well delay corrosion, but not prevent it. An interesting area of research is highlighted on the use of mixtures of silica fume, cement, fine sand, polymers and inhibitors for coating rebars to protect them before and during use. It would have been timely for some mention of paint-on anode systems and cathodic protection and the section dealing with surface protection of concrete could have been usefully expanded.

There are a few minor typographical errors in the text and the photographic quality is not good. How-

ever, it is always worthwhile for somebody of lengthy experience, such as the author, who has spent her working life in industry (Wimpey Laboratories), to divest themselves of a lifetime's involvement with concrete in this way. We should all take note.

P. C. HEWLETT

(Peter Hewlett is Managing Director of Cementation Research Ltd and a visiting Industrial Professor in the Department of Civil Engineering at the University of Dundee.)

Nordic concrete research. Publication No. 5

Edited by The Nordic Concrete Federation

Norske Betongforening, Kronprinsensgate 17, 0251 Oslo 2, Norway, December 1986. 234 × 169 mm. pp. 230. Reproduced typewriting, paperback. ISSN 0800-6377. Price NOK 150,—excluding air mail postage.

This book is the latest annual volume presenting a compilation of papers on research projects within the field of technology and structural design of concrete, carried out or concluded during 1986 in the five Nordic countries. The 17 papers were selected by the Research Committee of the Nordic Concrete Federation and, as may be expected, cover a wide range of topics. Briefly, these include: roller-compacted concrete; high-strength beams; chloride binding in cement paste; joints in precast hollow core panels; calculation methods for combined thermal and mechanical loading; limitation of crack widths; joints and details in a prefabricated column-slab system; Danish approach to concrete durability problems; testing compactability of no-slump concrete; compatibility of binder and

superplasticizer in high-strength concrete; shear capacity of prestressed beams in regions of plastic hinges; analysis and design of r.c. shell structures; durability of cement-bound composites; non-linear 3-D analysis of r.c. structures; non-linear analysis of r.c. structures using quadrilateral membrane elements; bond between reinforcement and concrete in vacuum-treated zones; service design life with regard to frost resistance.

The presentation is functional but adequate and all the papers are in English. The previous four annual volumes are still available from the Nordic Concrete Federation each priced at NOK 150,- and a leaflet is available which lists the papers and authors in the books.

J. N. CLARKE

Partial prestressing, from theory to practice

Editor: M. Z. Cohn

Dordrecht, Boston, Lancaster, Martinus Nijhoff Publishers, 1986. Published in cooperation with NATO Scientific Affairs Division. NATO Advanced Science Institutes Series: Series E, Applied Sciences, No. 113 a, b. Vol. 1, pp. xix, 405; Vol. 2, pp. xii, 426. 245 × 165 mm, casebound. Text typeset, line diagrams and tables reproduced from typescripts. ISBN 90 247 3372 3. Price Dfl395, US\$186.50, UK £125.25.

This important contribution to the literature of prestressed concrete is the outcome of a week of seminars and informal discussions by an international gathering of research workers and practitioners at a NATO-sponsored Advanced Research Workshop on partial prestressing held in Paris in June 1984. The need for the meeting had become evident a year previously at the international symposium on Non-linearity and Continuity in Prestressed concrete at Waterloo University, and a debt of gratitude is owed to Professor M. Z. Cohn, not only for his initiative but

also for a great amount of detailed work which has born fruit in the present publication.

The stated objective of the Workshop was a move towards the unification of the subject, particularly by the reconciliation of conflicting American and European views. A second aim was to bring theoretical advances on partial prestressing within the grasp of engineering practice, and it was thirdly intended to provide the background for the development of guidelines on the use of partial prestressing in conformity with existing structural concrete standards.