The 2024 World Congress on
The 2024 Structures Congress (Structures24)
19-22, August, 2024, The K hotel, Seoul, Korea

Carbonation Efficiency of Steel Slag According to Carbonation Conditions

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ABSTRACT

The study suggests addressing current challenges in utilizing steel slag through a direct carbonation process to produce calcium carbonate by reacting carbon dioxide with the slag. To achieve this, optimal carbonation conditions need to be investigated. The research analyzed the relationship between the carbonation rate and key factors influencing carbonation, such as reaction time (*t*), CO_2 pressure (*P*), particle size of the slag (*d*), reaction temperature (*T*), and liquid-solid ratio (*L/S*).

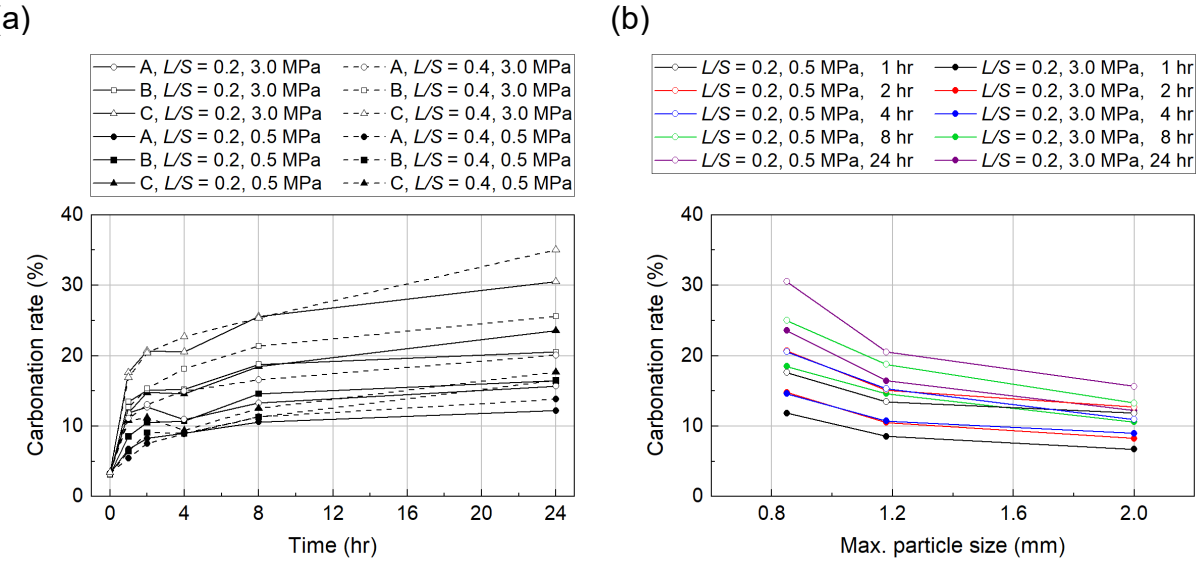

Fig. 1 relationship between the carbonation rate and carbonation factors. (a) Reaction time (*t*) and (b) steel slag particle size (*d*)

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[2)] Professor

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