Editorial

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An integral part of research and development is the measurement of whatever effects and properties there may be – in other words, a product, process or concept has to be quantified in order to make comparisons with the norms of the day. Such measurements allow us to make decisions and categorise responses, so permitting judgements about alleged better understanding or improvement to a product or function to be made.

It sometimes happens that a previous test method or instrument is not capable of making the measurements required and a new means of measuring has to be devised, be it in terms of chemical analysis, mechanical characteristics, rheological behaviour, etc. For instance, measuring autogenous shrinkage, the surface texture and retained appearance of concrete, the dissolution of latent hydraulic materials, the dynamics of frost and freeze–thaw attack, humidity profiles in drying concrete and the reliable determination of sulphate concentrations are just a few examples where understanding requires methods of quantification. The spectrum is open ended.

Test procedures are relevant to all aspects of concrete at every stage of its usage and study – from the moisture contents of the sand and aggregate prior to their use, when concrete is placed and in the plastic state, to when it has hardened and indeed throughout its life. The latter is most important and perhaps the

least known. Planning for maintenance and pre-empting failure requires sensitive measurement of subtle changes and their recording.

Research projects sometimes require modified or new methods but their disclosure can be regarded as secondary to the main aim of the project and so are not highlighted in resulting publications. More disclosure would be beneficial.

Some years ago, the *Magazine of Concrete Research* contained regular and separate features on testing and test methods. This created correspondence between researchers that aided the adoption of new or revised procedures.

However, for reasons that are unclear, this is no longer the case. We wish to change that and encourage researchers and practitioners both in academia and industry to submit details of methods, equipment and procedures that they have devised or techniques they have evaluated in the field of concrete technology.

In order to determine if this suggestion has an appeal to the readership, we therefore request that authors please submit to the journal office (margaret.tomlinson@icepublishing.com) a 200-word email covering a new or modified test method that has been used.