

## BOOK REVIEW

**Photocells and Their Application.** V. K. ZWORYKIN AND E. D. WILSON. *John Wiley and Sons*, New York, N. Y., Second Edition, 1932, xv + 331 pp. (180 Figures). \$3.00. This book is an extensive revision of the former edition published in 1930. More than one hundred and twenty pages have been added, by including five new chapters and adding considerably to the existing chapters. Important new data have been interspersed throughout the text, the value of the book thus being considerably enhanced for the average reader.

Works on photoelectricity seem prone to one of two extremes. Either so much information is omitted that the book seems sketchy and of limited value, or so much detail is incorporated that reading becomes difficult unless one is an authority on the subject. It seems to the reviewer that the authors have avoided both extremes in the second edition and have produced a work that is very readable in addition to its being useful for consultation with its very complete references and bibliography.

This edition follows the same general arrangement as the previous one. The first two chapters on history and general theory are substantially unchanged. The third chapter on photosensitive films is new and constitutes a short résumé of this important subject. The next two chapters describe the materials and apparatus used and the technic followed in constructing the vacuum and gas-filled cells whose characteristics are described in the succeeding two chapters. Photoconduction and photovoltaic cells are treated much more fully than in the previous edition, where they were limited to one short chapter, now expanded into two. The new dry or *sperrschicht* cells, which have attracted so much attention recently, are discussed under the subject of voltaic cells. The three chapters, ten to twelve, lead the reader from considerations of photo-output and amplifying tubes and the optimum output of various types of cells, through the problem of amplification and carrier modulation by various means. The remaining seven chapters constitute a comprehensive review of such applications as special light-sensitive devices, photometry and colorimetry, sound movies, facsimile transmission, television, miscellaneous uses, and probable future advancement.

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