cards or standards provided by various segments of industry such as the textile, printing ink, or paint industries, are also described. The glossary of color terms at the end of Part II will be most useful in that it collects in one place the terms and definitions for the most important color concepts used in American industry.

Part III, "The Physics and Psychophysics of Colorant Layers," thoroughly explores techniques for determining or forecasting the gloss and opacity or hiding power of colored layers. The major portion of this part is given over to the Kubelka-Munk analysis as applied to dyed textiles, paints, papers or pigmented plastics. Several mathematical tables necessary for such analytical solutions are included in the appendix which should prove useful to those interested in these materials.

There is an excellent selection of references which includes the important work in the field for those who will wish to pursue the subject further, and also a fine index.

Members of the SMPTE may be particularly interested in the section entitled "Reproductions of Pictures in Color," in which Dr. Judd outlines the general problem and also demonstrates by a practical example the use of the CIE tristimulus values and the color triangle to select practical working primaries, and thence to the determination of camera sensitivities for a typical color television system. This reviewer was particularly impressed by Dr. Judd's reasonable approach to the old question of the importance of art versus science in color reproduction. To quote:

"An important question in reproduction of pictures in color is color fidelity — how faithfully the colors of the original scene are reproduced. This is not the whole of the problem of producing pictures that the public will like. We know too little about what makes us see objects and people from the mosaic of colored patches presented to the eye from real scenes to state with confidence that a completely faithful reproduction (not yet achieved, by the way) would always look good. In fact, there are some who take the position that perfect color fidelity usually leads to poor pictures and should be avoided on purpose. They say that intentional systematic deviations from fidelity can make the picture better than the original itself. This is adding art to science. But even if you intend to try to improve on the original scene, it is a great help to have a faithful reproduction to start with. You could not get very far with intentional improvements if the basic color fidelity of the picture was so poor that it would not yield any reds, for example, in the picture, or so poor that greens in the original scene were rendered as reds in the picture. So, reasonably faithful reproduction of colors must be built into any reproduction system, even if the final aim is to improve artistically upon the original scene by intentional deviations from color fidelity."

With the increasing emphasis on color in motion pictures and television, an understanding of this concept is important.

This book is highly recommended to all interested in color and its industrial applications. —*L. M. Dearing*, Technicolor Motion Picture Corp., 6311 Romaine St., Hollywood 38, Calif.

Journal on Microfilm

Microfilm editions of the *Journal* of the SMPTE are now available to members and subscribers from University Microfilms, Ann Arbor, Mich., which records more than 700 periodicals. *Journal* Volumes 54 and 55 (1950) are priced at $4.15 and Volumes 56 and 57 (1951) cost $4.00 (this is the year that the *Journal* switched to the two-column format, with a saving in pages). If there were enough demand for it, University Microfilms would make positives for the years 1941–49. The present price for such positives is about a half cent per page, but this would be reduced with a larger number of customers to share the cost of the negatives. Readers may address inquiries to University Microfilms, 313 North First St., Ann Arbor, Mich.