1. Record Nr. UNINA9910807109303321 Autore Siebers Nina Titolo Bentonite Functionalised with 2-(3-(2-aminoethylthio)propylthio) ethanamine (AEPE) for the Removal of Hg(II) from Wastewaters : Synthesis, Characterisation and Hg(II) Adsorption Properties / / Nina Siebers Hamburg, : Diplom.de, 2008 Pubbl/distr/stampa **ISBN** 3-8366-1847-8 Edizione [1st ed.] 1 online resource (73 p.) Descrizione fisica 628.5 Disciplina Soggetti Bentonite Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from cover. Nota di bibliografia Includes bibliographical references. Bentonite Functionalised with 2-(3-(2-aminoethylthio)propylthio) Nota di contenuto ethanamine (AEPE) for the Removal of Hg(II) from Wastewaters; Content; Abbreviations; Physical characteristics; Index of figures; Index of tables; Index of schemes; Index of equations; Abstract; 1 Introduction; 2 Aims; 3 Experimental: 4 Results and Discussion: 5 Conclusion and Outlook: 6 References; 7 Appendix In this study, natural bentonite clay was first purified and then Sommario/riassunto functionalised with the chelating ligand 2-(3-(2-aminoethylthio) propylthio)ethanamine (AEPE) to improve the adsorption capacity and selectivity towards Hg(II) ions. The surface modification was characterised with the help of powder X-ray diffraction (XRD), Fourier transform infrared spectroscopy (FT-IR), BET isotherm to determine the specific surface area while the thermal stability of the samples was studied using thermogravimetric analysis (TGA). FT-IR and TGA

demonstrated the presence of the chelating ligand on the modified c