

Editorial

Leroy Gardner BENG, PhD, DIC, CEng, FICE, MStructE
Professor of Structural Engineering, Imperial College, London, UK

This year, *Structures and Buildings* moves from 10 to 12 issues per annum, and with an increased page count per issue. This expansion is in response to the growing interest in the journal and an increasing number of high-quality submissions, which is also reflected in the journal's 2-year impact factor, which just exceeded 0.6 for the first time. We also intend to maintain a number of themed issues throughout the year, which are around 50% longer than regular issues and have proved popular with readers. The Editorial Advisory Panel of *Structures and Buildings* continues to comprise a blend of academic and industrial experts in structural engineering, with international reach.

This issue contains four papers, all addressing various aspects of concrete structures. The first paper by Hellebois and Espion examines the behaviour of Hennebique reinforced concrete structural systems, which were prevalent in many European countries at the turn of the 20th century. The paper provides useful insights for the assessment of the load-bearing capacity of these structures and their strengthening and rehabilitation.

Concrete durability, particularly in the presence of chloride solutions is the subject of the second paper by Arya *et al.* Results showed that chloride penetration was particularly sensitive to effective porosity and drying conditions immediately prior to wetting.

The third and fourth papers investigate the behaviour of concrete structures subjected to extreme loading. The paper by Iqbal includes scaled experiments and numerical simulations of nuclear reactor containment structures under ground shock and air blast forces. A methodology to evaluate the blast response of such structures is proposed. The final paper by Halabian and Emami presents an investigation of the influence of foundation flexibility on the response of concrete framed structures under near-fault ground motions, and highlights the importance of soil-structure interaction effects.

As always, views and comments from readers on the papers in this issue are very welcome through discussion articles.