第46回コンクリート工学講演会 | A. 材料・施工 | ジオポリマー・アルカリ活性材料/ポリマーコンクリート

ジオポリマー・アルカリ活性材料3/ポリマーコンクリート

座長:麓隆行(土木),今本啓一(建築)
2024年6月28日(金) 13:15 ～ 15:00 第1会場 (小展示室A)

[1211]SOLIDIFICATION OF ORGANIC OIL WASTE IN METAKAOLIN-BASED GEOPOLYMER USING GRAPHENE OXIDE STABILISED PICKERING EMULSION

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キーワード：Organic oil waste、 Solidification、 Pickering emulsion、 Geopolymer

This research focuses on incorporating and solidifying organic oil waste into metakaolin-based geopolymer using a pre-emulsification technique. Graphene oxide has been utilised as Pickering particles to stabilize the emulsion during the pre-emulsification of oil with an alkali activator solution. The prepared samples carried out various experimental procedures, and the creaming index was determined to evaluate the stability of Pickering emulsions. The results demonstrated that the graphene oxide-stabilised Pickering emulsion exhibited excellent stability, and the emulsified organic waste oil could be successfully incorporated within a metakaolin-based geopolymer .

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