

Cite this article

Kandasami S (2023)

Editorial.

Proceedings of the Institution of Civil Engineers – Construction Materials **176(3)**: 93,
<https://doi.org/10.1680/jcoma.2023.176.3.93>

Editorial

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Editorial

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Greetings to all our readers. As always *Construction Materials* seeks to publish original research and practice papers of the highest quality on procurement, specification, application, development, performance and evaluation of materials used in construction and civil engineering. The journal is as relevant as ever, is at the forefront of dissemination of cutting-edge knowledge and is committed to publishing excellent articles. Our peer-review system is completely online, processing of manuscripts is getting faster and the best of research in construction materials gets published – thanks to a fantastic editorial team.

This May 2023 issue of *Construction Materials* is a blend of four papers encompassing a structural study on resistance of low-rise vernacular masonry buildings to extreme floodings and three on concrete-related matters – two papers on constituent materials in concrete and the other on an electrical resistivity test method to determine the moisture diffusivity in concrete.

Platt *et al.* (2023) have detailed the development of a simple retrofit method using reinforced renders as an alternative to low-quality masonry units. Based on field study, the common failure modes were identified and, by experimental work, simple measures to improve the lateral load resistance were developed. This is high-impact research when viewed in a global social context where millions living in flood-risk areas across nations desperately need a structurally stable yet affordable house.

Metakaolin is a useful pozzolana for producing a durable high-strength concrete and, to add to the existing body of research, Mo *et al.* (2023) have studied its performance in cement paste using mortar samples and, by a combination of selected test methods, its mechanical performance as well. They recommend an optimum replacement of clinker in the range of 10% to 15% for excellent compressive strength at

early and later ages because of a refined pore structure – good for concrete durability.

Following on from metakaolin, the next paper, by Snehal and Das (2023), informs readers about the impact of direct addition of phase-change materials in cement mortar on thermal properties. Using both organic and inorganic phase-change materials the authors have noticed a significant reduction in surface temperature.

The last paper, by Alaswad (2023), deals with the electrical resistivity method to assess the moisture diffusivity in concrete, as movement of water within the concrete mass continues to fascinate researchers around the world. With the help of resistance measurements for differing ambient temperature and curing regimes, an exponential relation between moisture diffusivity and moisture content is derived.

I hope you enjoy reading this issue and encourage you to discuss all the papers further. Stay safe and healthy.

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