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## Preface to the Seventh German and Third English Edition

*Kristallographie* has now appeared, after 32 years, in its seventh edition (*Crystallography* in its third). The book has changed greatly over these 32 years, and, I hope, for the better! I have always been very keen that it retain its character as a basic text, suitable for use at an early stage in a course of study. I also attach great importance to the exercises – now more than a hundred in number – which give many possibilities for deepening the study.

In the last few years, I have become increasingly aware that an increasing number of my readers are undertaking the study of crystallography independently. It thus seems sensible to assist these readers – and not only them – by including material designed to assist their study. Even in the first edition (1976), I included a pattern from which to build a model of a crystal, with instructions on how to build others. Unfortunately, this proved to be too difficult for many, so now there are 22 patterns included, which have now been used in Münster for several decades. Genuinely three-dimensional models are of great assistance in determining symmetry, indexing, recognizing forms, and assigning the crystal system and point group of a crystal. Further, they help to give the three-dimensional training that is so important in crystallography.

On the other hand, it is difficult to give simple instructions for the building of three-dimensional models. It is, however, my experience that, with practice, drawing the parallel projections of structures can also help the student to appreciate their spatial nature.

This book deals with the fundamentals of crystallography. Today, of course, there are many websites available with help in learning more about the subject. A good place to begin is the website of the International Union of Crystallography (IUCr) [[www.iucr.org/education/resources](http://www.iucr.org/education/resources)] with many helpful suggestions.

I am much indebted to Professor Elke Koch and Professor Heidrun Sowa for helpful discussion of symmetry problems. I am also very grateful to Dr. R.O. Gould, who has again translated the revised text with great expertise.

Crystallography

An Introduction

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