

X-ray and other (*e.g.* electron) diffraction films can be eliminated by using the device shown in Fig. 1.

This device could also be useful in demonstrating some elementary techniques in crystal structure analysis (*e.g.* determination of unit-cell parameters, the space group, or positional parameters through measurement of intensities).

The principle of recording the coordinates of spots is demonstrated by a simplified example. As is shown in Fig. 1, a transparency with dots is used, as a simple representation of a diffraction photograph. This is placed

on an opalescent screen which is illuminated from below. A mirror image copy of a coordinate chart (obtained by copying the original chart in reverse) is placed behind a mirror of 20–25% transparency, and illuminated with a fluorescent lamp mounted on top of the mirror. By looking through the mirror, the image of a selected dot is seen superimposed on the chart at the intersection of the grid lines. After recording the coordinates of the spot, the observer is left unobstructed to record its intensity by placing an intensity scale adjacent to it.

Further details of construction and operation of the above viewer may be obtained from the author.

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Meetings

List of 'Summer' Schools in 1970

The commission on Crystallographic Teaching of the International Union of Crystallography decided to compose a list of all known summer

schools to be held in 1970. In September and at the end of October, the secretary of the commission asked crystallographers representing several

geographical or linguistic areas for information.

Many replies have been received although it proves to be difficult to ob-

List of (Summer) Schools on Crystallography 1970

Country	Town	Date	Subject, information address, fee, etc.
France	Orléans	1–15 July	<i>Crystal Optics of Absorbing Materials</i> Secr. Dr. Lévy, Lab. de Cristallographie et Minéralogie, Faculté des Sciences, 9 Quai S. Bernard, Tours 16–26, Paris, France.
Italy	Parma	7–19 Sept.	<i>Direct and Patterson Methods of Solving Crystal Structures</i> Postdoctoral (NATO) course. Limited financial assistance available. Inf.: Prof. M. M. Woolfson, Dept. of Physics, Univ. of York, Heslington, York YO1 5DD, England.
	Venezia	20 Aug.–1 Sept.	<i>Protein Structure and Function</i> Prof. S. Pontremoli, Istituto di Chimica Biologica, Univ. di Ferrara, 44100 Ferrara, Italy.
Japan		August	<i>Domestic</i> summer school. Place and details to be determined in April.
Spain	Barcelona	December	<i>Métodos de análisis estructural</i> (in Spanish) Inf.: Prof. M. Font-Altaba, Dept. de Cristallographia, Universidad de Barcelona, Barcelona 7, Spain.
United Kingdom	Harwell	6–17 April	<i>Electron microscopy. Probe-analysis and X-ray Diffraction</i> Address for both: Education & Training Centre Building 455, A.E.R.E., Harwell, Didcot, Berkshire, England.
	Cambridge	29 June–11 July	<i>Experimental X-ray Crystallography</i> Inf.: Dr. W. A. Wooster, Brooklyn Cryst. Labor., Bottisham, Cambridge.
	Leicester	13–17 July	<i>Crystallographic Computing</i> Inf.: Mr. N. A. Curry, School of Math. Computing and Statistics, Leicester Polytechnic, The Newarke, Leicester, England.
U.S.A.	Cambridge	20 July–1 August	<i>Tensors and Group Theory applied to Crystallography</i> Inf.: Dr. W. A. Wooster, Brooklyn Crystal. Labor., Bottisham Cambridge, England.
		4–18 April	<i>X-ray Diffraction Methods and Applications</i>
		4–8 April 11–18 April	Session I: Basics. Session II: Topography. Inf.: Prof. R. A. Young, School of Physics, Georgia Inst. of Technology, Atlanta, Georgia 30332, U.S.A. Tuition: \$250 per session.
	Buffalo (N.Y.)	June or August	<i>Roswell Park Mem. Inst. Educ. Progr.</i> Ask for Crystallography Scholarships available. Inf.: Dr. E. A. Mirand, Ass. Dir. Educ. Affairs, Roswell Park Mem. Inst., 666 Elm Street, Buffalo, N.Y. 14203, U.S.A.

List of (Summer) Schools on Crystallography 1970 (cont.)

Country	Town	Date	Subject, information address, fee, etc.
U.S.A.	Fayetteville (Ark.)	1 June-21 August	<i>Summer Structural Chemistry Program</i> Participants will do own structure analysis. Stipends of N.S.F. College Teacher Res. Particip. Prog. are available for U.S. participants from small colleges. Inf.: Dr. A. W. Cordes, Direct. Chemistry Dept., Univ. of Arkansas, Fayetteville, Ark. 72701, U.S.A.
	New Brunswick (N.I.)	1-5 July	<i>Application of X-ray Diffraction in Material Science</i> Espec.: Techniques which reveal lattice defects. Inf.: Prof. S. Weissmann, Dept. of Mech. and Mat. Science, College of Engineering, Rutgers State University, New Brunswick, N.I. 08903, U.S.A. Tuition: \$175 (?).
	Brooklyn (N.Y.)	8-18 Sept.	<i>Intensive Course in X-Ray Diffraction</i> Powder in single-crystal patterns, topography, structure and texture, line broadening and stress analysis. Inf.: Mrs. D. Cattell, Dept. of Phys., Polytechn. Inst. of Brooklyn, 333 Jay Street, Brooklyn, N.Y. 11201, U.S.A. Tuition: \$350.

tain full information at this early date. The present list gives information available on 1 January 1970.

The list has been sent to all Members and Consultants of the Teaching Commission and will be sent at the

convenience of the Bureau of the Union to all National Committees. Organizers of summer schools, or people who know of summer schools, other than listed, are requested to send their information to one of the Mem-

bers or to the secretary of the Teaching Commission:

Prof. Dr. G. D. Rieck
Technical University
P.O.B. 513 Eindhoven
Netherlands

Forthcoming Events*Conference on Applications of X-ray Analysis. Denver, Colorado, 5-7 August 1970*

The nineteenth annual Denver Conference on Applications of X-ray Analysis will be held on 5-7 August 1970 at the Albany Hotel, Denver, under the co-chairmanship of Dr E. C. de Wys and Prof. J. B. Newkirk of the University of Denver. Papers dealing with any aspect of X-ray analysis are being solicited. Titles and abstracts are due 10 April 1970 (three copies). Abstracts should be about 300 words. Final typed manuscripts (2 copies) are due 13 July, and should be accompanied by the author's written consent to publish in the copyrighted proceedings of the conference, which will appear as *Advances in X-ray Analysis*, Vol. 14. Further information from:

Prof. John B. Newkirk
Metallurgy and Materials
Science Department
University of Denver
Denver
Colorado 80210
U.S.A.

Fifth National Conference on Electron Probe Analysis. New York, N.Y., 22-24 July 1970

The conference will be held at the Waldorf-Astoria Hotel, New York. The topics of the technical sessions will include: Electron Probe X-ray Analysis, Techniques, Methodology, Instrumentation. Principles of Electron Scattering and X-ray Generation. Quantitative Correction Procedures, Soft X-ray Emission and Micro-Analysis, Computer Applications to Microprobe Data, Kossel Techniques, Scanning Electron Microscopy, New Methods and Instrumentation in Micro-Analysis, Applications.

Abstracts should be sent to:

Mr J. W. Colby
Bell Telephone Laboratories,
Inc.
555 Union Boulevard 22-01041
Allentown, Pa. 18103
U.S.A.

Further information is available from:

Mr Paul Lublin
General Telephone and
Electronics Laboratory
208-20 Willets Point Boulevard
Bayside, New York 11630
U.S.A.

American Crystallographic Association Meeting. Ottawa, Canada, 16-21 August 1970

The meeting will be held at Carleton University, Ottawa. Abstracts should be sent to:

Dr Maria Przybylska
Chemistry Division
National Research Council
Ottawa
Canada

Further information is available from the Secretary:

Dr Walther Roth
General Electric Research
Laboratories
Schenectady
N.Y. 12301
U.S.A.

Second International Conference on Small-Angle X-ray Scattering. Graz, Austria, 26-29 August 1970

Information is available from the Chairman:

Prof. O. Kratky
Institute for Physical Chemistry
University of Graz
A-8010 Graz
Austria