probably would require additional clarification by the instructor.

The problem lists are adequate, and answers are given to the odd problems. A reasonable number of illustrative examples to the theory are given, and ample material occurs on identities and on trigonometric equations.

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Tables of Integral Transforms. vol. II. Based in part on notes left by Harry Bateman. Bateman Project Staff, A. Erdélyi, Ed. McGraw-Hill, New York–London, 1954. xvi + 451 pp. $8.

This is the final volume of the Bateman Manuscript Project's tables of definite integrals. The first part of volume II continues the plan initiated in volume I [reviewed in *Science* **120**, 302 (1954)] of listing as many integrals as possible in the notation of transforms. The transforms tabulated here have never been tabulated extensively before: they are transforms in which the kernel is a Bessel function of some kind (not only the Hankel transform), fractional integrals, Stieltjes transforms, and Hilbert transforms. The second part of the volume contains assorted definite integrals, most of which are not in transform form. These integrals involve orthogonal polynomials, gamma functions and their relatives, Bessel functions and hypergeometric functions. As in volume I, there is an appendix, giving the notations used, so that each volume can be used independently.

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Monomolecular Layers. A symposium presented at the Philadelphia meeting of the AAAS. Harry Sobotka, Ed. AAAS, Washington, D.C., 1954. vii + 207 pp. Illus. $4.25; members, $3.75.

The recent progress in the study of monomolecular layers is aptly presented by current workers in the field. Included are "Modern film techniques and their application to biochemical reactions," by Hans J. Trurnit; "Determination of molecular weights of proteins by the horizontal surface balance," by E. Mishuck and F. Eirich; "Mechanical properties of the surface films on aqueous solutions of detergents," by A. P. Brady and A. G. Brown; "Study of adsorption at a solution-air interface by radiotracers," by J. K. Dixon, C. M. Judson, and D. J. Salley; "Deposited radioactive monolayers," by D. E. Beischer; "Hydrophobic monolayers and their adsorption from aqueous solution," by E. G. Shafrin and W. A. Ziswan; "Review of the properties of films at oil-water interfaces," by E. Hutchinson; "Chemical reactions of sample and mixed monomolecular layers," by Harry Sobotka and Shirley Rosenberg; and "Chemical reactions and electric potential in monolayers," by E. Havinga. Most of these sections are well balanced and illustrated summaries of talks presented at the symposium at the Philadelphia meeting. Each presents a well-balanced summary of historical background, experimental technique, practical applications, and current theory involved. Sufficient detail is given to convince the reader of the widespread utilities of film studies in the fields of physical, colloid, organic, and analytic chemistry, in addition to biochemistry and chemical engineering.

The new tools, including a recording ellipsometer, an automatic dipping device for building up a uniform series of step gages, a new horizontal surface balance accurate to .01 dyne, and techniques for the isolation of films directly from pure molten compounds are adequately illustrated. The authors all succeed in pointing out the potential usefulness of further study of two-dimensional chemistry.

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Das Glas im chemischen Laboratorium. Fritz Friedrichs. Springer, Berlin, ed. 2, 1954. viii + 144 pp. Illus. DM 16.50.

A chemical laboratory without glassware is unthinkable. Nevertheless, the average chemist knows very little about the substance glass, its history and manufacture. Fritz Friedrichs, who can look back on 40 years of activity in one of the world's leading manufacuring centers of laboratory glassware, makes an attempt to remedy this situation and introduces his book with a brief history of glass through the ages.

As a descendant of the founder of the first Thuringian apparatus glass manufacturing company and a partner of the leading house of Greiner and Friedrichs, Wertheim (Main), the author is uniquely qualified to give us a lively picture of the development of apparatus glass and the manufacture of different laboratory equipment. Guided by an authority, the reader learns what types of glasses are available and their main properties as far as they are interesting to the chemist. Even though we buy our laboratory equipment and take it for granted that our pipettes, burettes, thermometers, and so forth, are properly calibrated, it is of interest to learn how other instruments are made, which tools the glass blower uses, and what training he has to qualify him for the job.

After World War I the apparatus division of the German Chemical Society activated a program which led to a gradual standardization of the equipment and its dimensions. For example, from the 119 different types of apparatus for developing gases in the laboratory only a few were chosen to remain on the market. The decision as to which types were essential could be made only by carefully analyzing the advantages and disadvantages of each type of apparatus, both for the user and the manufacturer. In order to help the scientist select the proper condenser, suction pump, absorption flasks, and so forth, the author critically discusses their particular features.

The book is well written and has excellent pictures