crystallographic and the optical principles are explained where necessary, and references to other books conclude the various chapters.

Roughly the book is divided in equal halves, the first dealing with the determination of crystal structure and the second with the results obtained.

In the first half comparison with the former edition shows an increase in the space devoted to Weissenberg diagrams (including an appendix on their indexing) and to the methods of Fourier analysis and synthesis. In view of the great advances made in this field it would seem proper even further to enlarge this section. This would make it easier for the student to penetrate to the topical problems of structure determination.

In the second half of the book, dealing with crystal chemistry, a more radical overhaul of the first edition might have been expected. Not that the matter retained has become superfluous; but very little is to be found of the modern concepts of the chemical bond, the establishment of which is one of the main interests in present-day structure determinations. It is true that this discussion requires as a prerequisite some general description of the wave-mechanical explanation of the types of chemical bond; but this may be assumed as given to a student in his chemistry course just as the general notion of interference is presumed to be known to him from his physics course. The linking-up of the X-ray evidence with the results of wave-mechanical theory explains the interest taken in structure determinations nowadays, and to open this vista to the reader would be well worth some twenty

In spite of these desiderata, to which may be added the wish for slightly better quality of half-tone reproductions, the reviewer considers this to be a most useful, handy and well-balanced book. He is glad to learn that an English edition is well under way.

P. P. EWALD

Polytechnic Institute of Brooklyn 99 Livingston Street Brooklyn 2, N.Y., U.S.A.

Problemas de Cristallografía (morfologica y estructural). By J. Garrido. Pp. 149 with 81 figs. Madrid: Ediciones Hispano-Argentinas (distributed by Insula, Carmen 9, Madrid). 1949. Price 30 pesetas.

In his introduction the author says 'The usefulness of problems in the teaching of crystallography can never be too much insisted upon'. Every teacher will agree with that statement. In this little book Dr Garrido has followed up his text-book (with J. Orland) Los Rayos X y la Estructura fina de los Cristales (see Acta Cryst. 1, 48) by providing a very useful collection of problems. These range over a wide field of crystallography-morphology, geometry of Bravais and reciprocal lattices, calculations, transformation of axes, stereographic and gnomonic projections, point-group and space-group symmetry, indexing of X-ray photographs and structure factors. Of these problems seventy are worked out completely and another fifty are left, without answers, for the student to solve. In addition the book is provided with a glossary of terms and a list of the equations used. The diagrams are good and the material is clearly laid out. This book will play a part in the development of the teaching of crystallography in the Spanish-speaking countries, but it deserves also to be widely used in all countries where crystallography is taught. N. F. M. HENRY

Department of Mineralogy and Petrology Cambridge, England

Acta Cryst. (1950). 3, 323

International Union of Crystallography

The audited accounts of the Union for the calendar year 1949 are printed below.

Acta Crystallographica Account for the year ended 31 December 1949

	\mathfrak{t} s. d.	\mathfrak{L} s. d.		\mathfrak{L} s. d.	\mathfrak{L} s. d.
Publication Expenses:	2382 1 11		Subvention from U.N.E.S.C.O. Subvention from U.S.A. Sources	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Printing and Binding Circularizing, Postage, In-	2362 1 11		Subvention from C.S.A. Sources	100 13 4	1490 1 6
surance and Sundries Publishers' Commission on	77 11 4		Trade and General Subscriptions, Volumes 1 and 2	1941 4 5	
Production and Sales	619 7 7	3079 0 10	Sale of Single Copies and Reprints	554 3 6	
Editorial Honoraria		429 12 6	printer		2495 7 11
Secretarial Wages and National		000 10 10			
Insurance Office Rent, Postages, Telephone,		203 13 10			
Stationery, Printing and Sundry					
Expenses Depreciation of Office Equip-		106 16 9			
ment		1 5 0			
· Balance carried forward to 1950		165 0 6			
		£3985 9 5			£3985 9 5

International Tables Account for the year ended 31 December 1949

		£ s. d .			\mathfrak{L}_{-} s. d .
Contribution towards General Expenses	of		Subventions from U.N.E.S.C.O. for 1949	•••	2977 13 4
Commission		$250 \ 0 \ 0$			
Balance carried foward to 1950	•••	2727 13 4			
		£ $2977 13 4$			£2977 13 4

Structure Reports Account for the year ended 31 December 1949

Editorial Honoraria Assistants' Salaries Abstractors' and Office Expenses General Expenses of Officers attending Confe		£ 1132 300 218 £ 1650 ccount £ 42	0 0 for s.	0 0	Subventions from U.N.E.S.C.O. for 1949 Subventions from U.S.A. Sources for 1949 Balance carried forward to 1950 e year ended 31 December 1949 Subscriptions from Adhering	£ 661 83	14	d. 1 8 d.	£ 745 904 £1650 £	0 19 0	d . $\begin{array}{c} 9\\ 3\\ \hline 0\\ \hline \end{array}$
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Liabilitica	Balanc	e Snee	t as	at	31 December 1949 Assets						
Liabilities	£ s. d	. £	ε.	d.	Asses	£	s.	d.	£	ε.	d.
Sundry Creditors: Cambridge University Press (as estimated by the Press Syndicate) (Note. At 31 December 1949 there were some 12,598 unsold copies of Parts 1 to 6, Volumes 1 and 2, of Acta	710 0 :				Cash in Hand Cash at Bank Investments (at Cost): £2000 2½ % National War Bonds 1952/54 £2000 2½ % National War Bonds 1954/56 £2500 2½ % Defence Bonds	2052 2070 2500	7		2 4077 6622	9 10	9 6
Crystallographica in the Publishers' hands)					Structure Reports Commission:				0022	10	ð
Office Expenses Commissioners of Inland Revenue	14 14 11 14				Assistants' Salaries paid in Advance Subscriptions for 1949 Outstanding				100	0	0
Acta Crystallographica Account: As at 1 January 1949 Surplus of Income over Ex-	3631 17		8	3	U.S.Ā Spain Office Equipment at Cambridge	225 75			300	0	0
penditure for the year to date International Tables Account As at 1 January 1949 Surplus of Income over Ex-	1500 0	- 3796 0	17	11	and Belfast: As at 1 January 1949 Sale of Equipment at Belfast 15 0 0 Depreciation 1 5 0		10		1.		0
penditure for the year to date Structure Reports Account As at 1 January 1949 Less Excess of Expenditure over Income for the year to date	2342 12 904 19	- 4227 4 3				16	5	0	11	5	U
General Fund Surplus of Income over Expenditure for the year to date		915 £11114	8	5				;	£11114	1	0

N.B. No decision has yet been received from the Revenue Authorities on the question of Liability of the Union to British Income Tax. Provision has been made in the above Accounts for possible liability to British Income Tax on Investment Income only.

We have prepared the foregoing Balance Sheet and Accounts from the Books and Vouchers produced to us and we certify these Accounts to be correct and in accordance therewith, to the best of our knowledge and belief.

Sussex House Hobson Street Cambridge, England 23 January 1950 SLATER, DOMINY AND SWANN
Chartered Accountants