

EDITORIAL

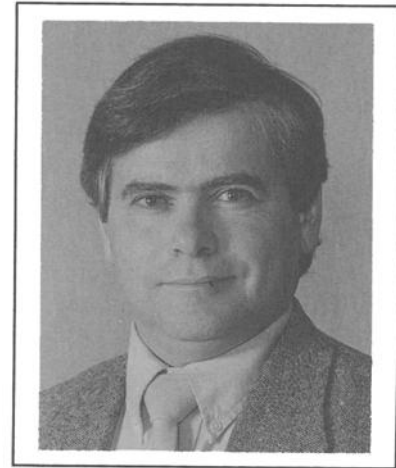
Due to a publishing glitch, the December 1994 issue was printed with several errors which had been previously corrected. You should have since received an errata sheet. We apologize and steps have been taken to prevent a reoccurrence.

I would like to thank the cochairs Steve Kosmatka and Ara Jeknavorian and the authors of the C-9 symposium on Determination of the Chemical and Mineral Admixture Content of Hardened Concrete for agreeing to have their proceedings published in this issue of the Journal. This helped out greatly with the unfortunate recent lack of manuscripts received. *Cement, Concrete, and Aggregates* also reaches a larger audience than typical special technical publication (STP) issues, and hopefully other symposia chairs will continue this trend of publishing in the journal.

This leads me into the next item. I have asked the major sponsoring committees for permission to expand the editorial board to include international members. The purpose is two-fold. ASTM is often accused, in the international cement and concrete community anyway, of only representing North American interests and ignoring what is happening in the rest of the world. I don't agree with this viewpoint but I have heard it from many sources.

Also, I would like CC&A to become a stronger focus for papers, regardless of origin, related to testing and standardization. There are several new journals on the market, so unless a journal fills a specific niche, it won't survive. Every year, there are numerous research programs where test methods are found to be either suitable or deficient or where new or alternate test methods are evaluated, but this information is not always coming to the attention of the ASTM standardization committees. If we can attract these papers to CC&A, I think they are far more likely to receive the attention of ASTM subcommittees. The ASTM committees are trying to develop the best standards by consensus and if international activities are ignored, it is not deliberate. Sometimes our international members bring these items to our attention, but many subcommittees don't benefit from active international members. Hopefully, an international editorial board will broaden the input of relevant papers to CC&A (By the way I'm talking, you'd think Canada was the 51st state!).

Finally, my previous editorial on alkali-aggregate testing received some attention. (This shows that someone is reading them.) Parts of it were quoted in a recent National Aggregates Association newsletter. As well, Bill Hime wrote to me, saying that I had omitted any comment on the new uranyl acetate gel fluorescence test. It slipped my mind because it's not one that I have great first-hand experience with nor have I seen it sprayed on our local bridges (probably from fear of our Ministry of the Environment who would likely take a dim view of the practice).



R. Doug Hooton

My understanding of the purpose of this test, originally developed at Cornell University by Dr. Hover and Dr. Natesaiyer and used in the recent SHRP program, is to provide highway engineers with a quick field method of identifying whether a structure has undergone some alkali-aggregate reaction. This method is detailed in the Handbook for the Identification of Alkali-Silica Reactivity in Highway Structures, SHRP Report SHRP-C/FR-91-101. The danger that I see with this concept is that it assumes that "good" aggregates are inert, and as Bryant Mather has often said, "All aggregates are ert." In other words, often some minor signs of reaction can be found in almost any structure but in most cases this does not lead to deleterious expansions or cracking. Therefore, minor evidence of alkali silica gel does not necessarily imply that there is or will be a problem with a structure, and the interpretation of results could be suspect. The question then is, if a structure has deteriorated, did ASR cause the problem or is it just confusing the issue? Also, engineers with experience using this test have also told me that pozzolans such as fly ash and silica fume will also result in fluorescence. As well, ettringite, a sulfoaluminate mineral apparently can fluoresce. A competent petrographer should be able to distinguish these interferences by other means, but a highway field crew couldn't and may jump to the wrong conclusion. Forensic analysis is rarely simple!

However, in defense of the test, a major problem faced by state highway agencies is that before the SHRP program, many didn't know that ASR problems existed in their jurisdictions. At least this test has the potential for allowing field inspectors to bring a suspected ASR case to the attention of the agency. Hopefully, these agencies would then involve a trained concrete petrographer for a more thorough examination, testing, and confirmation before raising the alarm.

—R.D. Hooton, *Editor-in-Chief*