This issue of the DFI Journal reflects the wonderful, continued support of the DFI, the editorial staff, and the authors. We are certain that you will find these papers helpful in whichever role - engineer, contractor, leadership, and so on - you serve within our Industry. You will note that the papers represent a broad geography including the state-of-practice in Texas, sedimentary rocks in the mid-Atlantic region, and augered, cast-in-place piles in central Florida. All at the DFI can be proud that the following contributions to the Journal represent such a wide distribution over the USA and beyond.

R.B. Moghaddam, H. Seo, W.D. Lawson, J.G. Surles, and P.W. Jayawickrama present the development and calibration of LRFD resistance factors for designing deep foundations at the serviceability limit state. For this study, the writers correlated the top displacements measured during 60 full-scale pile load tests to Texas Cone Penetration (TCP) data. The paper appropriately notes the importance of considering both the serviceability and strength limit states in deep foundation design with the recognition that greater emphasis is often placed on the latter. It is implied that high quality local correlations, in this case the application of TCP data, can be extremely helpful in designing successful, cost-effective foundations.

A. Marinucci, R.B. Moghaddam, and M. NeSmith Jr. summarize the results of a full-scale field demonstration project in central Florida. The project included computer monitoring during installation, thermal integrity profiling (TIP), axial and lateral load testing, and extraction of 457 mm (18 in) and 610 mm (24 in) augered, cast-in-place piles. The rather rare opportunity to exhume a ACIP pile was valuable in further evaluating the effectiveness of the recently-introduced TIP technology and recognizing the importance of establishing the actual pile ground volume in the interpretation of TIP results. The project supports the efficacy in resisting superstructure loads using these types of piles in the geology of central Florida.

J. Turner and W. A. Billiet remind us of the importance of construction effects on foundation performance in their examination of geotechnical resistance of drilled shafts in Triassic Basin sedimentary rocks. Their study included high-quality, bi-directional load tests at three projects which were all located in a similar geologic setting. While two sites showed remarkably similar results and were consistent with predictions using well-established design procedures, the drilled shafts at the third site underperformed in comparison. The writers explain how the noticeable reduction in resistance was a result of differing construction practices.

A. Martinez and K. O’Hara describe the load-transfer behavior of model piles with bio-inspired surfaces tested using the UC Davis centrifuge. The surfaces were characterized by two different, directional-dependent set of asperities. In one direction, the set of asperities increased the interface friction along as compared to the reverse direction. The writers touch on possible practical applications for this research such as facilitating driving where the pile length is controlled by uplift and the reduction negative skin friction. Martinez and O’Hara won the 2020 DFI Young Professor Paper Competition Award.

The final paper of this Issue is a summary of an international survey recently executed by B. Fellenius. The results of a static loading test and soil exploration were distributed to volunteers along with a survey. A total of 52 submissions representing 20 countries were received. The survey included pile performance aspects such as load distribution, residual load, settlement, and possible performance enhancing adjustments. The results presented in

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this paper allow us to better understand and compare the rationale of professionals throughout the world concerning interpretation of pile loading test data and associated geotechnical exploration results.

Furthermore, we would like to invite you to visit the DFI Journal’s new web platform to be found at https://www.dfi-journal.org/. Our website provides an easy online access to all current and past journal content, included for free in your annual DFI membership. In addition, to the currently published volume, you can read ahead on our “preprint papers” page, which feature all upcoming publications ahead of print online. Please let us know if you can do anything to improve your experience on our Journal website.

Best regards,
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