The book reaches the high standard of presentation that one has come to expect from this publisher even though it is prepared from camera-ready copy supplied by the authors and consequently the papers vary in typeface and some contain typographical errors. This high standard is attributable to the excellent and clear instructions for

authors, to the quality of which I, as a contributor, can testify.

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Concrete in hot climates

M. J. Walker (Editor)

Spon, London, 1992, ISBN 0 419 180907, £47.50

The high temperatures and low humidities experienced in hot climates, combined with often aggressive soils, pose particular problems for concrete and it has been long recognized that its performance often falls short of what is desirable. This book contains the papers presented at the 3rd International RILEM Conference on Concrete in Hot Climates, which was held in Torquay, England in September 1992, and organized by RILEM Technical Committee 94-CHC and the Concrete Society. The aim of the conference was to update and revise the early RILEM work in this field to note progress made over the 17 years since the second conference.

The volume contains 22 papers, grouped into the effects of environment, the performance of concrete, and construction in hot climates. In the environmental group are papers discussing the effects of high temperatures and the evaporation of surface moisture, while the second group mainly deals with research on the properties of concrete. The group dealing with construction matters include questions of supervision, quality control, curing, durability, formwork and some case histories. It was clearly difficult to group the papers logically, as some of them could fit adequately into two or even all three sections.

The papers vary in treatment from those that are informative only to those that report the results of research programmes. The latter are of specialized interest and deal with pozzolanic materials, slag materials, high-strength concrete, strength prediction, and a novel method of pre-

cooling fresh concrete with liquid nitrogen. Occasionally the significance of results is reduced through a choice of experimental conditions that are not severe enough. For example, one questions the value of results obtained after 40°C curing *under water* for application in hot climates, and the performance of curing membranes in practice will be different from that indicated by laboratory tests at 20°C. The group of papers dealing with aspects of construction contain a wealth of practical information and experience embodying both principles and practice, and discuss the results of applied research and investigations of real structures. Applications of protection methods, such as cathodic protection, make their appearance here.

The book is attractively laid out and presented, but since it was prepared from camera-ready copy provided by the authors it suffers from variations of style, typeface and layout, as well as occasional typographical errors, despite the best efforts of the editor and publisher. However, the diagrams and the few photographs are clear and the index, based on keywords identified for each paper, is adequate. Overall, the book makes a useful contribution to the subject and will be welcomed by those working in the field of concrete technology in hot countries. Its authoritative information will make it strongly recommended reading on hot-weather concreting throughout the world.

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Size effect in concrete structures

H. Mihoski, H. Okamura and Z. P. Bazant (Editors)

Spon, London, 1994, 0 419 19040 6, £69

The Japan Concrete Institute, in conjunction with a number of co-operating international bodies, organized a Symposium in Sendai, Japan, 31 October–2 November

1993. The organizers list the purposes of the meeting: to discuss the experimental aspects of the size effect in concrete structures, the physical mechanisms that are

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responsible for size effects, theoretical models and analytical techniques, and the consequences of research findings to design. This volume contains the principal lecture, 39 contributed papers and an annotated bibliography, 1970–1993, containing 230 references.

The coverage of the subject is very thorough and the individual papers are clearly written. Those who are responsible for the design of large structures, or who seek to push concrete design into new areas, will wish to

consult this book. It will, no doubt, also exert a formative influence on specification, design codes and test methods.

The reproduction is good for camera-ready copy, although it would have benefited from better discipline on typefaces and sizes.

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