Anyone wishing further information should contact the Executive Secretary, International Union of Crystallography, 13 White Friars, Chester CH1 1NZ, England.

Notes for Authors

An updated version of 'Notes for Authors' has been published recently in *Acta Crystallographica* Section A [*Acta Cryst.* (1978). A34, 143–157]. Copies of these notes may be obtained from any of the Editors or the Technical Editor.

Polarization ratio for X-rays – A survey by the Commission on Crystallographic Apparatus

The Commission is conducting a survey of measured values of the polarization ratio for crystal-monochromated X-ray beams. A notice summarizing the definition of this ratio and mentioning techniques for its measurement has been published recently in *Acta Crystallographica* Section A [*Acta Cryst.* (1978). A**34**, 159–160]. The objective of the survey is to establish the range of values observed in practice and all interested scientists are invited to participate.

Book Review

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. 20. Edited by *H. F. McMurdie, C. S. Barrett, J. B. Newkirk* and *C. O. Ruud*. Pp. xvii + 604. Plenum, 1977. Price $42.50.

This volume contains papers presented at the 25th Annual Conference on 'Applications of X-ray Analysis' held at Denver in August 1976. In contrast to the trend in recent years, the emphasis of the meeting was on powder diffraction methods and particularly on quantitative measurements, signified by the presence of H. F. McMurdie of the JCPDS as conference and by invited papers from two of the founders of quantitative diffractometry, L. E. Alexander and L. K. Frevel.

As may be expected a number of papers deal with computer searching of the JCPDS file and other data sources and one reports the results of a round-robin comparing this with hand searching, on a group of test mixtures, mineral, organic and inorganic. The results indicate that, even among the 'upper crust' laboratories taking part in the round-robin, laboratory practice and the measurement of *d* values were not all they might have been; searching is better able to cope with poor data than is the computer but if only poor data is available then additional information on elemental composition vastly improves the computer performance.

A large group of papers deals with X-ray diffraction stress analysis, an encouraging proportion of them making measurements for practical purposes in the real (commercial) world. A comparison by Kirk and Caulfield of the effectiveness of fitting either a cubic or a quadratic to step counts, for peak location, is valid in other fields as well as stress analysis.

Energy-dispersive methods of X-ray analysis offer such attractions in increased speed that they come under discussion in all sections of the meeting, but it is in X-ray fluorescence that they look most immediately promising. A paper on analysis of nickel ores shows that acceptable accuracy can be achieved.

In the instrumentation section a new proportional single-wire detector offers the possibility of simultaneous registration of the whole diffraction pattern with considerably better resolution than is available from energy-dispersive systems; here, possibly, will be found the best compromise between speed and resolution.

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