
To this reviewer, McLachlan’s book appears to be what has been sought as a textbook for a graduate course in which the laboratory exercises involve solution of crystallographic problems by x-ray diffraction methods. This book contains all of the fundamental theory essential to the solution of an original problem involving structure determination. Surprisingly, however, certain data (for example, $f$ values) are omitted.

Following a discussion of the reciprocal lattice, the experimental methods are given in logical order, beginning with that of von Laue. Chapter 8 discusses the computational aids that are often used to handle the extremely tedious calculations. The appendix, “Special Recording Techniques,” describes some tricky devices of very limited utility.

The author has done an outstanding service for the beginner, but the value of this work is by no means limited to the novice. The book is excellently illustrated with diagrams and halftones.

DUNCAN McCONNELL