Record Nr. UNINA9910298364703321 Autore Ramezanianpour Ali Akbar Titolo Cement Replacement Materials: Properties, Durability, Sustainability / / by Ali Akbar Ramezanianpour Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa , 2014 **ISBN** 3-642-36721-6 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (345 p.) Collana Springer Geochemistry/Mineralogy, , 2194-3176 620.1 Disciplina 620.118 Soggetti Mineralogy **Building materials** Ceramics Glass Composite materials **Building Materials** Ceramics, Glass, Composites, Natural Materials Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references. Natural Pozzolans -- Fly Ash -- Granulated Blast Furnace Slag -- Silica Nota di contenuto Fume -- Metakaolin -- Rice Husk Ash -- LimeStone -- The Role of Supplementary Cementing Materials on Sustainable Development. Sommario/riassunto The aim of this book is to present the latest findings in the properties and application of Supplementary Cementing Materials and blended cements currently used in the world in concrete. Sustainability is an important issue all over the world. Carbon dioxide emission has been a serious problem in the world due to the greenhouse effect. Today many countries agreed to reduce the emission of CO2. Many phases of cement and concrete technology can affect sustainability. Cement and concrete industry is responsible for the production of 7% carbon dioxide of the total world CO2 emission. The use of supplementary

cementing materials (SCM), design of concrete mixtures with optimum content of cement and enhancement of concrete durability are the main

issues towards sustainability in concrete industry.