Douglass C. Harvey has been appointed Manager, Commercial and Professional Products, Apparatus & Optical Div., Eastman Kodak Co. He has been with Eastman Kodak since 1939. Since 1961 he has held the post of Associate Director of Research and Engineering. In his new post he will be responsible for design and manufacturing engineering, product assembly and product quality control.

Recent appointments at DeLuxe Laboratories West Coast Div.: Al Blanco was named Customer Services Manager of DeLuxe's Western Ave. plant. He was formerly on the sales staff of General Film Laboratories, a division of DeLuxe. Ray Gaul was appointed Plant Superintendent of General Film Laboratories in Hollywood. He was formerly Assistant Plant Manager. Bill Medlin has joined the production staff of DeLuxe. He was formerly the production manager of Allied Laboratories in Detroit.

Joseph F. Fichera has been appointed to the new position of Merchandising Supervisor for the Photolamp Operation of Sylvania Electric Products, Inc., 730 Third Ave., New York, N.Y. 10017. Fichera joined Sylvania in 1962 and has been a sales representative in the Chicago district. He formerly was with Argus Inc. Fichera has a BBA degree from Pace College and has done graduate work at the University of Michigan. He also attended Brooklyn College and Pratt Institute.

Y. Frank Freeman has been elected a Life Trustee of the University of Southern California. Mr. Freeman, who is Vice-President of Paramount Pictures Corp., has been a member of the USC Board of Trustees since 1949. USC now has five Life Trustees. The others are Bishop James C. Baker of Claremont, William C. Mullendore, Elvon Musick, and Franklin S. Wade, all of Los Angeles. Mr. Freeman is Chairman of the Board Emeritus of the Association of Motion Picture and TV Producers. He was Honorary President of the Freedom Documents Foundation in 1964–65.

Otis E. Finley, Jr., former Executive Director of the Community Action Program for Rochester and Monroe County, N.Y., has joined Eastman Kodak as Marketing Associate with the Director of Education Markets Development. In this capacity he will work on the development of ideas, products and programs to expand Kodak's activities in the field of education. He will assist in establishing contacts with principals in educational fields and in continuing broad exploration of the education markets. Mr. Finley was formerly Associate Director of the National Urban League in New York (1961–65) where he directed the League's national program in education and youth motivation.

Books Reviewed

Professional Engineers Examination Questions and Answers (Rev. 2d ed.)

By William S. La Londe, Jr. Published (1966) by McGraw-Hill Book Co., 330 W. 42 St., New York, N.Y. 10036. 589 pp. + index. Diagrams. 5⅜ × 8 in. Price $9.95.

A high rate of growth in the number of professional engineering registrants has been apparent in the last few years as a result of the increased importance and significance attached to registration by industry and management. Since the first registration law for engineers was enacted in 1907, the number of registrants increased at an average annual rate of 400 per year up to 1940; 7,000 a year during the 40's and 50's; and the current rate is approximately 10,000 new registrants annually. The total number of registered professional engineers is approaching 300,000 in the United States. A number of refresher courses in book form have been published on basic engineering subjects as an aid to engineers preparing for their state examinations. The La Londe book is one of the first books of that type. It consists essentially of a compilation of typical problems and solutions of the type asked in the examinations; 80% of the questions are taken directly from actual examinations in states throughout the country.

The book is divided into three parts. Part I provides the information needed on legal registration, addresses of Registration Boards and suggested experience qualification guides. The second part of the book is devoted to typical examination questions listed by categories. Virtually all broad fields of engineering are covered, including mechanical, electrical, civil, sanitary, chemical and land surveying. The third part provides answers to the questions.

The intent of the La Londe book is to encourage the user to answer the questions himself, thus providing the basis for a comprehensive critique of his engineering background. No attempt is made by the author to review the basic engineering principles required to solve the problems. The book may be considered deficient in this respect.

There is other published material of interest especially for subject areas and in specific states, such as:

Aidlin, Samuel S., *Professional Engineering Economics and Practices—Review Course for the Engineering License Examination, New York State*. 1st ed., Kings County Chapter, New York State Society of Professional Engineers, 117 Remsen St., Brooklyn 2, N.Y.

Illinois Society of Professional Engineers, *Professional Engineers Examination Questions*, 4th ed. $1.50. (Available from the Executive Secretary, Illinois Society of Professional Engineers, Association Building, 612 S. 2nd, Springfield, Ill.)

Missouri Society of Professional Engineers. *Refresher Course*. Paperbound. $1.00. (Available from the Missouri Society of Professional Engineers, P.O. Box 365, Jefferson City, Mo.)

Pennsylvania Society of Professional Engineers. *Sample Questions From Examina-*

tions Given for Engineers-in-Training, Professional Engineers and Land Surveyors. Paperbound. $2.00. (Available from the Executive Secretary, Pennsylvania Society of Professional Engineers, 2121 North Second St., Harrisburg, Pa.)

There are other books recently published or being developed to cover specifically preparation for professional engineers examinations. It is hoped that these comments will be useful for those seeking such as the La Londe book.—*William G. Hyzer*, P.E., Consulting Engineer, 205 Wall St., Janesville, Wis. 53545.

Stereoscopy

By N. A. Valyus. Trans. from the Russian by H. Asher in cooperation with The Department of Education and Science, National Lending Library for Science and Technology, Boston Spa (Yorks). Published (1966) by Focal Press, 20 E. 46 St., New York, N.Y. 10017. 426 + 6 pp. Illus. Diagrams. Viewers (cardboard) in pocket on inside back cover. 7 by 9½ in. Price $39.

Any treatise on stereoscopy is a repetition of basic principles explained over a century ago, to which the author adds new concepts which he thinks important but omits many others of which he may not even be aware.

The present book is no exception although the publisher's claim appears accurate: "This is probably the most comprehensive up-to-date work on stereoscopy." There were a few significant omissions when published and it is now 5 years short of being up-to-date.

Each of the nine chapters approaches a particular aspect from its historical beginnings which makes for pleasant reading but also for some lack of continuity and some duplication. The halftone reproductions have only fair resolution. This may be due to the author's intentional avoidance of sharp halftones. Presumably, in his day, there had not been enough halftone lenticular prints to predict the now common experience wherein a 200-line sharp halftone behind a 120-line lenticular screen apparently beautifully resolves pictures from 10 or more azimuths, which is an order of magnitude above the theoretical maximum.

On page 12, the publishers offer an apology for the lack of credit to earlier authors including A. W. Judge and R. and N. Spottiswoode. In general, the book fully encompasses the teachings of these earlier authors plus a great deal more. Even so, a serious worker in stereo motion pictures may prefer Spottiswoode's tables, graphs, formulae and explanation of the "human factor." There is qualitative mention of the tolerances in stereo register, vertical register and differences in brightness of the images and of permissible leakage of the images to the wrong eyes, but no quantitative figures are given. Also, there is no explanation as to how or why only some pseudo stereo pairs give "inverted space" appearance and others appear quite normal.

The two-lens and single-lens stereo cameras shown in the text appear to be relatively crude and the Mainardi-type single-lens system, with its increased efficiency, favorable format and elimination of keystone conflict, is not even mentioned. Table 4 (pp. 76–79) lists the "Principal Means of (Stereo) Reproduction. . ." including under II-B2, the well-known "moving train" effect seen from a side window but omits the front window effect (acceleration of magnification) which gives such dynamic depth as was experienced in the first Cinerama view from a roller coaster. Holograms are also not listed or mentioned anywhere in the text.

The chapters on practical stereo applications to motion pictures, television, range finding, astronomy, microscopy, x-rays and aerial mapping are probably as comprehensive as is appropriate. Those skilled in each of these fields will undoubtedly be aware of equipment far more elegant, versatile and precise than any here described. Nevertheless, Russian scientists have explored certain aspects much more thoroughly than their Western counterparts and this compact description of such explorations is well worth having. For example, Russians have made major investments of time and funds in perfecting ramifications of the Lippman (1908) process with considerable success, although the author seems unaware of the similar western activities such as those of DiMontebello. Also, after the French, English and German activities relative to stereo pictures projected to complex, azimuth delineating screens had died down, the work was apparently carried to a successful, if expensive, conclusion in Moscow. With such a screen the observer in each seat of the theater receives proper stereo views; the need for spectacles is obviated.

Comprehensive or not, this book is an entertaining and valuable reference on the subject of stereoscopy — perhaps the best general text available. The English translation is excellent — *F. M. E. Holmes*, Eastman Kodak Co., Research Labs., Kodak Park, Rochester, N.Y. 14650.

Color Photography in Practice (rev. ed.)

By D. A. Spencer (Edit. revised ed. L. Andrew Mannheim and Viscount Hanworth). Published (1966) by Focal Press, 20 E. 46 St., New York, N.Y. 10017. 416 pp. incl. index, appendixes, glossary. Illus. 7 by 9½ in. Price $23.

A conspicuous example of the technology explosion is the trend of the techniques of color photography. Since the early experiments in 1914 of Fischer and Siegrist, and the later work of Godowsky and Mannes, and others, that led to the development of Kodachrome in 1936, color photography has become so simple and relatively inexpensive (for the button-pusher at least) that it has fostered a vast amateur and professional activity. The first edition (1938) of this book has gone through a number of reprintings and new editions. The great changes in techniques have now required a wholly revised edition, prepared by two well-qualified editors.

The preface explains that: "The text of the first edition was designed to help the advanced amateur and the commercial and professional photographers to take the plunge and make color photographs by the processes then available." The present edition, with respect to the modern processes, "aims to give the reader, with a minimum of superfluous information, a broad and general basis on which to work and a practical and theoretical knowledge of the subject which, even if incomplete, should not be superficial."

Dichroism (di'kro·izm),*n*. The property by which a crystalized body exhibits different color according to the direction of light transmitted through it.

A dichroic filter has the ability to both transmit and reflect the different primary colors of an artificial light source. Its purpose is to convert the Kelvin color temperature from 3200° K, standard for interior lighting, to 5600° K, the ideal simulation of sunlight. Boston-Lite dichroic daylight conversion filters do NOT add blue to the light source, as conventional glass filters do. Instead, their dichroic coatings reflect the red portion of the spectrum, and permit the intense blue region to be transmitted.

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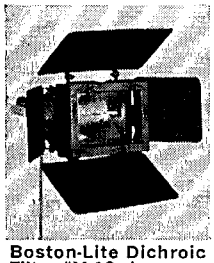
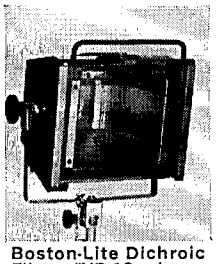


Boston-Lite Dichroic Filter #M-10 shown on Colortran LQM-10/WYB (Mini-Lite "10").



Boston-Lite Dichroic Filter #VB-10 shown on Colortran LQBF-10 (Variable Broad).

Boston-Lite Dichroic Filter #5 shown on Colortran LQF-10 (Multi-Beam "1000").

Model No.	Sizes Available:		Price
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M-6	4¾" X 4¾"	for Colortran Mini-Lite 6	23.75
10	6⅜" X 6⅜"	for Colortran Quartz 1000 w. Duals: 650 w. Multi-Beam	30.85
M-10	4½" X 6"	for Colortran Mini-Lite 10	30.85
5	7⅜" X 7⅜"	for Colortran 1000 w. Quartz Wide Flood, Multi-Beam; Mole Quartz Mickey Mole	38.50
MB-10	6½" X 11¾"	for Colortran 1000 w. Quartz Single; Multi-Beam Broads	59.50
VB-10	7½" X 8⅝"	for Colortran 1000 w. Quartz Variable Broads	56.50

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The specific subjects covered are light and color, the eye and color vision, the fundamentals of color photography, lighting and exposure for color photography, the various color processes and techniques, duplication of transparencies and the making of color prints, discussion of accurate color reproduction involving densitometry and the use of masking techniques, color photograph reproduction by printing press processes, and a final chapter on aesthetic considerations. There is little di cussion of motion-picture film, and it is explained that this would really require another book.

The presentation throughout tends to be of a rather general nature, and to avoid too precise details. In a number of places the authors advise the reader using commercial products to examine and follow the directions carefully, for these vary with the different makes and also change as new developments are brought out. Fairly extensiv discussion is given of the residual defects in color rendering, to keep the reader aware of the pitfalls in the rather complicated processes, all the way from initial exposure to final viewing. Perusing these, particularly with regard to printing press copies, one wonders that the rendering can come out really good — yet it is common observation that popular magazines do consistently exhibit highly acceptable color photographs over tremendous printing runs.

The book will be particularly useful to those who wish or need to be familiar with the general nature of current color photographic processes, if they do not expect to find exactly described the quantitative steps necessary to carry them out. Although it does not specifically describe motion-picture film techniques, it nevertheless gives the reader an insight into many of them. — *Pierre Mertz*, Consultant, 66 Leamington St., Lido Beach, L.I., N.Y. 11561.

Electronics and Nucleonics Dictionary, 3d Ed.

By John Markus. Published (1966) by McGraw-Hill Book Co., 330 W. 42 St., New York, N.Y. 10036, 743 + viii pp. + index. 993 illus. 6 by 9 in. Price $16.50.

One of the serious reasons that scientific and technical writing is so little understood outside its own narrow field, and so little appreciated by the general public, lies in the exotic vocabulary that it uses. Much of it is often nothing but jargon. Some of it eventually gets sanctified by extensive and continued use, for example, the "barn" as a unit of nuclear cross-section started as facetious jargon, but became respectable. Some of it, after a long interval, finally gets rectified, such as the use of "cycles" for "cycles per second." In many cases, it must be said, cryptic terms are used offhandedly, where a simpler expression would be clearer. The use of such cryptic terms was of course encouraged by the extensive technical secrecy that existed during World War II.

All this is very well known to the various scientific and technical societies, who are trying hard to get precise "official" definitions of their respective technical terms, and weed out and deprecate the use of much of the jargon. Because of the large number of people that must agree, however, such action tends to take an inordinately long time — and meanwhile new jargon develops. For this reason there is ample room for an "unofficial" dictionary that collects all the present usage, "official" and other, and gives the general reader a chance to decipher current papers. The success of the present book is indicated by its three editions over a period of 25 years.

One is of course curious as to how the definitions compare with those of "official" listings such as the 1961 *IRE Dictionary* and the newer 1965 "Information for IEEE Authors." Mr. Markus himself says that "the rigorous formal definitions in the standard glossaries were usually rephrased and simplified for easier understanding by nonspecialists." This is evident, and often the change has been felicitous. The book came out just a little too early to plump wholeheartedly for the new trend to "hertz," versus the now deprecated "cycles" without the "per second." One notes that Mr. Markus does not hazard himself with the "entropy" of information theory (the 1961 Dictionary lists it, as a synonym). The advent of television, particularly in color, has brought in many new terms and units, though "blondel," the various color blind designations, and various laws, Weber-Fechner, Ferry-Porter, and Lambert's, are still missing.

The engineer who has to do much technical reading and writing, will find this book indispensable alongside the more "official" glossaries.—*Pierre Mertz*, Consultant, Lido Beach, L.I., N.Y. 11561.

Mesures, Régulation, Automatisme

Published by the Comité d'Éditions Techniques, 40 rue du Colisée, Paris 8e, France, Vol. 30, August, September and October, 1965.

The French journal "Mesures, Régulation, Automatisme," which has been devoted to the problems of measurement and control in technology, has recently celebrated the 30th anniversary of its existence, the first number having come out in January of 1936. The founder, Jean Vivié, has written as the first of a series of historical papers, a contribution on "The birth and progress of industrial control." This is followed in two successive numbers by similar historical material on the role of measurement and control in a wide range of aspects of modern technology, from electrical meters to heat measurements, steam gages, and radiogonometers.

The papers are accompanied by reproductions of old prints and photographs of people and devices of which we have all heard much in our educational preparation, but which we rather rarely have the opportunity to view. It is fascinating to see contemporary pictures of d'Arsonval, Bourdon, Oersted and others, a reproduction of the figure page of Lee de Forest's 1907 patent, and pictures of Ampere's laboratory apparatus, the very early d'Arsonval galvanometer, and many early Siemens and Halske and Hartmann-Braun electrical measuring instruments. The Weston instruments changed so little over the long period that they hardly look old.

All these illustrations induce a nostalgia that the younger entrants into the various fields of technology will find difficult to understand.—*Pierre Mertz*, Consultant, Lido Beach, L.I., N.Y. 11561.