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Award-winning paper in 2021.
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Announcement

International Journal of Physical Modelling in Geotechnics

ice Publishing

Award-winning paper in 2021

Papers published in *International Journal of Physical Modelling in Geotechnics* 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 14 October 2022, ICE president Ed McCann presented an award to the following paper published in *International Journal of Physical Modelling in Geotechnics* in 2021. 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 *International Journal of Physical Modelling in Geotechnics*, was awarded to Fan *et al*. (2021).

Abstract

Monopiles used as foundations for offshore wind turbines can be installed using different methods including jacking, vibratory driving and impact driving. Significant research efforts have been dedicated to the characterisation of monopile–soil interaction under lateral loading, mainly using *p*–*y* curves. There has also been extensive research in quantifying the effect of different installation methods on the axial response using numerical modelling and physical modelling techniques. Little attention has been paid to the effect of the installation method on the subsequent lateral response of a monopile under the in-service condition. In this paper, a purpose-designed apparatus is described that allows in-flight installation using different installation methods followed directly by lateral loading without stopping the centrifuge and thus retaining the installation-induced stress state. Test results from three lateral loading tests are discussed, with the piles either jacked at 1***g*** and *N****g*** or impact driven at *N****g*** into a dry medium dense sand, allowing the effect of the installation method on the initial stiffness and ultimate capacity to be examined. The successfully conducted tests illustrate the capabilities of the new apparatus for centrifuge testing of laterally loaded driven piles.

REFERENCE

Fan S, Bienen B and Randolph MF (2021) Centrifuge study on effect of installation method on lateral response of monopiles in sand. *International Journal of Physical Modelling in Geotechnics* **21(1)**: 40–52, https://doi.org/10.1680/jphmg.19.00013.