

Symposium 23:

Geopolymer, building materials and low environmental loading construction materials

Recently, reduction of carbon dioxide emission and effective usage of industrial waste is very important for establishment of low carbon and recycling-oriented society. Research on blended cement with high fly-ash replacement is attracting great attention. And blended cement such as energy CO₂ Minimum (ECM) cement using high volume blast furnace slag, ordinary Portland cement and gypsum were designed for a large amount of CO₂ emission reduction. On the other hand, alkali activated material using fly-ash such as geopolymer and hybrid-type geopolymer using fly-ash and blast furnace slag are attracting high attention as alternative material for cement. In this session, we will discuss the recent researches on low environmental loading construction material. In addition, since geopolymer materials have a high temperature resistivity, they will be expected as high temperature construction materials, namely refractories. In this session, application to novel use of geopolymer will be also discussed.

<PROPOSED SESSION TOPICS>

- Low Carbon and Recycling-oriented Society
- Reduction of CO₂ emission
- Management of Industrial Waste

<ORGANIZERS>

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<INVITED LECTURES>

Tentative invited lecture information is posted in the following URL;

http://www.ceramic.or.jp/pacrim13/list_of_invited_speakers.html#23