

PROFESSOR DIAMOND'S SUMMARY OF PROCEEDINGS

A REPORT

Professor Diamond expressed the view that although some of the papers presented at this Symposium deviated from the strict subject title of the meeting, a wealth of new technical information had been presented which indicated healthy and flourishing research in this field of study.

The papers could perhaps be grouped into the following general areas of study: the effects of alkalis on concretes, the effects of alkalis in cements, the study of the potential reactivity of aggregates, consideration of the detailed reaction mechanisms, consideration of the effects of pozzolans on reactivity, field reports and case study investigations, reports of remedial work and reviews of the subject such as that presented by Vivian.

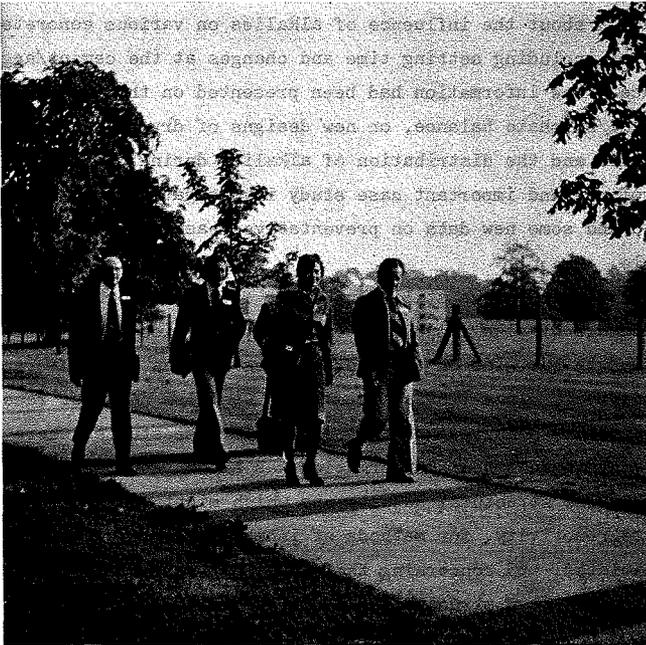
Delegates attending this Symposium had received much new information about the influence of alkalis on various concrete properties including setting time and changes at the cement/aggregate interface. New information had been presented on the importance of the alkali/sulphate balance, on new designs of dry process cement manufacture and the distribution of alkalis during manufacture. A number of new and important case study investigations have also been reported and some new data on preventative measures has become available.

However, there was still a need for further information concerning the influence of alkalis on the various properties of concrete, not just strength but also on other properties such as set, interaction with additives, glass fibres etc. There was also need for research on preventative measures and for reports of case studies where remedial measures had been taken. Information was also urgently needed concerning the structural adjustments which might result from alkali-aggregate reactivity, for methods of inhibiting or slowing reactions once initiated, and concerning the cosmetic treatments which might be applied to affected structures.

CONTRIBUTION TO DISCUSSION

Mr. K. Brittain

May I please make one comment concerning Dr. Diamond's excellent review of the proceedings of this symposium and the tasks to be dealt with, I suggest that as well as case studies, we must have an assessment of the frequency of damage, either structural or superficial to buildings in each area. If national guidance is to be given, the scale and emphasis must relate to the anticipated need.



Delegates at C. & C. A.