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Announcement

Geotechnical Research

Award-winning paper in 2022

Papers published in *Geotechnical Research* are eligible for awards from the Institution of Civil Engineers. Papers from any of the ICE journals can be nominated for several awards. In addition, each journal has awards dedicated to their specific subject area.

On Friday 13 October 2023, ICE president Keith Howells presented an award to the following paper published in *Geotechnical Research* in 2022. The editorial panel nominated their best papers and an awards committee chaired by Tim Broyd allocated the awards.

Thomas Telford Premium Prize

The Thomas Telford Premium Prize, presented for the best paper published in *Geotechnical Research*, was awarded to Liu *et al*. (2022).

Abstract

Cement is commonly used as a stabilisation material in soft soil stabilisation. However, the use of cement can cause environmental issues, as the production of cement results in high emission of carbon dioxide (CO_2). Hence, it is essential to develop other suitable stabilisation materials to reduce the amount of cement used in the stabilisation of soft soil. Fly ash and DuraCrete (blended cement) were investigated in this study to be used as partial replacements for traditional cement-only mixes. The behaviour of specimens stabilised using cement, fly ash and DuraCrete under both unconfined compressive and consolidated isotropic undrained conditions was investigated in this study. The experimental results proved that both fly ash and DuraCrete can be used as partial replacements for cement. Fly ash can provide the highest reduction in terms of percentage of cement. Meanwhile, DuraCrete is more cost effective, as a relatively smaller quantity of DuraCrete can replace a correspondingly larger amount of cement for a similar strength gain. The contribution of this research can provide engineers with alternative, more sustainable design mixes for soft soil stabilisation that can readily satisfy design strength requirements while emitting relatively less carbon dioxide.

REFERENCE

Liu Y, Ong DEL, Oh E, Liu Z and Hughes R (2022) Sustainable cementitious blends for strength enhancement of dredged mud in Queensland, Australia. *Geotechnical Research* **9(2)**: 65–82, https://doi.org/10.1680/jgere.21.00046.