Editorial: Communicating research impact

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It is sometimes said that what distinguishes engineering research from science research is that while the latter may be curiosity-driven, the former should be for a purpose. Put another way, the outcome of a piece of engineering research should lead to a clear benefit – not necessarily immediately, because further developments may be needed before tangible benefits become available, but there should be a clear view that something desirable that is not currently possible could now be done as a result of the successful completion of the research. Put even more simply, how does the piece of research respond to the ‘so what’ test: ‘You have completed this research – so what?’

The *Magazine of Concrete Research* is, of course, keen to publish those contributions to research within the areas of concrete materials and concrete structures for which there are clear, significant and worthwhile answers to the ‘so what’ question. These can, of course, take many forms, with improved understanding and fresh insights being just as valuable as the more obvious improved performance and simpler procedures or more economic construction. For those of us involved in engineering research, having a clear view of why a piece of research is needed and how its successful completion will result in useable outcomes should be a guiding principle in identifying, conceiving, conducting and – most importantly – reporting research.

This journal receives far more papers for consideration than are published. Many of the unsuccessful submissions are far too narrow in their view, simply reporting the authors’ own findings, with no attempt to explain how they could contribute to a worthwhile advance in the subject area. If authors cannot explain the significance of their work and the ways in which its findings actually provide some benefit, why should readers devote time to studying the paper? Even the most fundamental of papers, concerned with improved methodology, exploratory

results or advancing a new hypothesis, should be able to set the content in the context of how such work addresses current limitations and how its outcomes could form the basis for identifiable improvements.

Thus, intending authors should plan their paper in such a way that ‘communicating research impact’ clearly features. Doing this should assist them in testing whether they have devised an arrangement that does not stop at mere reporting, but which communicates the importance and the value of what they have done. It is, surely, no coincidence that the award for the best paper published in the *Magazine of Concrete Research* last year went to a contribution that showed how to extract much more value from a large number of previously conducted series of laboratory tests by first assembling and synthesising all the results and then using the findings as the basis for several predictive equations and procedures that enabled the full benefit of all the testing to be utilised in practice. While it might not have been as glamorous or obviously novel as an improved theoretical approach that permitted previously intractable features to be included or some laboratory testing using novel techniques and/or more sophisticated monitoring of performance, it was clearly felt to combine mastery of the subject matter with a meticulous approach and a clear view of what was needed to effect advances in practice.

We all know that there are fashions in research (remember ‘industrial collaboration’, ‘blue skies’, ‘multidisciplinary’ and ‘novel’), and ‘impact’ is very much today’s buzzword. But shouldn’t we be pleased that it plays to what should be an inherent strength of the best engineering research? This journal wants to play its part in publicising the best concrete research and enhancing its impact, but we rely on our contributors to recognise and address this important feature. All authors are advised to make sure their submissions give adequate attention to the communication of research impact.