

Editorial

As the clock ticks by, and as we realise that we are entering the last few years of this century, one cannot but reflect at the momentous changes that have taken place in the world during the last ninety five years. It can escape no one's notice that the world we live in today is so vastly different to the world we inherited at the beginning of the twentieth century. Perhaps the most dramatic effect of the scientific and engineering achievements of the last few decades is the unprecedented social changes and societal upheavals that have revolutionised not only the human way of life but also our way of thinking. Continued population growth and evolutionary industrialization have resulted in an endless process of urbanization, and perhaps for the first time of this century, more people will live in and around our cities than in rural areas. This explosion into an urban way of life has put undue demand and pressure on the resources and supply of construction materials required to build this infrastructure needed to support life in these cities.

Along with this incessant and continuing demand on energy and resources, there has also been an explosion on published information on construction materials. We have, or perhaps should have, a better understanding now of material characteristics and material properties than we had ever before. Similarly, we have, or should have, a clearer picture of the behaviour of structural members made from the old and newer building materials. But, do we? Time and time again, there are instances of design and construction brought to our notice where there is a noticeable and glaring absence of a thorough appreciation of how material characteristics influence structural behaviour, not merely at the time of, or immediately after, construction, but over a long period of time during which a structure is expected to give trouble-free service life. How do we reconcile this lack of an integrated material/structural design strategy required to build durable structures with the enormous amount of scientific data on material behaviour and structural performance that is readily available in literature? On the other hand, how do we overcome this apparent lack of ability on the part of material scientists and engineers to integrate their research knowledge in order to forge an integrated approach to design and construction?

These are difficult questions to answer, and probably, there are no single solutions to offer. These thoughts have, however, been very much on the minds of the Editorial Board of this Journal, and as a result of various discussions, a number of changes have been introduced. First, from 1996, the Journal has been expanded into six issues per year. We hope that this will reduce the time between the receipt of a paper and its eventual publication. Secondly, the scope and coverage of the Journal has been expanded to include all aspects of material behaviour and

structural performance. The Editorial Board hope that by widening the spectrum of topics covered in the Journal, authors will be persuaded to cross not only the boundaries between materials and structures, but also between laboratory and field research, as well as between disciplines. Finally, it is our intention to produce more theme issues of the Journal. These theme issues may be based on invited topics; on the other hand, they may be based on a collection of papers, all devoted to a particular theme. It is hoped that in this way, the Journal can achieve its aims and objectives better, and work towards a more interactive and inter-disciplinary dissemination of information to those who require it.