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Babak Azimi, Maryam Tahmasebpoor, Pedro E. Sanchez-Jimenez, Antonio Perejon, Jose Manuel Valverde

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Babak Azimi[1], Maryam Tahmasebpoor[1]*, Pedro E. Sanchez-Jimenez [2], Antonio Perejon[2, 3], Jose Manuel Valverde[4]

[1] Faculty of Chemical & Petroleum Engineering, University of Tabriz, Tabriz, Iran, PO Box 51666-16471

[2] Instituto de Ciencia de Materiales de Sevilla, C.S.I.C.-Universidad de Sevilla, C. Américo Vespucio nº49, 41092 Sevilla, Spain

[3] Departamento de Química Inorgánica, Facultad de Química, Universidad de Sevilla, Sevilla 41071, Spain

[4] Facultad de Física, Universidad de Sevilla, Avenida Reina Mercedes s/n, 41012 Sevilla, Spain

Abstract

CaO-based materials have been identified as promising sorbents for highly efficient pre-combustion and post-combustion CO_2 capture in fluidized beds operated at high temperatures by means of the Calcium Looping (CaL) process. However, Ca-based sorbents suffer from a decline of the capture capacity over multiple sorption/desorption cycles, mainly due to sintering, and from a markedly heterogeneous fluidization behavior due to the strength of interparticle attractive forces as compared to particle weight. The present study is focused on the development

* Corresponding author, Maryam Tahmasebpoor; Tel: +98-41-33392936; Fax: +98-41-33338497 E-mail: tahmasebpoor@tabrizu.ac.ir