

# Book reviews

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*Owing to the shortage of space in the Magazine and the large number of books received, it has not been possible in this issue to provide comprehensive reviews: it is hoped, however, that the reader will find the following summaries useful.*

## **Über das Kühlen von Beton**

(The cooling of concrete)

by Dr-Ing. Wolfgang Mandry

Published by Springer-Verlag, Berlin, 1961. pp. v, 146. Price 28.50 DM.

In the first two sections of the book, the author discusses the influence of the type of cement on the temperature rise in mass concrete and gives calculation procedures. He then suggests practical methods of initial cooling and systems of pipe cooling using refrigerating plant. The difficult calculations involved in the assessment of the final temperature as a result of natural and artificial cooling are illustrated by examples and compared with measured values: the many graphs will enable the formulae to be used in practice without recourse to involved mathematics.

## **Elastic analysis of shells by electronic analogy**

by C. B. Wilby and N. W. Bellamy

Published by Edward Arnold (Publishers) Ltd, London. 1962. pp. viii, 56. Price 30s.

Electronic analogue computers are not normally used in the design of shells, but the design work required by conventional methods can be reduced by their use. By adapting Schorer's and Jenkins' types of equation to the analogue computer and by developing techniques for shell edge conditions, the authors show how shells can be designed by this method. Its advantage is that optimum sizes are easily obtained, so simplifying the designer's problems.

## **Shell research**

**Proceedings of the Symposium on shell research, Delft, August 30—September 2, 1961**

Edited by A. M. Hans and A. L. Bouma

Published by North-Holland Publishing Company, Amsterdam, 1961. pp. 364. Price 86s.

Most of the papers are concerned with experimental investigations of models and full-scale thin shells in prestressed concrete, timber, brick, steel and plastic. The influence of shape and edge conditions on the stress distribution, and the effects of temperature changes, shrinkage and creep on the strength and stability under various loading conditions, are examined and discussed. The papers are presented in English, German or French, each with a short abstract in English, but English is the predominant language used in the book.

## **Simplified calculation methods of shell structures**

**Proceedings of the Colloquium on simplified calculation methods of shell structures, Brussels, September 4-6, 1961**

Edited by A. Paduart and R. Dutron

Published by North-Holland Publishing Company, Amsterdam, 1961. pp. xi, 529. Price 100s.

This book is similar in its presentation to "Shell research". The colloquium was divided into five sessions and covered the following topics: general methods available for all kinds of shells and for surfaces of alternate Gaussian curvature; methods for surfaces of zero Gaussian curvature; methods for instability problems. Although it is often obvious that the English text was edited abroad, it provides, together with its companion volume mentioned above, a useful source of up-to-date information.