

and the initiation of direct phasing applications to small proteins. The review by Fortier summarizing developments in the direct phasing efforts in macromolecular crystallography is thorough, balanced, and up-to-date. The reader may find Bricogne's presentation of the maximum entropy method a bit too mathematically technical and involved, but one need only refer to the author's background articles in *Acta Crystallographica* to realize that great pains have been taken to simplify and refocus the material in an attempt to make it more palatable to the uninitiated.

One of the main features of interest in the book is the discussion of capabilities of various direct-methods phasing programs and recent modifications that improve their performance. The programs described include MULTAN, SHELX, MITHRIL, XTAL, SAPI, MICE, DIRDIF, SIR, and SIMPEL. These are compared as a group in a chapter by Gilmore and in varying detail by their developers throughout the volume. It is somewhat surprising that the majority of the expositions on these programs are not accompanied by meaningful structural test examples on which calculations have been performed and evaluated, the presentations of Sheldrick, Schenk, and Beurskens being notable exceptions.

In format, the quality of the papers

varies according to what their authors submitted, and it is apparent that a number of them were not carefully proofread. It is fortunate that the mechanical defects do not seriously affect the quality of the science presented.

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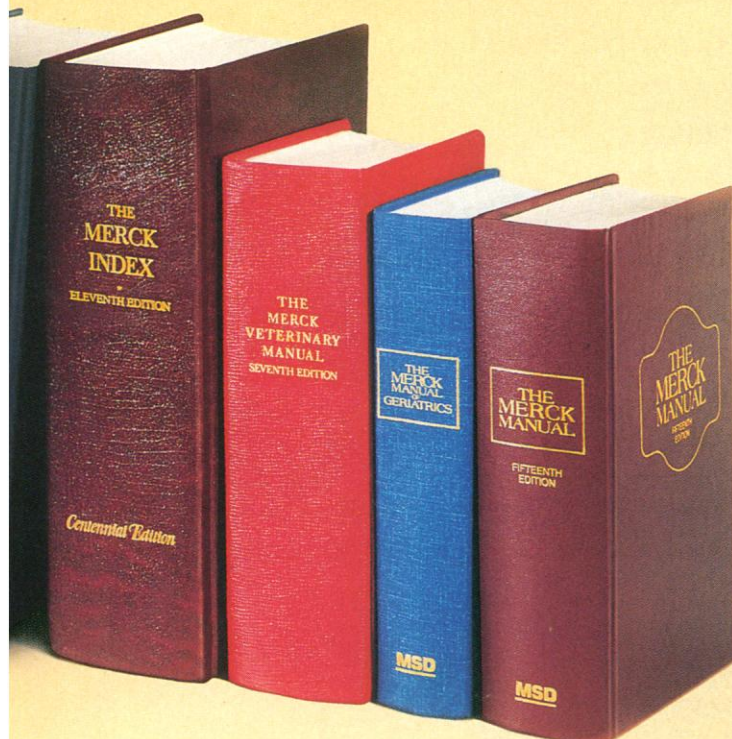
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