



Ian Sims
Chairman and
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Editorial

I. Sims

Our journal has now been established for three years and it is my honour to have taken over Chairmanship of the Editorial Advisory Panel from Professor Stephen Ledbetter. I should like to take this opportunity to congratulate and thank Stephen for his energy and good-humoured leadership in ensuring the successful launch and rapid growth in both circulation and reputation of this periodical. We aim to provide a regular blend of papers and articles that address a range of materials used in construction and also vary from detailed research reports to authoritative updating reviews and short, thought-provoking briefing notes.

Of course, we are living in difficult times and the economic downturn is being particularly felt in the construction industry. However, this does not mean we should stop planning and preparing for the inevitable upturn, which might well be led by enhanced construction activity, perhaps initially involving publicly funded projects. Nor does it mean we should moderate our determination to strive for the sustainable use of materials and the desire to ensure constant improvements in both performance and durability. *Construction Materials* will endeavour to make a modest contribution to these ambitions, with the help of our contributors and readers, and I should be very pleased to receive any suggestions for making our journal even more effective.

It is important that our journal attracts interest across the full breadth of construction materials, ranging from the major products that are frequently the subject of research, notably concrete, through a comprehensive list of traditional materials, including metals, timber, stone, glass and plastics, to modern or esoteric developments – often innovative composites or new applications for old solutions. As the new Chairman of the Editorial Advisory Panel, I would encourage readers to submit papers, especially dealing with material types or aspects that are not accommodated by other journals that specialise in particular materials.

This May issue of *Construction Materials* features five fascinating and useful papers by authors from six countries, which aptly illustrate the diversity and practicality of our journal. In many ways, the first paper, by Yasantha Abeysundara and Babel,¹ epitomises many of the aims of *Construction Materials*, addressing an important topical issue – sustainability – and daring to include consideration of a long-standing but now widely distrusted material – asbestos. The authors compare

asbestos-based and timber elements for ceilings in Sri Lanka, taking into account economic, environmental and social considerations; readers may be surprised by the outcome.

A second paper, by Venkatarama Reddy and Chander,² helpfully demonstrates the potential advantages of adding fly ash to mixtures for concrete blocks – both as a partial replacement for cement and also to act as a major component of the sand. The principles demonstrated by this study, enabling significantly improved block strength whilst using a waste product, will find applications well beyond the authors' native India. The theme of obtaining materials improvements whilst consuming waste products is continued in the next paper, by Petrella *et al.*³ from Italy, in which recycled waste glass is found to be a versatile granular material for use in cementitious mortars. Micropore structure (see cover image) of the recycled waste glass led to lightweight mortars with enhanced thermal and acoustic properties.

Two final papers in this issue address concrete durability, although in very different ways. Woo *et al.*,⁴ from South Korea, directly demonstrate how the durability of the facings in concrete-faced rock-filled dams can be improved, again employing an optimum content of fly ash as part of the binder, but also employing polypropylene fibres. A complete change of approach is represented by the fifth paper in this issue, by Nehdi and Bassuoni⁵ (from Canada and the UK, respectively), which employs the 'fuzzy logic' concept to evaluate concrete durability from accelerated test results. The potential offered by this system has been demonstrated in this paper using a model based on self-compacting concrete subjected to ammonium sulfate attack.

I hope you will enjoy reading the papers in this issue and look forward to hearing from readers and contributors.

REFERENCES

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