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Despite these criticisms, the revision of *Vacuum Technique* has its merits. Its value is enhanced by the many tables, most of which have been brought up to date, the extensive list of references, and a comprehensive index. The book reads easily, the print is good, and illustrations are of high quality.

**Röntgenstrahlinterferenzen** (3rd ed.). By Max von Laue with the collaboration of E. H. Wagner. 476 pp. Akademische Verlagsgesellschaft mbH, Frankfurt am Main, Germany, 1960. DM 75.00. Reviewed by Nicholas Chako, Queens College.

THE new edition of von Laue's classic book on x-ray interference does not differ very much from the previous edition published in 1944. A few changes have been made and some new sections have been incorporated, such as a mathematical analysis, using Fourier transforms, of a simple one-dimensional model of diffraction and interference properties of so-called paracrystals, which form the intermediate stage between the fluid and crystal state of matter. This model of a paracrystal consists of stacked  $n$ -parallel slabs of thickness  $a_n$  and separation distance  $y_n$ . These parameters obey a probability law and are independent of the enumeration index  $n$ . The calculated curves of the intensity distribution and of the function representing the probability measure of the distance between the centers of two atoms in a monatomic fluid show a surprising similarity to the experimental curves obtained with liquid mercury. The chapter devoted to the dynamical theory of space-lattice interference has been extended, especially the sections treating the problem of interference in the region of anomalous absorption.

It was felt that the new advances made since the last edition, especially in crystal structure and x-ray crystallography, deserve separate treatment rather than sketchy exposition in a volume of this size.

The printing as well as the quality of the paper of this edition are of high order and the binding is well done. In spite of the high price, von Laue's new edition should be a valuable reference book in the library of every specialist and scientist interested in this branch of physics.

**X-Ray Microscopy and X-Ray Microanalysis.** Symp. Proc. (Stockholm, 1960). A. Engström, V. Cosslett, H. Pattee, eds. 542 pp. American Elsevier Publishing Co., Inc., New York, 1960. \$20.00. Reviewed by Joseph G. Hoffman, University of Buffalo.

THE editors have arranged the 73 papers of the symposium into three major sections: x-ray microabsorption, x-ray microemission and x-ray microdiffraction. Within these three major subdivisions the material is carefully organized so that it has the makings of a systematic text. And indeed the table of contents and author and subject indices make this a kind of reference treatise rather than merely the report of a sym-