grams using these methods have been successfully applied in over fifteen cases. No further work is planned. The data are available on request from the authors. Statistical data are listed in Table 2.

Table 2. *Analysis of normalized structure factors*

	Theoretical centric space group	$B=2{\cdot}83$ Å^2	$B=1{\cdot}78$ Å^2
$\langle\|E\|\rangle$	0·798	0·776	0·867
$\langle\|E^2\|\rangle$	1·000	0·996	1·067
$\langle\|E^2-1\|\rangle$	0·968	1·038	0·934
$\|E\|>3{\cdot}0$	0·27	0·46	0·49
$\|E\|>2{\cdot}0$	4·55	4·60	4·11
$\|E\|>1{\cdot}0$	31·73	33·28	34·11

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Notes and News

Announcements and other items of crystallographic interest will be published under this heading at the discretion of the Editorial Board. The notes (in duplicate) should be sent to the Executive Secretary of the International Union of Crystallography (J. N. King, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England).

Delays in Dispatch of *Journal of Applied Crystallography*

Messrs Munksgaard wish to apologize to subscribers for the delays, very considerable in some cases, in the dispatch of the journals of the International Union of Crystallography. The delays arose during transfer of the subscription records to modern electronic data-processing equipment; after the initial troubles this should result in improved service.

Some adjustment will be made to the air-freight surcharge in 1975, in order to compensate regular subscribers in North America for the failure to provide the prompt delivery that they could expect from this service.

Book Reviews

Works intended for notice in this column should be sent direct to the Book-Review Editor (M. M. Woolfson, Physics Department, University of York, Heslington, York YO1 5DD, England). As far as practicable books will be reviewed in a country different from that of publication.

Introduction to the properties of crystal surfaces. By J. M. BLAKELY. Pp.xi+261, Figs. 92, Tables 9. Oxford: Pergamon Press, 1973. Price £3.50.

This book, directed at the newcomer to the field of surface science, sets out to give him an understanding of basic theories and measurements in a subject which is common to many fields of scientific endeavour. Thus a knowledge of surface structure and processes is of fundamental importance for the crystal grower creating new surfaces on the one hand and the corrosion scientist who sees his surfaces destroyed on the other. Between these extremes there are many other kinds of activity, typified by that of the chemist who seeks to understand the working of his catalyst.

Professor Blakely assumes in his reader a knowledge of thermodynamics and atomic and solid-state physics to a first degree level, and on this basis has devised a coherent treatment of the subject matter. In the early part of the book there is a comprehensive discussion of the macroscopic description of surfaces in thermodynamic terms, dealing with concepts such as surface energy and phenomena such as equilibrium forms and facetting. This is followed by a microscopic description in terms of atomic arrangements, which moves from ideal to realistic surfaces and a discussion of important surface defects. A further chapter deals with theoretical models of electronic structure and behaviour at surfaces. In developing this treatment in the first half of the book the author uses simple theoretical models of various phenomena to good effect, and supports the description with well chosen experimental results.

The bulk of the second half of the book is taken up by an account of experimental methods. The various microscopies, spectroscopies and other techniques which form the tools of the surface trade are examined in detail. In this connexion it is perhaps surprising that the author restricts to a minimum, and quite purposely, his description of the ultra-high-vacuum environment within which many of the techniques he describes have to be employed. A brief description of typical hardware for this purpose, at the same level as the rest of the text and giving an indication of the importance of such quantities as residual gas composition for example would have been useful for the reader new to the field. However this is a minor criticism, as appropriate references are given.

In the final chapter, concerned with atomic processes occurring at surfaces, there are accounts of the mobility of surface atoms and adsorption phenomena which bring the reader to the end of his journey. One imagines that he will judge the journey well worth while for he has been brought a considerable way along the road by this very good book, which is also excellent value for money.

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The use of the scanning electron microscope. By J. W. S. HEARLE, J. T. SPARROW and P. M. CROSS. Pp.x+278, Figs. 140, Tables 12. Oxford: Pergamon Press, 1972. Price £8.80.

Although written with the needs of the practising microscopist in mind this