

INTER-SOCIETY COLOR COUNCIL

NEWS LETTER

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INTRODUCING OUR
NEW EDITOR

It is with pride and satisfaction that we are able to present to News Letter readers our new editor, Mr. Warren L. Rhodes, head of the Graphic Arts Research Department, Rochester Institute of Technology, ISCC delegate from the Technical Association for the Graphic Arts, speaker at our 25th Annual Meeting last year, and editor of the twelve papers on graphic arts given at that meeting. Mr. Rhodes is on the staff of an organization that has been represented in the Inter-Society Color Council for many years by individual membership, held in the names of Byron G. Culver and Milton E. Bond (both of whom took part in the planning and execution of our annual meeting in 1942 held at the Metropolitan Museum of Art).

So that you may know something of the background, family, and interests of our new editor, we can tell you that he grew up in Colorado where he attended the University at Boulder before and after military service, and that he graduated from the Department of Photography at the Rochester Institute of Technology in 1952, immediately becoming a full-time member of the Graphic Arts Research Department. In 1955 he was appointed head of this department.

Mr. Rhodes' special interests and research projects have included -

STATISTICAL METHODS: A control chart method for quality control in photographic operations; statistical evaluation of visual evaluation of printing; and statistical techniques in experiments.

SHARPNESS: Study of factors influencing sharpness; objective measurement of sharpness in offset lithography.

TONE REPRODUCTION: Specifications and measurement of halftones, plates, and presswork, to enable prediction of final results.

COLOR CONTROL: Instrument for measuring color strength on printed sheets to indicate ink fountain adjustments.

COLOR REPRODUCTION: Three-color printing for offset newspapers; indirect system of three-color reproduction.

Familiarly known as Dusty to his many friends among printers, manufacturers of printers' supplies and equipment, and various other people connected with the graphic arts industry, his winning smile and friendly manner are well known in circles such as the Litho Club of Rochester, the Rochester Club of Printing House Craftsmen, and the Technical Association of the Graphic Arts. He is a member of the Technical Association of the Pulp and Paper Industry, and is serving on the Committee on Printing of the Research and Engineering Council of the Graphic Arts Industry.

At annual meetings of TAGA he has presented papers on "Tone and Color Control in Reproduction Processes" and "Study of Objective Methods for Evaluating Sharpness in Lithography." He has talked before numerous industry groups on such subjects as tone reproduction and three-color printing, and is the author of many articles in periodicals. In both 1954 and 1956 he was a staff member of the New York University's Sixth Quality Control Seminar.

In 1955 at Amsterdam he represented RIT at the Third International Conference of Printing Research Institutes, and this year he plans to participate in their Fourth Conference in Munich.

In what spare time he can find, Dusty enjoys family life. On summer week-ends he is likely to go fishing with Anne, 11, and Linda, 7. Skating at the RIT ice rink, and listening to concert music, both live and recorded, are family amusements. (Anne and Linda have had five years of ballet lessons, and have shown oil paintings and ceramics at the Art Gallery.) Mrs. Rhodes (Marjorie), who met Dusty in Colorado, is as busy as her husband, for she is on the executive boards of the PTA at school and the RIT Women's Club, a member of the Girl Scout committee, a leader of 20 Brownies, and advisor to 60 RIT sorority girls. For diversion she is taking two courses at RIT.

To Mr. Rhodes, our new Editor, we say, "Welcome." "May your association with us in the ISCC be successful, long, and happy!"

Waldron Faulkner, President

FROM THE NEW
EDITOR'S DESK

The News Letter is an important activity of the Council. For some of the members it is the main contact with the Inter-Society Color Council. I am pleased that I was chosen for the job of editing the News Letter, but I can be only as effective as you are. As individual members, as local groups, as member bodies and as committee chairmen, you should get the news to me if it should be published. Former editors have done an excellent job. I shall try to do as well.

Warren L. Rhodes

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26TH ANNUAL
MEETING

Dr. Deane B. Judd received the first Godlove award for contributions to the knowledge of color at the 26th Annual Meeting. Dr. I. A. Balinkin, Chairman of the Godlove Award Committee read the citation on behalf of President Waldron Faulkner and members of the Inter-Society Council.

Dr. Judd, who has just returned from four months in Spain, received the award and recalled the guidance and inspiration of I. H. Godlove. He paid tribute to Mrs. I. H. Godlove, sponsor of the award, and called attention to the fact that she is carrying on Mr. Godlove's work in color. He made reference to the paper, "A Munsell Book in High-Gloss Colors," Hugh R. Davidson, Margaret N. Godlove, and Henry Hemmendinger presented at the 1957 Winter Meeting of the Optical Society of America.

One Hundred-fifty-nine people will verify that the Council can put another mark on the record for a successful meeting at the Statler in New York on March 6. President Waldron Faulkner began the meeting by turning the rostrum over to Dorothy Nickerson and her seven active sub-committees of the Problems Committee. He took it back for reports of officers, committees, delegations to ISCC and delegates from ISCC.

Mrs. Helen D. Taylor, Program Chairman, was moderator of the afternoon panel "Recent History of Consumer Color Choice." Mrs. Elschen Hood, Coordinator of Color Research, Coats and Clark, Inc., New York, presented the point of view of the textile industry.

The plastics industry was represented by Albert J. Benjamin, Supervisor of Color Styling Service, Monsanto Chemical Company, Springfield, Massachusetts; Everett R. Call, Director of the Statistical Division, National Paint, Varnish and Lacquer Association, discussed trends as seen by the paint industry.

The evening lecture "Color in Product Styling" was given by G. J. Pollard, Jr. of the General Motors Corporation.

The Council was fortunate in obtaining Interchemical's new film "This is Color." Although it was unscheduled, Lew Wurzburg was able to obtain it at the last moment.

One of the highlights of the meeting was the visit to House and Garden Merchandising Color Department at 420 Lexington Avenue. Mrs. Elizabeth Burris-Meyer graciously opened the department, which is normally closed to the public. She discussed the House and Garden magazine plan for coordination of colors for home decoration. Mrs. Burris-Meyer was very patient in explaining the huge Color Trends Chart which is part of the House and Garden display. Each person attending the presentation received a set of 34 of the House and Garden colors for 1958.

I appoint myself as a committee of one to represent the ISCC in expressing our appreciation to the program committee, Helen Taylor, Ralph Pike, and Scott Wilson (an industrial designer).

NEW MEMBERS ELECTED AT ANNUAL MEETING The National Paint, Varnish and Lacquer Association, Inc., 1500 Rhode Island Avenue, N. W., Washington, D. C., was elected to membership in the Inter-Society Color Council at the 26th Annual Meeting. This action by the Council brings the number of member-bodies to twenty-seven. The application was signed by Allan W. Gates, secretary. Everett Call of the Association was on the annual meeting program. The new member was welcomed by the ISCC.

Seven Associate Individual Members were also elected.

<u>Associate Individual Members:</u>	<u>Affiliation and Interests:</u>
Mr. R. W. Bassemir Sun Chemical Corporation Graphic Arts Laboratories 390 Central Avenue East Rutherford, New Jersey	TAPPI. Identification of colorants; color matching; and color control.
Mr. Charles N. Clark General Electric Company Large Lamp Department Nela Park Cleveland 12, Ohio	IES. Color rendition and specification; relation of light and color in human environment; impact on comfort, sales, efficiency, morale, etc.; demonstration of principles and application.
Mr. Paul M. Fisher American Viscose Corporation Marcus Hook, Pennsylvania	ASTM and OSA. Measurement and specification of color and color differences on textiles and of whiteness, luster and other appearance characteristics of textiles. Colorimetry of fluorescent textiles.
Dr. Norbert J. Kreidl (Bausch & Lomb Optical Company) 40 Milford Road Rochester 10, New York	ACS and OSA. Color tolerances; color systems.
Mr. Burton Love (Boeing Airplane Company) 5606 - 224th Street, S. W. Mountlake Terrace, Washington	FPVPC. Industrial color problems - the practical applications of color to industrial products. Development of a color standardization program and a color control laboratory. This includes grading of raw materials, study of materials and processes, and the development of sales appeal for the finished product.

Mr. Earle R. McLean
Research Laboratories
Coats and Clark, Inc.
1292 McCarter Highway
Newark 4, New Jersey

AATCC. Color measurement of dyes and dyed material - particularly thread and yarn. Method of sample presentation. Color difference measurements and methods.

Mr. Lyman W. White
Gering Products, Inc.
North Seventh St. and Monroe Ave.
Kenilworth, New Jersey

OSA. Instruments, measurement, and specification of color as a tool for fast, accurate color matching, using an abridged spectrophotometer.

HISTORY OF ISCC GROWTH 1931 - 1956

The September, 1956 issue of the NEWS LETTER carried the first of a series of articles on the history of the ISCC. The first article was a reprint of the progress report by our first chairman, Dr. E. N. Gathercoal, at the second annual meeting which described the origin of the ISCC and the progress of the first years effort to put into action the objectives of the founders. The purpose of an historical series, as this is intended, is to create a reliable perspective of the origin, the aims, the growth, and the achievements of the organization. The hoped for result is a better understanding by the membership of the role of the Council in coordination of color activities and the mechanics of its operation.

Over a span of 25 years the Council has been constantly influenced by the original aims of the founders, many of whom continued to serve the organization for many succeeding years. Even today, the policies and activities are wisely guided by individuals who played major roles in the early organization. Dr. Dean B. Judd, Miss Dorothy Nickerson, Mr. Walter C. Granville, Mr. M. Rea Paul, Dr. Forrest L. Dimmick, and Mr. Carl E. Foss are members of this early group who are still serving in important elective, advisory, or appointive parts.

The adherence to the basic principles of organization has been a conspicuous quality of the organization. This has been particularly true of the founding concepts of growth "in order that its influence might be more widely felt and its activities be more highly developed."

One measure of growth and influence can be achieved by analysis of membership. In this respect it must be emphasized that the ISCC growth and influence parallels the growth and activity of its member bodies. The vital expansion of individual technical trade organizations during the past 25 years are compounded with the increasing number of affiliated groups.

The Preliminary Conference on Organization of an Inter-Society Committee on Color Specification, held on February 26, 1931 preceding the first meeting of the ISCC, passed as its first resolution the principle of membership:

- "(1) Resolved: It is the sense of the meeting that an 'Inter-Society Color Council' be formed, composed of delegates from national societies, and associations interested in the standardization, description and specification of color."

The first meeting held on September 21, 1931 recommended expansion of the membership provisions to include individuals vitally interested in the activities but who may not be delegates designated by the affiliated societies or associations.

The articles of Organization and Procedure which remain essentially unchanged from the present By-Laws were adopted at the Fourth Annual Meeting on February 21, 1935. These Articles defined the present classes of membership:

- (1) Member-Bodies
 - (a) Voting delegates
 - (b) Accredited delegates
- (2) Individual Members
- (3) Sustaining Members

At that date there were 9 "Member-Bodies" with 30 "Official Delegates" and 16 "Cooperating Associate" members. During 1937, individual memberships exceeded the 30 minimum, necessary according to the Articles of Organization, to admit the individual group to a full member body statute with voting privileges.

Another milestone in Council history was accomplished on October 14, 1953 when the Inter-Society Color Council was incorporated. This did not change the primary objectives of the Council. However, the legal advisor for the incorporation proceedings pointed out that to invest the ultimate authority in the Member-Bodies would by definition eliminate the individual member group from voting representation, and accordingly this change was duly made in the By-Laws. At the same time, two classes of individual membership were established: associate individual members are those who belong to Member-Bodies, and affiliate individual members are those who do not. While there is no difference in the duties and privileges of the two groups, they are identified in the Membership List to emphasize the large number of individual members who belong to one or more of the Member-Bodies.

At this point, equipped with sound principles of organization; an imposing list of unsolved color problems; committees taking aggressive action on problems of terminology, specification, and measurement; and an established NEWS-LETTER publication; the Council could be considered to have come of age. From a gathering of a few individuals with recognition of a need for better organization of those interested in the description and specification of color, and a few years of aggressive committee work; an organization was established which was to orient and guide the thinking of diverse individuals and industries through a maze of confusing viewpoints in the period which has been most aptly termed "the color revolution." In the post-war period, many industries were faced with commercial problems involving selection of colors in support of sales or to simplify production or to control color uniformity. Many have turned to the ISCC for guidance through a maze of confusing and contradictory opinions with the hope that application of basic scientific processes would establish simple, basic, and universally accepted principles.

The accompanying chart (ISCC MEMBERSHIP ROSTER) describes more vividly than words the steady spread of influence of the ISCC over the past 25 years.

1931

ISCC MEMBERSHIP ROSTER

1956

ANNUAL MEETING REPRESENTATION

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	SOCIETY	
	'31	'32	'33	'35	'36	'37	'38	'39	'40	'41	'42	'43	'44	'45	'46	'47	'48	'49	'50	'51	'52	'53	'54	'55	'56		
AAPL											X	X	X	X	X	X	X	X	X	X	X				X	American Artists Professional League, Inc.	
AATCC	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	American Association of Textile Chemists and Colorists	
ACS							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	American Ceramic Society	
AIA																			X	X	X	X	X	X	X	American Institute of Architects	
AID																			X	X	X	X	X	X	X	American Institute of Decorators	
AOCS	X	X														X	X	X	X	X	X	X	X	X	X	American Oil Chemists Society	
APHA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	American Pharmaceutical Association	
APA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	American Psychological Association	
ASTM	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	American Society for Testing Materials	
ASID																			X	X	X	X	X	X	X	American Society of Industrial Designers	
ATCI																									X	ArchitecturalTerra Cotta Institute	
CAUS	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Color Association of the United States Inc.	
PFVPC											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Federation of Paint and Varnish Production Clubs	
PFBA																									X	Folding Paper Box Association of America	
GTA																				X	X	X	X	X	X	Gravure Technical Association	
IES	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Illuminating Engineering Society	
IDI																			X	X	X	X	X	X	X	Industrial Designers Institute	
NAPIM																		X	X	X	X	X	X	X	X	National Association of Printing Ink Makers, Inc.	
OSA	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Optical Society of America	
PDC																									X	Package Designers Council	
PI																								X	X	Packaging Institute	
REC																									X	Research and Engineering Council of the Graphic Arts Industry Inc.	
SMPE							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Society of Motion Picture and Television Engineers	
SPE																									X	Society of Photographic Engineers	
TCA																							X	X	X	Tanners Council of America, Inc.	
TAGA																					X	X	X	X	X	Technical Association of the Graphic Arts	
TAPPI	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	Technical Association of the Pulp and Paper Industry	
USP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	United States Pharmacopoeia	
							24	30	50	67	80	82	91	94	100	119	141	160	179	195	215	224	253	276	283	300	NUMBER OF INDIVIDUAL MEMBERS

The greatest expansion has occurred since 1950, in line with the growing national interest in the many facets of color science. Present membership is composed of* 26 affiliated societies which are represented by approximately 260 delegates and over 300 individual members. This membership further provides geographical representation from 30 states and 11 foreign countries, numerically distributed as follows:

<u>United States</u>	<u>1955 % Total Membership</u>	<u>Foreign Countries</u>	<u>1955 % Total Membership</u>
New York	28.1	Canada	2.9
Pennsylvania	8.6	England	.7
Maryland & D. C.	7.8	Argentina	.5
Massachusetts	7.1	Switzerland	.3
Illinois	6.7	Germany	.3
Ohio	6.4	Sweden	.3
California	6.2	Japan	.3
Michigan	5.5	Australia	.2
New Jersey	5.3	Japan	.2
Connecticut	2.7	Netherlands	.2
Texas	1.3	Spain	.2
Wisconsin	1.3		<u>100.0%</u>
Minnesota	.9		
Tennessee	.7		
Delaware	.7		
Virginia	.7		
Iowa	.5		
Louisiana	.5		
Missouri	.5		
Indiana	.5		
Maine	.3		
Rhode Island	.2		
North Carolina	.2		
Kentucky	.2		
Oregon	.2		
West Virginia	.2		
Florida	.2		
Colorado	.2		
Nebraska	.2		

Projection of this growth data to the year 1966, would find the ISCC composed of 38 member bodies and 480 individual members. It will be interesting to observe whether or not the 1966 Editor of the NEWS LETTER will choose to again analyze the subject of membership growth, and explain the errors in this projection in light of the history of color in the following decade.

Editor's Note: We notice that Japan appears twice in the eleven foreign countries. However, we caught the error too late to check with the author for correction.

*Statistics were compiled prior to the 26th Annual Meeting.

THREE PROBLEM
COMMITTEES CONVENE
AT ANNUAL MEETING

Three of the seven Problem Sub-Committees met on Tuesday before the annual meeting.

Problem 14, The Colorimetry of Transparent Materials, chairman, R. C. Stillman.

Problem 17, Color in the Building Industry, chairman, Waldron Faulkner.

Problem 20, Basic Elements of Color Education, chairman, R. W. Burnham.

Complete reports of the seven Problem Sub-Committees activities will be published in the Proceedings of the Twenty-Sixth Annual Meeting.

PHILADELPHIA-WILMINGTON
COLOR GROUP

Mr. Roland E. Derby, a graduate of M.I.T., who has a Master's Degree in Textile Chemistry and Dyeing from Lowell Technological Institute, talked to the groups on "Problems of Color Control." Mr. Derby is currently completing his work at M.I.T. leading to a Doctorate in Fibrous High Polymers. He is a member of the Optical Society of America and a delegate from the American Association of Textile Chemists and Colorists.

WASHINGTON AND BALTIMORE
COLORISTS HOLD JOINT
MEETING ON COLOR

Dr. Robert W. Burnham addressed a Joint Meeting of the Washington and Baltimore Colorists, Illuminating Engineer Society, and the American Institute of Decorators on February 19 in Washington, D. C. Dr. Burnham's lecture, "More to Color Than Meets the Eye," was first presented at the Illuminating Engineering Research Institute at Cornell last September. Dr. Burnham is chairman of ISCC Problem 20, Basic Elements in Color Education. He is a delegate from the American Psychological Association.

THE COLOR COUNCIL
OF TORONTO

"Color Order Systems" was the topic of the January 8 meeting at the Prince Arthur House in Toronto. Three systems were discussed.

THE MUNSELL SYSTEM, by C. R. Conquergood, Canada Printing Ink Company, Limited. ISCC delegate from the National Association of Printing Ink Makers, Inc.

THE OSTWALD SYSTEM, by Bill Howard of Eaton's College Street

THE VILLALOBOS SYSTEM, by Professor W. E. Carswell, University of Toronto

The February 12 meeting "Color As Seen and Photographed (or Does the Camera Lie?)" was conducted by Buz Allison, the T. Eaton Company of Canada, Limited; John David, Brigdens, Limited; and John Gilchrist, Gilchrist-Wright, Limited.

The points covered were:

- Light and Color
- Types of Color Film
- Color Balance
- Effects of Exposure
- Color Prints
- Three Color Reproduction
- A Standardized System of Specifying Color Photographically

THE PHYSICAL SOCIETY
COLOR GROUP

The Ninety-Sixth Science Meeting was held on December 12th at the Imperial College, South Kensington. The topic was introduced by Professor W. D. Wright, "A Symposium on Colorimetry: Its Errors and Accuracy." A set of six tiles, variously colored, had been examined spectrophotometrically. The reflectances measured in different laboratories, differed by as much as 2 to 3%. This was attributed to a variety of causes, such as the presence or absence of specular reflection.

Miss. D. L. Tilleard of the Paint Research Station discussed the precision of the measurement of special colors with the Beckman Spectrophotometer. For light colors the precision, although apparently less than in visual discrimination, is supposed to check close commercial matches, according to Miss Tilleard.

Mr. P. S. Williams of the ICI Paints Division explained that pulp measurements have been made on a set of 16 different colors on a General Electric Recording Spectrophotometer and Librascope Computer, on the Donaldson Six-Filter Colorimeter, and on the "Colormaster" Differential Colorimeter. The former (GERS) could yield better repeatability and accuracy than was claimed by its manufacturer. He said that Donaldson's instrument was sensitive to voltage and temperature changes and results obtained with it agreed better with the "Colormaster" than with Hardy's apparatus.

Mr. J. W. Perry, Hilger and Watts, Limited introduced information on two aspects of absolute color measurement accuracy for the Hilger Photo-Electric Tristimulus Colorimeter. Mr. Perry said the maximum accuracy of C.I.E. Chromaticity measurements for ordinarily occurring color materials is ± 0.005 in x or y within a chromaticity region bounded roughly by Munsell Chroma 10 but extending to the spectral locus in the yellow regions. Elsewhere accuracy depends on the spectral complexity but normally would not exceed approximately ± 0.01 . He further stated that the theoretical conditions under which observations for the subsidiary X_2 contribution can be replaced to an accuracy of ± 0.005 by data obtained from the Z observation computed for a Gaussian type spectral-wavelength distribution of intensity.

The Ninety-Seventh Science Meeting was held at the Strand Electric and Engineering Company Limited theater on January 16th. The lecture was presented by Mr. Richard Blore, Leichner's Limited, whose topic "Color in Theatrical Make-Up," included the problems of orthomatic film and television as it concerns make-up. He followed this with a demonstration where he made up the left half of a girl's face with a glamorized make-up and the right half in an aged make-up. Tea was served and a lively discussion followed.

AMERICAN SOCIETY FOR
TESTING MATERIALS
COMMITTEE D-1

On February 20 and 21 the Committee D-1 met at the Shoreham Hotel in Washington, D. C. The meeting was called by Harry K. Hammond, secretary. The discussions included definitions, gloss and goniophotometry, hiding power, tinting strength of white pigments, color difference measurement, Munsell color system, light sources for color matching, and sub-committee X on optical properties. Harry Hammond, from the National Bureau of Standards, is a delegate from the American Society of Testing Materials. Two other chairmen, William Kiernan of the Bell Telephone Laboratories and Mark Morse of E. I. duPont, are also ASTM delegates.

PACKAGING SYMPOSIUM
AMERICAN SOCIETY OF
INDUSTRIAL DESIGNERS
AND PACKAGE DESIGNER'S
COUNCIL

Landor, both delegates of

Egmont Arens, founder of both organizations, opened the symposium at the Museum of Modern Art, New York City, on February 14 with his lecture "What Price Packaging?" Mr. Arens is well-known for his package designs for A & P brand foods, Phillip Morris and Parliament packages. Francis E. Blod and Walter

Landor, both delegates of the Package Designer's Council, were on the symposium panel.

THE COLOR ASSOCIATION
FALL AND WINTER COLORS

Fibers, and Silk to its members. This announcement was made by Estelle M. Tennis, executive director of the organization. Each card presents a fashion range of 40 advance fall colors, including important basic shades and two featured collections of brilliant hues and winter pastels for sports and evening wear.

The Color Association of the United States, Inc. has just released the regular edition of its 1957 Fall and Winter Cards for Woolens and Worsteds, Man-Made

Miss Tennis also announced that the Association has just presented the color of the gown worn by Mrs. Dwight D. Eisenhower at the Inaugural Ball; in her honor it has been named "First Lady Yellow." Swatches of this citron-yellow shade dyed to match the original sample given to the Association through the courtesy of Mrs. Eisenhower were issued with the announcement. The success of this is expected to match the "First Lady Pink" presented by the Association four years ago.

COLOR MEASUREMENT
FORUM; FEDERATION
OF PAINT AND VARNISH
PRODUCTION CLUBS

interesting because it was conducted by practical men working in the field of color control.

With this copy of the News Letter, there is a reprint of the "Color Measurement Forum." These reprints were made available through the efforts of Ralph Pike and Frank Barrelle of the Federation. According to Ralph Pike, this meeting was especially

IDI ANNOUNCES PLAN
FOR 7TH ANNUAL AWARD

February 15 and May 5. Forms may be obtained by writing to him at 1226 North Dearborn Parkway, Chicago 10. The results will be announced on June 20 at a display of designers works.

Walter Granville, chairman of the Industrial Designer's Institute 7th Annual Award program announced that designers may submit their work between

OPTICAL SOCIETY
1957 WINTER MEETING

the day following the ISCC meeting so that interested members could attend both meetings. Many ISCC members were on the OSA program:

The OSA held its 1957 Winter Meeting at the Statler Hotel immediately following the ISCC Annual Meeting. The OSA arranged to present the papers on color on

Dorothy Nickerson, U.S. Department of Agriculture
Deane B. Judd, National Bureau of Standards
Ralph Pike, E. I. duPont de Nemours
W. E. Knowles Middleton, National Research Council, Canada
G. W. Wyszecki, National Research Council, Canada
Hugh R. Davidson, Davidson and Hemmindinger
Henry Hemmindinger, Davidson and Hemmindinger

Margaret N. Godlove, Davidson and Hemmindinger
 M. P. Morse, E. I. duPont de Nemours
 Forrest L. Dimmick, Medical Research Labs
 L. G. Glasser, E. I. duPont de Nemours
 O. H. Olson, Armour Research Foundation
 John E. Tyler, University of California

PDC PACKAGING DESIGN COMPETITION The Package Designers Council announced awards for the Third Annual Package competition in New York. The jury reviewed over a thousand packages which had been entered in twenty categories representing every national industry. The Council voted 62 Certificates of Merit, twenty First Awards for the twenty categories, three special industry Awards, and the best-of-show award, the PDC Gold Medal. The Aqua Velva package won Donald Desky Associates three first awards: the best entry in toiletries category, the best example of a re-designed package, and the PDC Gold Medal Award.

TANNERS' COUNCIL LEATHER GOODS FOR SPRING From Helen Taylor, chairman of delegates from the Tanners' Council of America, we have samples of washable leathers in glove colors for the spring of 1957. The colors, in wash wear leathers, she says, will stand up wonderfully; for the dyes have complete penetration! She notes this as the leather industry's effort to recapture the glove market from the fabric group. From the display of the very lovely colors called by the following names, it looks to us as if they might have success! The colors are: vanilla, sand bark, camel-tone, wicker, French bread, and russet, pink, flame red, lilac, sky blue, turquoise, buttercup, olive, and pastel grey.

LAKE SHORE TAPPI COLOR MEASURING CONFERENCE Two hundred forty registered for the "Color Measuring Conference and Exhibition" at the Statler Hotel, Cleveland, Ohio, on January 25. The conference was sponsored by the Lake Erie Section of the Technical Association of the Pulp and Paper Industry with the cooperation of local sections of the American Society for Quality Control, the Federation of Paint and Varnish Production Clubs, Printing House Craftsmen's Club, Society of Industrial Packaging and Material Handling Engineers, and the Folding Box Association of America.

Dr. Marvin Rogers of the R. R. Donnelley Company, Chicago, opened the session with "Outline of Color Problems from the Printer's Standpoint." He explained the various printing processes and discussed the problems involved in multi-color web printing. He talked about the effects of paper, illumination, inks, and end use on color printing; and he touched on the preferences, whims, and psychological factors which affect the problem.

The Papermaker's viewpoint was presented by Rudolph Griesheimer of the Mead Corporation, Chillicothe, Ohio. Mr. Griesheimer pointed out that the papermakers greatest problem was the control of the color of "white" papers. He said that visual comparisons were still most common because of the difficulties of instrumental measurement and specification and because of the inability of the instruments to determine the effect of fluorescence. He covered many other aspects of the problem of color control and the effects of such production factors as bleaching, de-inking, sizing, and aging.

Interchemical Corporation's new film, "This is Color" and Lew Wurzburg, Printing Ink Division, New York, did an excellent job of explaining "The Theory of Color." Lew discussed the energy distribution curves of illuminants, the spectral reflectance curves of materials, additive light mixtures, subtractive pigment mixtures, tri-stimulus values, the CIE diagram, and the psychophysical aspects of color measurements.

The subject of color measurement was carried on by S. J. Huey of Sherwin-Williams, Cleveland, Ohio. In his "Comparison of Instruments Currently Available to Measure and Control Color" Mr. Huey explained the importance of standard conditions of viewing, including standard illumination. He said that an instrument for color control should be simple, rugged, compact, and stable. He also discussed the problems of metamerism, tolerances, color differences and visual standards.

The confusion and lack of understanding between the producer of color items and the purchaser of them was covered by E. Bryent, Jr. of the Whirlpool-Seeger Corporation, St. Joseph, Michigan. He pointed out several things which he said would tend to reduce the confusion: the use of Munsell notation, the use of Judd or MacAdam units, standardized light sources, viewing conditions, maintaining standards, and specification of gloss and texture.

Henry R. Becker called on his experience with the Scott Paper Company, Chester, Pennsylvania, to discuss the mechanical problems involved in coloring tissue papers. He explained how Scott sets up automatic, continuous metering for dye solutions. He explained that their color standards were maintained by the modified MacAdam system, using colorimeters to supplement visual observations. According to Mr. Becker, colorimeters usually check better than the eye, and the average viewer will accept three to five percent variation in these pastel shades while the untrained eye would accept as much as ten percent.

Representing Ohio Boxboard, Rittman, Ohio, Lue Burnette appealed to the conference "Let's Keep It Simple." Tiney Erikson, who reported the meeting said, ". . . and he surely did. . . inspirational talk asking for more uniformity in instrumentation and in specification of color . . ."

As in the 1956 ISCC Annual Meeting, Dr. Rodgers opened the program, and as in the '56 meeting, Albert Knerr was the finalist. Again he was witty and illustrated his talk with a slide projector. Again he emphasized that color is used for communication, that color and design can be suggestive of the product, and that if you want attention you must produce something different both in design and in color. The subject, "Impact of Color on the Layman" was quite different from his ISCC lecture, but this time as last ". . . he got his ideas across to the audience in swell shape."

Mr. Erikson explained that the attendance was excellent and that the program was excellent, but he felt that the topics were too technical for the audience. He lamented that there are few color control men in the printing and related industries, and as a result the men attending were interested in color but did not have the background to understand what was presented.

SOCIETY OF MOTION PICTURE AND TELEVISION ENGINEERS Ed note: The following article on the Society of Motion Picture and Television Engineers continues the series begun in the May 1955 issue of the News Letter on the societies of which the Inter-Society Color Council is composed. Miss Sue Grotta, Director, Press Relations at the Society of Motion Picture and Television Engineers' office in New York, has prepared the information. The Society of Motion Picture and Television Engineers was one of the earliest Member-Bodies to form the Council and for a number of years the Inter-Society Color Council Secretary, Mr. Ralph M. Evans, has been Chairman of the Delegation from the Society of Motion Picture and Television Engineers.

In 1916 a group of farsighted engineers recognized that if the motion picture were to become a medium of communication international in scope, standardization of equipment and practices would have to be undertaken, and technological cooperation among those working in the new industry would have to be encouraged. These men, under the leadership of C. Francis Jenkins, a pioneer in the design of motion picture projection equipment, met in Washington, D. C. on July 24, 1916 to incorporate an organization which would provide the means for technological cooperation and the machinery for standardization.

This group was called the Society of Motion Picture Engineers and took as its objectives "advancement in the theory and practice of motion picture engineering and the allied arts and sciences, the standardization of the mechanisms and practices employed therein, and the maintenance of a high professional standing among its members."

In the early years of motion picture history invention, experimentation and development were being conducted simultaneously by many men in the United States, England and France. The only relatively standard item of motion picture equipment at that time was the film itself. To facilitate the development of technical standards, which make possible interchangeability of equipment and which aid operating efficiency, the SMPE formed engineering committees to conduct standardization procedures.

From its incorporation the SMPE held semiannual conventions at which technicians working in this new industry read papers describing their latest efforts and innovations. These papers were then incorporated into the Society's Transactions where they received further distribution and provided a lasting reference of motion picture technical developments.

Interest in the work of the SMPE grew rapidly and continuously throughout the twenties, and by 1930 membership had reached 750. In that year the Transactions were supplanted by a monthly Journal which is still the Society's principal publication.

With the increase in technological developments in the industry, the interests and activities of the SMPE broadened accordingly. The incorporation of sound and picture on one film brought a new group of motion picture engineers into the Society; and as color increased in importance, its technicians also became a part of the SMPE. High-speed photography provided yet another field for SMPE attention; and in the early 1940's the television engineer joined the ranks as well. With the development of this new medium and the increasing use

of filmed program material, the SMPTE formally recognized the addition of TV engineers to its ranks, and in 1950 changed its name to the Society of Motion Picture and Television Engineers.

Today the SMPTE has grown to include almost 6000 individual members from 68 countries, and 110 companies which participate in and support the work of the Society as sustaining members. The headquarters of the SMPTE is in New York City where a staff of sixteen, directed by an Executive Secretary, implement the policies set by the Society's 25-man Board of Governors. The members of the Board are elected for two-year terms by the voting members of the Society.

The membership of the SMPTE within the United States and Canada is divided into eight local Sections with headquarters in Atlanta, Chicago, Dallas-Ft. Worth, Hollywood, New York City, Rochester, San Francisco and Washington, D. C. These local Sections elect their own administrators, consisting of a chairman, a secretary-treasurer, and a six-man Board of Managers. Each Section holds a monthly meeting, usually in its headquarters city, although one or two-day regional meetings occasionally take place in other cities where there are substantial groups of SMPTE members. In addition, student chapters at New York University and the University of Southern California operate under charters issued by the Society's Board of Governors, which also appoints a faculty advisor to oversee the activities of each of these groups.

Section meetings and semiannual conventions provide opportunities for technicians in the industry to get together to exchange ideas and information. Equipment exhibits are usually held in conjunction with the Society's national conventions and represent the only opportunity for those in the industry to view examples of this type of equipment collected under one roof.

The monthly Journal, which reaches some 7000 readers, contains technical papers as well as SMPTE and industry news, book reviews, new product announcements, an employment service, and lists of future engineering and technical society conventions. In 1956 thirty percent of the technical articles appearing in the Journal were on color subjects -- primarily new equipment developments and practices for color television.

Journal articles of wide interest and importance are often reprinted for broader distribution; and from time to time special engineering committee projects and reports are prepared for publication. In recent years three reprints on color subjects made available by the Society dealt with "Characteristics of Color Film Sound Tracks," "Principles of Color Sensitometry," and "Subject-Lighting Contrast for Color Photographic Films in Color Television." A publications list, including these and other SMPTE publications, has been prepared by the headquarters staff.

Early in 1957 an SMPTE Color Committee project entitled "Elements of Color In Professional Motion Pictures" will be printed in book form. This comprehensive study was prepared to provide an insight for non-engineering personnel in the industry into the fundamental problems associated with the use of color in various phases of motion picture production. It includes chapters on color fundamentals and characteristics; color films and processes; planning and photographing a motion picture in color; color photography outdoors and in the

studio; special effects; color processing and printing; motion pictures and color television; and visual effects. This book was compiled from the contributions of leading specialists in color motion picture production; and the final manuscript was edited by a member of the Color Committee.

Standardization activities are now conducted by fourteen engineering committees, consisting of more than 250 members, which deal with projects relating to color, film dimensions, film-projection practice, high-speed photography, laboratory practice, motion-picture studio lighting and process photography, optics, screen brightness, 16- and 8-mm motion pictures, sound, standards, stereoscopic motion pictures, television and television studio lighting. In addition to the evolvement of new standards and the review or withdrawal of old ones, engineering committees conduct surveys and studies and prepare reports, such as a recent investigation of lighting practices in color television studios. Among the projects on which the Color Committee is currently at work are the following:

1. preparation of a tutorial report on the conditions influencing the appearance of projected color motion picture film, including
 - a. the theoretically desirable characteristics for the light source
 - b. the effects of surround illumination on color rendition
 - c. a statistical survey of actual projector light sources and screens;
2. utilization of the above report to develop a standard for the projection and viewing conditions of laboratories and studio screening rooms;
3. replacement of the "color temperature" concept with a system for defining the color characteristics of camera light sources that is more directly related to the response of color film;
4. establishment of a specific technique and nomenclature for measuring the density of the optical sound record on color film which, when adopted as a standard, will eliminate misinterpretation of terminology among various laboratories using slightly different equipments.

SMPTE engineering committees also determine specifications for motion picture and television test films produced by the Society. These films, both sound and visual, are used by equipment manufacturers and dealers, theater service and studio engineers, educators, broadcasters and others as standardized measuring tools to define and check equipment performance. At present the SMPTE has 41 test films including color television test films and slides which represent the quality of color material obtainable from Eastman, Ansco and Technicolor prints.

The Society cooperates extensively with other engineering and technical

organizations, among them, of course, the Inter-Society Color Council. The SMPTE currently has nine representatives to the ISCC, appointed for two-year terms by the Engineering Vice-President. More than half of these representatives also serve on the Society's own Color Committee, and so facilitate coordination of the activities of the two groups. Individual SMPTE members have presented lecture-demonstrations on color photography and color television at ISCC meetings. This association between the SMPTE and the ISCC is one of long standing, existing since the 1930's.

In recognition of outstanding technical contributions to motion pictures and television the SMPTE annually presents five industry awards. The Progress Medal is awarded "for any invention, research, or development which resulted in a significant advance in the development of motion picture or television technology." The Samuel L. Warner Memorial Award is presented "for outstanding work in the field of sound motion picture engineering." "For new techniques, methods, and equipment which hold promise for the continued improvement of television," the SMPTE presents the David Sarnoff Gold Medal Award. And the Journal Award goes to the author of "the most outstanding paper originally published in the Society's Journal during the preceding calendar year." A new SMPTE award was first presented in 1956 to honor "major contributions to the scientific progress of color motion pictures." Called the Herbert T. Kalmus Gold Medal, it was awarded to Wesley T. Hanson, Jr. of Eastman Kodak for "the contributions he has made in connection with materials for use in professional color motion-picture photography."

The most recent addition to the list of SMPTE activities is in the educational field. Recognizing the need for supplementing the knowledge of those currently employed as motion picture and television engineers, the Society has sponsored courses in laboratory practice and sound recording at the University of Southern California and the University of California at Los Angeles; and has initiated similar courses at New York University. Recently a Projectionists Information Committee, which will evolve and implement procedures for keeping theater projectionists advised of new equipment and techniques, was formed.

The education program, like other SMPTE projects noted above, indicates the Society's constant awareness of the changing technical problems and needs of motion picture and television engineers and technicians, and attests to its continuing efforts to serve them.

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