

**CRYSTALLOGRAPHY, AN
OUTLINE OF THE
GEOMETRICAL
PROPERTIES OF CRYSTALS**

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Crystallography, an outline of the geometrical properties of crystals by T. L. Walker

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T. L. WALKER

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CRYSTALLOGRAPHY

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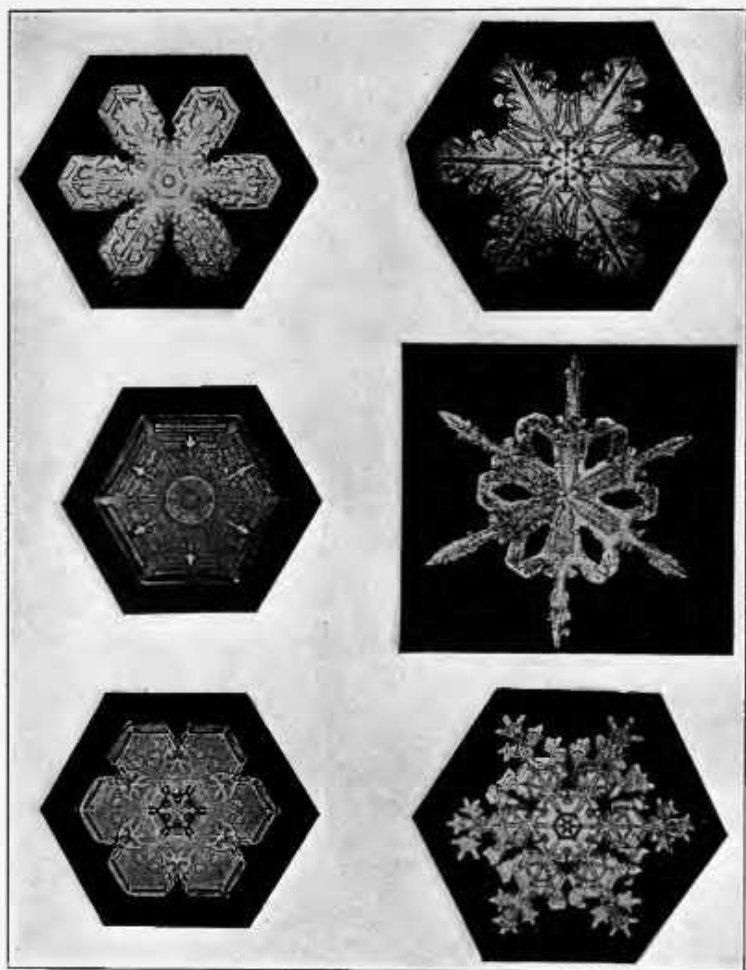


Fig. 1

(After Chamberlin and Salisbury)

CRYSTALLOGRAPHY

AN OUTLINE OF THE GEOMETRICAL PROPERTIES OF CRYSTALS

BY

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PREFACE

DURING the past twenty years Dr. Victor Goldschmidt of Heidelberg has done much to make crystallography an attractive subject. His development of the two-circle goniometer, the gnomonic projection and a new system of symbols which can be read directly from the projection has largely contributed to this end. For many years the writer has used in his classes the methods of Goldschmidt with gratifying results. The chief motive in writing this book arose from the desire to have in the English language a connected elementary statement of crystallography from this point of view. It is hoped that the present work may be generally useful, not only as a presentation of the geometrical properties of crystals, but also on account of its following in outline the newer methods so splendidly developed by Goldschmidt. I fear I may be criticised for my frequent repetition of some of the fundamental ideas such as are usually only slowly comprehended by the student. My defense lies in the fact that it is necessary for all but the exceptional student.

The extracts from papers on crystallography contained in the last chapter should serve to indicate to the student the chief problems of crystallography as well as the methods of solving them.

The writer acknowledges his great indebtedness to Dr. Goldschmidt for assistance in many ways; to Professors E. H. Kraus, T. C. Chamberlin and R. Salisbury for permission to use figures contained in their works; to colleagues who kindly consented to the publication of extracts of their papers in the last chapter and to Professor A. L. Parsons and H. V. Ellsworth for assistance in proof-reading and in many other ways.

UNIVERSITY OF TORONTO,
June, 1914

T. L. WALKER

CONTENTS

CHAPTER	PART I.	PAGE
PREFACE		v
I. GENERAL PROPERTIES		
I. GENERAL PROPERTIES		1
II. FORMATION OF CRYSTALS		
II. FORMATION OF CRYSTALS		3
From solution		3
By sublimation		4
From fusion		4
III. CHEMICAL PROPERTIES		
III. CHEMICAL PROPERTIES		6
IV. MATHEMATICAL CHARACTERISTICS		
IV. MATHEMATICAL CHARACTERISTICS		10
Gnomonic projection		10
Regular arrangement of projection points		12
Formation of crystal symbols		13
Measurement of crystals		16
(a) The contact goniometer of Carangeot		17
(b) Wollaston reflecting goniometer		18
(c) A modern reflecting goniometer		19
(d) Two-circle contact goniometer		19
(e) Two-circle reflecting goniometer		21
Preparation of gnomonic projection from measurements		22
Mathematical determination of crystal symbols and constants		25
Stereographic projection		28
Co-ordinate representation of face direction		29
Derivation of Miller's index symbols		31
General properties of polyhedra		32
V. SYMMETRY OF CRYSTALS		
V. SYMMETRY OF CRYSTALS		35
Classes of polyhedra involving only the following elements of symmetry: planes, centre and diad, triad, tetrad and hexad axes		38
Crystal systems		39
VI. PHYSICAL PROPERTIES		
VI. PHYSICAL PROPERTIES		41
VII. THEORY OF THE INTERNAL STRUCTURE OF CRYSTALS		
VII. THEORY OF THE INTERNAL STRUCTURE OF CRYSTALS		43

CHAPTER	PART II.	PAGE
VIII. CUBIC SYSTEM		47
Symmetry of the cubic system		47
Standard orientation of cubic crystals		47
Axes of reference		48
Classification of all possible planes intersecting three equivalent axes at right angles to one another		48
Cube		50
Rhombic dodecahedron		51
Octahedron		51
Tetrahexahedron or pyramidal cube		51
General symbols		52
Hexoctahedron		52
Trisoctahedron		53
Trisitetrahedron		53
Combinations of crystal forms		54
Limiting forms		55
	HEMIEDRAL CLASSES OF THE CUBIC SYSTEM	
Plagiohedral hemihedral class		57
Pentagonal hemihedral class		59
Diploid		60
Pyritohedron		61
	TETRAHEDRAL HEMIEDRAL CLASS	
Tetrahedron		63
Trigonal tristetrahedron		64
Tetragonal tristetrahedron		65
Hextetrahedron		65
	TETARTOEDRAL CLASS	
Projections		69
IX. TETRAGONAL SYSTEM		70
	HOLOHEDRAL CLASS	
Symmetry		70
Standard orientation		71
Axes of reference		71
Classification of all planes with reference to their inter- section of the tetragonal axial cross		72
Pyramid of the first order		72
Ditetragonal pyramid		73
Pyramid of the second order		74
Basal pinacoid		75
Prism of the first order		76
Prism of the second order		76
Ditetragonal prism		76