warded by 1 November 1977 to Dr E. A. Giess, AACG Awards Committee, IBM, T. J. Watson Research Center, Yorktown Heights, NY 10598, USA.

Current Awareness Profile on Crystallography

A new publication entitled *Current Awareness Profile in Crystallography* is being published fortnightly by the Chemical Information Center, which is part of the Department of Chemistry of Indiana University. Each issue represents a computerized search of two consecutive issues of *Chemical Abstracts*, using the Chemical Abstracts Condensates tapes. Marketing restrictions on the use of these tapes currently prevent sales of the profile in some countries in Europe and elsewhere. The profile excludes all references to citations from *Acta Crystallographica*, since inclusion of these citations would have increased the cost of the profile by about 40% and it was felt that most potential subscribers to the profile would scan *Acta Crystallographica* in any case. However, the profile does include citations from the *Journal of Applied Crystallography*.

For subscribers in the USA the annual subscription is US $37.50. Further information may be obtained from the Chemical Information Center, Department of Chemistry, Room 003, Indiana University, Bloomington, Indiana 47401, USA.

Proceedings of the Sagamore V Conference

The proceedings of the Sagamore V Conference on charge, spin and momentum densities, which was held in Kiljava, Finland, 16–20 August 1976, are about to be published in *Physica Scripta*. Orders for single copies should be addressed to *Physica Scripta*, Institute of Physics, PO Box 530, S-751 21 Uppsala, Sweden. The price is 50 Swedish Crowns. Conference participants and subscribers to *Physica Scripta* will receive copies automatically. The conference was organized with the assistance of the Commission on Charge, Spin and Momentum Densities of the International Union of Crystallography.

It is planned to hold the next conference in the series, Sagamore VI, during the period 19–25 August 1979 at Mont Tremblant, Quebec, Canada, under the chairmanship of Professor V. H. Smith, Department of Chemistry, Queen's University, Kingston, Ontario, Canada K7L 3N6. Anyone wishing to have his name added to the Sagamore mailing list, in order to receive news of this conference and other projects of the Commission on Charge, Spin and Momentum Densities, should write to Dr M. J. Cooper, Department of Physics, University of Warwick, Coventry, Warwickshire CV4 7AL, England.

Book Reviews

Works intended for notice in this column should be sent direct to the Book-Review Editor (J. H. Robertson, School of Chemistry, University of Leeds, Leeds LS2 9JT, England). As far as practicable books will be reviewed in a country different from that of publication.

Advances in X-ray analysis. Vol. 19. Proceedings of the 24th annual conference on applications of X-ray analysis, Denver, Colorado, 6–8 August, 1975. Edited by *R. W. Gould, Charles S. Barrett, John B. Newkirk* and *Clayton O. Ruud*. Pp. xvi + 784. Dubuque, Iowa: Kendall/Hunt, 1976. Price $37.00.

This tome contains fifty-two papers, of which forty-six are devoted to topics in X-ray spectroscopy and six are concerned with X-ray diffraction, together with an appendix on some parameters for calculating X-ray absorption coefficients. It is not an easy book to read because of the mathematical expressions involved in some papers. Nevertheless, the scientific content is varied, the overall presentation is of high standard, and the papers contain many valuable references, so that it should appeal to a wide range of practising X-ray analysts.

The forty-six papers on X-ray spectroscopy are divided into six headed sections. The first of these contains fourteen papers on mathematical correction procedures which suffer a little from the repetition of material, but the reader may forgive this minor irritation when considering the immense value of individual contributions. The third section contains fifteen papers on environmental analysis, and the fourth section contains three papers on biomedical applications. Both of these sections will be found invaluable to workers in the two fields, and the concentration of effort on small-sample analysis should be of interest to workers in other disciplines. The second section of five papers on phenomena and applications might well have been integrated with the fifth section of five papers on laser analysis and the sixth section of four papers on soft X-ray and surface analysis under one heading, such as 'techniques'. However, this comment reflects on aesthetic feeling and should not deter the prospective reader in any way.

For the user of crystal-dispersive X-ray fluorescence spectroscopy the picture is one of consolidation rather than of technical advance, thereby implying a confidence which in itself might be regarded as significant advance. The energy-dispersive technique continues to stimulate interest because of the advantages in simultaneously displaying wide spectral regions, and despite the somewhat limited resolution of present equipment. It seems possible that excitation by monochromatic sources will find increasing use in both crystal-dispersive and energy-dispersive analyses because of the reduction of unwanted background and also the advantages gained in performing matrix corrections as compared with techniques using polychromatic excitation sources. However, the ultimate goal, an absolute method of instrumental element analysis, does not yet seem to be near at hand despite the advances made in computer control.

The six papers on X-ray diffraction are incorporated into one section. The first two papers deal with environmental analyses and particular attention is given to problems associated with determining asbestos levels. The next two papers are concerned with analysing residual stress in metals, one using a position-sensitive X-ray detector together with computer automation, and the other considering the separation of anomalous and true macrostresses which arise in uniaxial plastic deformation. The fifth paper deals with automating the study of orientation by back-reflexion Laue photographs, and the final paper is concerned with peak height as a measure of integrated intensity for quantitative X-ray powder-diffraction phase analyses. At first sight the X-ray diffraction content of this book may seem to be outweighed by the comparatively large number of papers on X-ray spectroscopy. However, there is much here to interest the discerning crystallographer who can draw parallels between analytical procedures with an eye to future developments.

Finally, although no special search has been made for errors or omissions (particularly amongst the complex mathematical expressions), there is an obvious gap at the bottom of p. 628. Occasional infelicities of language have been noted, but these can be ignored by most readers.

One puzzling feature of this book is that the bottom quarter of every page is completely blank. It can be assumed from the variation in type styles that printing was achieved by direct reproduction of typescripts. Even so, it should have been possible to arrange matters to avoid what seems an unnecessary waste of paper.

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Applied minerology. Vol. 9. Structural clay products. By *W. E. Brownell.* Pp. ix + 231, Vienna: Springer, 1976. Price (cloth) DM 98.00.

This is a book for the engineer and builder about the application of clays in the manufacture of tiles, bricks, pipes and similar structural products.

Practical electron microscopy in materials science. Vol. 4. Typical electron microscope investigations. Par *J. W. Edington.* Pp. vi + 112. Macmillan, 1976. Prix £9.00.

Le quatrième fascicule de la monographie de J. W. Edington (21 × 29 cm, 112 pp.) est comme les précédents remarquablement illustré. L'ensemble de ces albums offre un intérêt surtout 'naturaliste' car de nombreux cas y sont présentés mais les lecteur n'y trouvera pas forcément la résponse à son propre problème. Il me paraît difficile de remplacer un traité démonstratif par une liste d'exemples. La démarche logique consisterait à aller du cas particulier au cas général sans laisser au lecteur la tentation de généraliser des conclusions tirées d'un ensemble de cas particuliers.

La rigueur dans les définitions ou le vocabulaire employé dans cette monographie pourrait aussi être améliorée soit dans le domaine de la cristallographie géométrique soit dans l'étude des corps amorphes, soit encore dans l'emploi des termes comme contraste de phase ou contraste de sous focalisation.

En conclusion, ce quatrième fascicule, comme les précédents, est un complément très utile aux quelques excellents ouvrage existant (malheureusement souvent difficiles à trouver). Il permet d'apporter des précisions par son illustration, lors de discussions ou de conférences. Peut-être peut-il également, par son échantillonnage, mettre le spécialiste sur la voie de la réponse à ses problèmes.

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