

## **A review of mineral carbonation process routes-challenges and prospects**

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Mineral carbonation technology (MCT) is a process whereby CO<sub>2</sub> is chemically reacted with calcium- and/or magnesium-containing minerals to form stable carbonate materials which do not incur any long-term liability or monitoring commitments. Vast amounts of magnesium silicate minerals exist worldwide that may be carbonated, with magnesium carbonate as stable and environmentally harmless product. In this review chemistry and comparative analysis of different carbonation routes such as Ex-situ MCT, in-situ MCT and other MCT routes are discussed. Prospect and challenges, as well as cost and gap analyses of this technology are discussed.

### **Biography**

Abbas A. Olajire has completed his Ph.D. at the age of 34 years from University of Ibadan and postdoctoral studies from UFZ Centre for Environmental Research Leipzig-Halle, Department of Chemical Ecotoxicology, Permosersstraße 15, 04318, Leipzig, GERMANY. He is presently a Professor of Industrial/Environmental Chemistry. He has published more than 50 papers in reputed journals and has been serving as a reviewer for reputable journals.

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