Stephen Ledbetter
Chairman Editorial Panel

Editorial

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This first issue of *Construction Materials* includes four papers and three briefings on a range of topics that begins to demonstrate the wide scope of this new journal. While some fields of civil engineering endeavour, and some materials, are heavily researched and published—some may claim researched-out—the performance of construction materials and systems attracts far less interest and coverage. However, as one property developer put it to me “My buildings don’t fall down, rather they generally fall apart prematurely, leak water and carry heavy maintenance and repair costs”. It is to redress this imbalance in publication and to encourage research in this field that *Construction Materials* has been launched. I have been fortunate in gaining the support of people of like mind with experience in this field who have now formed the editorial panel for this journal.

One concern of practitioners is the use of novel materials and systems that are not fully proven. The economic benefits or enhanced performance achievable with these materials and systems may be great but so too, in many cases, are the perceived risks. The editorial panel welcomes papers on methods of assessing new products and uses, and papers that establish standardised operating environments or performance requirements for the purpose of assessment.

In my own field of façade engineering, the pace of change over the last two decades has been dramatic. Supported by technological advances we now use nano-coatings to create self-cleaning glass, solar control glasses and the like. Pulled by environmental concerns we modify the constituents of polymeric seals and coatings and incorporate complex shading devices into facades. Driven by the market and the current fashion we use ever-larger pieces of glass and materials that range from titanium to terracotta. Above all, we have not only to understand these

new materials and techniques but also to understand how they may interact with each other and to predict the performance and service life of the system created.

It is not only the use of completely new materials that requires our attention. Natural building stones have been used for millennia using methods handed down from generation to generation, but those same stones perform very differently when used as a veneer supported by bolted connections to a light gauge metal frame. Advances of this sort require us to re-evaluate traditional materials in a very short time-scale and to develop suitable systems that incorporate them. In the case of stone veneers, there is a whole new technology of sealing and the need for cavity construction with breather membranes to prevent water ingress.

It is the intention of the editorial panel that *Construction Materials* shall be of use to practitioners as well as researchers. To this end the journal will contain short briefings that describe new technology, new standards and novel applications. I encourage practitioners to consider submitting a briefing or paper. The scope of the journal is broad so that it is of value to those involved in design and construction that integrates the many materials and systems used on a construction project. The journal will also contain book reviews.

The initial call for papers for publication in *Construction Materials* received a good response but we continue to call for papers. From time to time issues of *Construction Materials* will be dedicated to particular topics. Future issues will cover the use of natural stone and the use of glass; papers are particularly requested in these areas.