colloids Water chemistry Nanoparticles - Environmental aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Environmental colloids and particles: current knowledge and future developments -- Colloidal properties of submicron particles in natural waters -- Colloid-trace element interactions in aquatic systems --Ultrafiltration and its application to sampling and characterization of aguatic colloids -- Characterization of aguatic colloids and macromolecules by field-flow fractionation -- Modern electrophoretic techniques for the characterization of natural organic matter --Electrophoresis of soft colloids: basic principles and applications --Strategies and advances in the characterisation of environmental colloids by electron microscopy -- Force microscopy and force measurements of environmental colloids -- Laser scanning microscopy for microbial flocs and particles -- Study of environmental systems by means of fluorescence correlation spectroscopy -- Laser-induced breakdown detection -- Probing environmental colloids and particles with x-rays.

This text presents the current knowledge of environmental colloids and

Sommario/riassunto

includes reviews of the current understanding of structure, role and behaviour of environmental colloids and particles, whilst focussing directly on aquatic systems and soils. In addition, there is substantial critical assessment of the techniques employed for the sampling, size fractionation and characterisation of colloids and particles. Chemical, physical and biological processes and interactions involving colloids are described, and particular attention is paid to quantitative approaches that take account of particle he