Contribution ID: **46** Type: **Oral Presenter**

Investigation of raw materials for cement industry of Upper Hunza, Gilgit-Baltistan

Monday 2 April 2018 16:20 (20 minutes)

Abstract
Limestone represents the main raw material for cement. In this study, six natural limestone's samples from different geological beds of Khyber Karimabad Upper Hunza Valley, Gilgitbaltistan were chemically and mineralogical investigated as suitable raw material. These samples were investigated with Thin Section, X-ray diffraction (XRD), Scanning electron microscopy coupled with Energy-dispersive X-ray spectroscopy (SEM-EDX), X-ray fluorescence (XRF) and reserve estimation with Geological Information System (GIS). The mineralogical, elemental and reserve estimation indicate that the local raw materials are suitable for cement industry. Geological review shows that there is a good potential for industrial-grade limestone, the composition of this limestone can be generally expressed in terms of CaO, MgO, Al2O3, and SiO2, that may be used in place of similar commodities of good quality cement raw materials.
Keywords: Limestone, dolomite, mineralogical, elemental, CaO and MgO.

Authors: Dr NAWAZ, Faheem (Dept. of Mining Engineering, Balochistan University of Information Technology, Engineering and Management Sciences, Quetta, Pakistan); Dr SHAH, Muhammad (Dept. of Mining Engineering, Balochistan University of Information Technology, Engineering and Management Sciences, Quetta, Pakistan); Dr MALGHANI, Muhammad Najam (Dept. of Chemical Engineering, Balochistan University of Information Technology, Engineering and Management Sciences, Quetta, Pakistan.); Mr KHAN, Naseer (bDept. of Geological Engineering, Balochistan University of Information Technology, Engineering and Management Sciences, Quetta, Pakistan); Mr AHMED, Zaheer (Dept. of Mining Engineering, Balochistan University of Information Technology, Engineering and Management Sciences, Quetta, Pakistan.); Mr HUSSAIN, Zahid (Dept. of Mining Engineering, Karakoram International University Gilgit-Baltistan, Pakistan.)

Presenter: Mr HUSSAIN, Zahid (Dept. of Mining Engineering, Karakoram International University Gilgit-Baltistan, Pakistan.)

Session Classification: Mining Engineering

Track Classification: Mining Engineering