

INTER-SOCIETY COLOR COUNCIL

NEWS LETTER

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33RD ANNUAL MEETING

The 33rd Annual Meeting of the Inter-Society Color Council will be held at the Statler Hilton Hotel, New York, New York, on Monday and Tuesday, May 4-5, 1964. On Monday, May 4, meetings of the Color Problems Subcommittees will be held. As in other years, members and friends of the Council are encouraged to attend this Monday session. A Monday evening reception will be held at Cooper Union Museum for the Art of Decoration. Those who attend will have an opportunity to see a new exhibit on textiles. The annual business meeting will be on Tuesday morning, May 5. Dr. Robert L. Feller will be the banquet speaker Tuesday evening. His subject is "Scientific Examination and Technical Study of Museum Objects." Dr. Feller is a Senior Fellow of the National Gallery of Art Research Project at the Mellon Institute.

Mr. William J. Kiernan, President of the Council, has arranged a symposium for Tuesday afternoon under the general title of "Color in Education." The moderator for the symposium will be Mr. F. L. Wurzburg, Jr., Interchemical Corporation.

The speakers are:

Mr. George Kaye, Assistant Director of Art, Board of Education, City of New York, "Color Education in Art."

Mr. Samuel Schenberg, Director of Science, Board of Education, City of New York, "Color Education in Science."

Dr. Randall M. Hanes, Applied Physics Laboratory, The Johns Hopkins University, "Report of ISCC Problem Committee 20, Color: A Guide to Basic Facts and Concept."

Professor Isay A. Balinkin, University of Cincinnati, "Two Worlds of Color--Or One?"

C. HOMER FLYNN,
EXECUTIVE SECRETARY OF
FEDERATION OF SOCIETIES
FOR PAINT TECHNOLOGY
DIED ON JANUARY 31

C. Homer Flynn, Executive Secretary of the Federation of Societies for Paint Technology, and one of the most respected and well-known men in the paint industry, died in Jefferson Hospital, Philadelphia, Pennsylvania, on January 31, 1964. He was 64 years old.

Known as "Homer" to hundreds of friends everywhere, he had also acquired the name "Mr. Federation," a title earned by his energetic interest and tremendous pride in the Federation and the industry it represented. The forward progress of the Federation, its growth and its position of technical leadership within the paint industry of the U. S., and its position of prestige throughout the whole world was largely due to his aggressive leadership and direction during his 13 years as executive secretary.

Mr. Flynn, who was named after Charles S. Homer, the first trained chemist employed in the paint industry, was born in Brooklyn and attended Brooklyn Preparatory School and Brooklyn College. He cut short his college career to enlist in the U. S. Army during World War I and spent 14 months overseas. After the war, he became associated with Valentine & Co. as a varnish maker's helper. Through the years he advanced to the position of superintendent.

In 1934, he joined the staff of the National Paint, Varnish and Lacquer Association in Washington, D. C. as director of its newly formed Industrial Division. Four years later he left the NPVLA to become Vice President and Sales Manager of Paramet Chemical Corporation in Long Island City. During this time Mr. Flynn served a term as President of the Synthetic Resin Manufacturers Association. When Paramet was purchased by the Plaskon Division of Libby Owens Ford Co., Mr. Flynn went to Toledo, Ohio as Product Sales Manager of the Coating Resins Division of Plaskon.

His career as "Mr. Federation" began in December 1950 when he became Executive Secretary of the Federation (then the "Federation of Paint and Varnish Production Clubs"), Editor of Official Digest, and Manager of the Paint Industries' Show. All three of these--the Federation, the publication, and the Show--grew in size and stature under his management. In 1961 he was awarded the George Baugh Heckel Award for his outstanding contributions to the general advancement of the Federation's interest and prestige.

Mr. Flynn was active in the National Association of Exhibit Managers, a group of individuals who manage industry shows for non-profit organizations, and served as its president in 1960-61. He was also a member of the Chemists' Club of New York.

His friends in the ISCC were stimulated by his enthusiasm for the Color Aptitude Test. He was devoted to this project, and through his work on it he became a solid supporter of the Council. His cooperation with ISCC was model. He alone was responsible for selling the idea of the Color Aptitude to the paint trade. He provided reprints, publicity, and any other kind of support he could think of. He will be remembered for his active enthusiasm both in the field of color and in paint technology.

He is survived by his wife, the former Irma Gramlich; two sisters, Mrs. Margaret M. Cunningham, of Long Island, New York, and Miss Martha A. Flynn, of Flushing, New York; and a brother, James Francis, of Lexington, Massachusetts.

1967 CIE SESSIONS
TO BE HELD IN THE
UNITED STATES

At its quadrennium meeting in Vienna last June, the Commission Internationale de l'Eclairage (International Commission on Illumination) voted to hold its next (1967) Congress in the United States. Time and place for this has now been established, according to Prof. E. M. Strong, Cornell University, President of the U. S. National Committee of CIE.

The Congress, Sixteenth Plenary Session of the CIE, will be held June 20-28, 1967, at the Shoreham Hotel, Washington, D. C. Some 600 delegates, from some 30 countries, are expected to attend. A USNC Steering Committee, headed by L. E. Barbrow and F. C. Breckenridge, both of the National Bureau of Standards, Washington, D. C., already is at work to organize details of the program.

The CIE Congress, with some 30 countries represented, meets every four years to review lighting development throughout the world. Its last meeting was in June of last year in Vienna, Austria. The last previous session of the Commission to be held in the United States was the Congress at Saranac Inn, New York, in September 1928.*

Several of the many CIE technical committees are concerned primarily with color in particular: E 1.3.1, Colorimetry; E 1.3.2, Color Rendering; E 1.3.3, Signal Colors. Many of our ISCC members serve on U. S. technical committees associated with the work of the CIE and of the U. S. National Committee of the CIE. We shall be glad to welcome members of the group to a meeting in this country.

INTERNATIONAL COMMISSION FOR COLOR COORDINATION

An International Commission for Color Coordination was organized in September 1963, to promote color coordination and the exchange of color information throughout the world. This commission is composed of a color organization from each member country. Representatives will meet twice a year to exchange ideas as well as to select colors. Countries participating in the initial meeting, which was held in Paris, included Belgium, France, Germany, Great Britain, Holland, Italy, Japan, Spain, Sweden, Switzerland, and the United States.

ISCC member Eloise Voss of the Color Association of the United States represented the United States at the organization meeting. She will also attend the second meeting in March.

Color inspirations and influences come from all over the world. Expanding international fashion interests, as well as the growth of the Common Market and international trade, make exchanges of color information highly desirable. The first meeting of the group selected "tendency tones" to serve as a guide for stylists in every country, as well as to establish a means of color communication. Listed below are colors in our spring-summer 1965 collection which reflect the committee's thinking.

The Commission plans to meet twice a year to make similar selections as a guide for industry.

If any of ISCC members have suggestions for additional services or other functions which you would like the Commission to consider, address your recommendation to Miss Midge Wilson, Color Association of the United States, 200 Madison Avenue, New York 16.

*Note. Norman Macbeth, Sr., was president of IES this same year, and our Treasurer, Norman Macbeth, Jr., accompanied his father to the Saranac Meetings of CIE which immediately followed IES Meetings held in Toronto.

Wool CollectionBeige-Brown

Pearl Beige
Bleached Sand

Yellow-Orange

Goldfinch
Peach Puff
Crustie
Molten Gold

Green

Green Sprig
Lime Spark
Blade Green

Blues

Turquoise Chip
Blue Gentian
Magna Blue
Heritage Blue
Poster Blue

Pink-Red

Pink Coral
Firefly Pink
Carmine Pink
Powerhouse Pink
Red Rambler

Silk CollectionBeige-Brown

Rattan Brown
Cocoa Brown
Rachel Beige

Yellow-Orange

Orange Meringue
Amber Glaze

Green

Celery Tip
Candy Mint
Crisp Green

Blues

Aqua Mist
Twinkle Turq
Tropic Isle Blue
Summer Sky
Monarch Blue
Half Moon Blue
Bonnie Blue
Blue Accent
Bellhop Blue

Pink-Red

Shelltone
Salmon Soufflé
Pink Cheek
Precious Coral
Spicy Coral
Pert Pink
Vibrant Rose

3RD ICSID CONGRESS, PARIS

The Third ICSID Congress was held in Paris at the UNESCO Headquarters building June 1963. Several members of ASID and IDI participated. Two ISCC members attended. They are Alfons Bach, IDI; and Ted Clement, IDI.

Topics discussed by the meeting were "Industrial Design, the Unifying Factor?" and "Plagiarism, For or Against?" In connection with the conference an international exhibit of industrial design was held in the Louvre. Many of the American designers criticized the U. S. contribution to the exhibit but felt that the exhibit itself was a tremendous success.

One of the very interesting ideas connected with the conference was the French innovation of inviting small groups of delegates into their homes for an evening of food, drink, and conversation. According to Mr. Peter Muller-Munk in the ASID Newsletter, "This was a delightful way to create intimacy out of a big, fairly formal meeting."

COLOR MARKETING GROUP

The Color Marketing Group has been quite active since its founding in September 1963. Louis A. Graham was re-elected Chairman of the Marketing Group. A spring meeting has been planned and a Color Fair Exhibit has been designed and produced. The following are other persons elected to the Board of Governors of the Color Marketing Group: Landon C. Stocks, Formica Corporation; Mrs. Elizabeth Burris-Meyer, House and Garden Magazine; Joseph Radigan, Kentile; Everett Call, National Paint, Varnish and Lacquer Association; Mrs. Ouida Wessman, Scott Paper Company.

The spring meeting will be held May 18th at the Sheraton-Atlantic Hotel, New York City. A feature of this meeting will be the Color Fair Exhibit showing color lines of companies represented in the organization. According to the

news release, these colors for November 1963 included "177 grays, 155 browns, 134 yellowish browns, 143 yellows, 104 blues, but only 29 reddish browns, 20 purples, 24 purplish blues, 21 purplish reds."

Speakers at the Annual Meeting were Everett Call, National Paint, Varnish & Lacquer Association; Kenneth Kelly, National Bureau of Standards; W. N. Hale, Munsell Color Company; C. S. Stackpole, American Gas Association; Richard Jones, American Builder Magazine; and Randall Hanes, Johns Hopkins University.

Dr. Hanes reported on two psychology tests. He said, "Two experiments in testing the effects of color on people were reported. In one experiment the effect of various colors on a person's evaluation of distance from the colored object was tested. By the use of a room with three gray walls and one wall which could be changed in color and moved closer or farther from the subject, the psychologists proved to their satisfaction that the objects colored in the so-called advancing colors do seem to be closer than they really are and those colors colored in the receding colors are, in fact, seen by the eye as being farther off than they really are.

"A second, different, carefully controlled experiment on the psychological effects of color use was also related by Dr. Hanes. In this, the response of school children to classrooms painted in various colors was studied. The results, however, were inconclusive. It could not be determined whether the initial alert response of the pupils was due to the change in room color or to the novelty of the entire experience. As time passed, the favorable pupil reactions became less and less, and ultimately the test group did not respond any differently than classes in rooms that had not been carefully colored."

Four well known colorists and designers discussed their methods of selecting fashion colors. The speakers were Susan Eastman, J. P. Stevens & Company; Austin O'Grady, James Lees & Sons; Carl Smedley, Glidden Company; and James Tully, Baumritter Corporation. Miss Eastman said that due to more and more rapid methods of communication, the color cycle is speeded up. The pyramid, with high fashion exclusive at the apex and mass produced, popularized shades at the base, is flattened out. "Everything seems to hit at the same time," she said. Mr. O'Grady pointed out that best sellers in carpets have been progressively deeper and deeper in color. A similar trend was reported by Mr. Smedley who said that at present there is a trend toward stronger colors in surface coatings.

THE COLOUR GROUP OF GREAT BRITAIN

Since November 6, 1963, the Colour Group has had a series of very interesting meetings. The following are taken from the Colour Group announcements of the meeting.

Dr. R. A. Weale, "On Seeing Red." Detailed fundus reflection spectrometry enables one to correlate some subjective and objective data obtained with light of long wavelengths in a quantitative manner. The objective data have also a bearing on the Stiles-Crawford effect, in particular on some of the work recently published by Enschede and Stiles.

Dr. J. D. Moreland, "On Seeing Blue." When a small field is fixated within 8° of the fovea a transient arc is seen entoptically. The arc corresponds topographically to the band of retinal nerve fibres serving the area stimulated and is always blue no matter what stimulus color is used. These effects will be demonstrated. Experiments on the spectral sensitivity of the phenomena will be described.

Mr. J. Charlton, "The Use of Color in Eighteenth Century Interiors." The change of architectural fashion from the time of Sir Christopher Wren to that of Sir John Soane a century later brought with it a varied and increasing use of color. The lecture will trace these changes in color usage.

Dr. C. A. Padgham, "The Positive Visual After-Image." The binocular matching technique has been applied to the study of the decay of the brightness of positive visual after-images, formed by both white and monochromatic light stimuli. Quantitative data are given for various conditions. Suggestions are made regarding the origin of the after-image.

Mr. K. H. Ruddock, "The Effect of Age on Color Vision." A colorimetric survey has been performed to investigate changes in visual response to color. The effects of age which have been measured have been correlated with known age changes, such as those in lens transmission. The possibility of other age changes in the visual system has also been examined.

Mr. S. Rees-Jones, "Artists' Materials and Techniques." The range of artists' pigments: the limits before the beginning of the modern industrial era and the subsequent extension. Physical characteristics of paint which interest the artist. Looking at pictures in the gallery and in the laboratory.

Mr. G. E. Wickham, "Color Aesthetics." The need for order is inherent in man's nature. Art, the emotional expression of an order, can only be appreciated by those naturally sensitive to such organization, or those esoterically aware of its nature. This is an attempt to share some of the non-rational responses that order in color can stimulate.

KARL FREUND
RECEIVES NEW HONOR

Mr. Karl Freund has been presented with a Department of Navy Letter of Commendation on behalf of Rear Admiral K. S. Masterson, Chief of the Navy's Bureau of Weapons. Adm. Masterson said of Mr. Freund, "As a direct result of your efforts in the field of photometric and colorimetric instrumentation and measurements, the lighting of aircraft cockpit areas and instruments has been raised to a degree of sophistication not possible before. The benefits of your skill and knowledge accrue to all aircraft, whether military, commercial or private. The importance of your work is too extensive for evaluation in a short letter." Brightness meters developed by Mr. Freund are now international standard instruments for the measurement of airport illumination, school lighting and highway lighting.

TWO ISCC MEMBERS PRESENT
INTERESTING LECTURES

The Newsletter received a copy of a talk presented by Howard Ketcham at the joint meeting of the American Association of School Administrators and the American Institute of Architects, February 16, 1964, in Atlantic City, New Jersey. In his presentation Mr. Ketcham made a number of important

observations and recommendations. He pointed out that school administrators will often employ acoustical and illumination experts to make sure that the environment is comfortable and not distracting. He pointed out that color is equally important but that this is not often delegated to a color authority. He backed up his statements with reports on a number of investigations showing the influence on comfort, psychology and well being of classrooms painted in different colors. (The Newsletter has a copy of Mr. Ketcham's talk which it will make available to interested ISCC readers.)

In the last issue of the Newsletter there was a report that a woman in Flint, Michigan could "see" colors with her fingers. A recent report in the New York Times has cast some slight doubt upon this ability, but it still remains a most interesting development. Ralph Pike, of the Paint Division of duPont in Flint, Michigan, has kept the Newsletter informed about these developments, and he has used this newspaper report in several talks which he has given. The first was presented to the Chicago section of the Illuminating Engineering Society, and the next is scheduled for the midwest section of American Institute of Architects. To illustrate his point he uses two definitions--one proposed by the American Psychological Association: "A sensory or perceptual component of visual experience typically characterized by the attributes of brightness or lightness, hue and saturation; but in certain cases having zero saturation and no hue." The Illuminating Engineering Society definition, on the other hand, says: "Color consists of the characteristics of light other than spacial and temporal inhomogeneities." Mr. Pike says, "By either of these definitions our interesting Flint subject does not see color through her fingertips, since neither the 'visual experience' nor 'light' is involved in the process."

LETTER TO
THE EDITOR

Since the publication of my historical essay on Metamerism and Color Stability in ISCC Newsletter No. 165-166, I have had the good fortune to see one of David Paterson's books. This was loaned me by Max Saltzman after a search of his company's library in Buffalo, and I can now share his and Roland Derby, Jr.'s, enthusiasm for the book. It is entitled "Colour Matching on Textiles" (a different title than the one listed as reference 19 in the bibliography). It was published in 1901 and contains fourteen specimens of dyed fabrics demonstrating metamerism and appearance color stability.

Specimens 1 to 5 show four reds and one blue that were designed to be appearance stable. Colors that are not appearance stable he calls "supersensitive shades" and defines them as colors that "are altered or changed in aspect" under different illuminants. The book contains a table of the effects of different illuminants on the appearance of various dye formulas for the then common illuminants daylight, arc light, Wellsbach, and acetylene.

The remaining swatches, 6 to 14, called "supersensitive shades" are appearance unstable or metameric. Specimen 6 shows a swatch of olive green silk overlaid with a visually matching swatch of wool. The match in daylight is good, but under incandescent the silk goes brown while the wool remains green. Specimens 7 and 8 are a pair of metameric navy blues. Numbers 9, 10, 11, and 12 show another metameric series which are plum colored. Numbers 13 and 14 are a pair of olive drab metamers that are roughly alike in daylight; however, under incandescent, Number 13 shifts to an olive green while Number 14 appears brown. The author even gives spectral reflectance curves for some specimens to explain their peculiar behavior.

Mr. Paterson tells an amusing story of an attempt to match the spots of a leopard skin but the dye match turned out to be so "supersensitive" that the reproduction no longer looked like a leopard skin when viewed under an artificial illuminant. The book is a real gem--it is a pity there are not more copies about for it contains much useful and still up-to-date information.

During the discussion on metamerism at the March 1962 meeting of the Inter-Society Color Council in New York, a difference of opinion was expressed by several members on the minimum number of times curves of a metameric pair must cross each other in order to be metameric. As I recall, Dr. Wyszecki said the curves must cross at least twice, while Roland Derby and I thought we had seen examples where the curves only crossed once. By coincidence, the Erikson ink metamers in the ISCC Newsletter article illustrate (nearly so) the latter point of view. If the ink for curve E were made just slightly lighter, the curves would cross only once, yet I think the two swatches would still be considered metameric although not a lightness match. Both points of view depend on one's interpretation of the definition of metamerism.

Perhaps a definition in terms of one "observer" is not most useful for it is difficult to find two real observers who will see a strongly metameric pair in exactly the same way because of differences in their color vision. It seems to me it may be just as important to know how much metameric colors shift under different illuminants as it is how well they match under one illuminant for a group of real observers.

Walter C. Granville

DIN SYSTEM REVIEW:
COMMENTS AND CORRECTIONS

A cordial letter from Dr. Manfred Richter regarding the review of the DIN system which appeared in Newsletter No. 168 contains several comments and corrections to which we call the attention of Newsletter readers.

1. While it is true that Rösch introduced the concept of "Relative Brightness Value h ," the idea that colors of the same h may be equivalent in the painter's sense was initiated in connection with the DIN charts by Dr. Richter and his co-workers.
2. The transformation equations used to convert Ostwald values to trichromatic values were those originally published by Dr. Richter as early as 1931, deduced from the original concepts of Ostwald. While Dr. Richter regards these as the only basis for a conversion to Ostwald notation, nevertheless they do not agree with any reproduction made of the Ostwald charts, whether the different editions of Ostwald's own atlases, or the U. S. editions of the Color Harmony Manual. Thus, the formulas for the Ostwald notations provided by the DIN authors have a theoretical basis with which no reproduction of Ostwald charts agrees. (This makes these Ostwald notations confusing, at least to U. S. colorists, who are more familiar with the notations of the Color Harmony editions of Ostwald charts.)
3. Dr. Richter indicates that the lacquer was applied to the acetate sheet (glossy side), not the cardstock. After allowing the heavily plasticized lacquer to partially dry over night, the acetate sheet was backed by the white cardstock, the sticky lacquer serving as the adhesive.

4. Last, but very important!, is a misunderstanding regarding price. Dr. Richter tells us that he has checked with Beuthvertrieb, who tell him that the complete DIN Color Chart, in plastic box, is available from Beuthvertrieb GmbH, Berlin 15, at a cost of 1015 DM (about \$255) plus costs for shipping and packing, whether for domestic or foreign shipment. This is very considerably less than the 1340 DM price (about \$338) quoted in our review. We are glad to provide the correct price information. (The other appeared on advertising literature which evidently was incorrect.)

D. N. and W. C. G.

COLOR VISION

The National Society for the Prevention of Blindness has made available to the Inter-Society Color Council a very interesting pamphlet, "Color Vision," reprinted from The Sight-Saving Review. The Society recognized the assistance of the late Commander Dean Farnsworth in the preparation of the article. It is mainly concerned with color deficient vision, its detection and consequences.

COOPER UNION MUSEUM FOR THE ART OF DECORATION

In the November-December 1963 Newsletter No. 168, page 28, it was reported that the trustees and administration of the Cooper Union had been considering the possible discontinuance of their Museum for the Arts of Decoration. A Committee to Save the Cooper Union Museum was organized and stands ready to work with the Cooper Union Administration in a constructive way to preserve the integrity of the museum. More recently a special committee of the American Association of Museums was appointed to study the situation and make recommendations.

Mr. Harvey Smith, President of Patterson Fabrics, Inc., and Treasurer of the Committee to Save the Cooper Union Museum, has informed your President, W. J. Kiernan, that the committee desires to prepare for the possibility that they may have to contribute active financial support to the museum over a period of about four years. Members of the committee and their friends have been asked to give Mr. Smith an indication of the amount they would wish to contribute to the Museum Fund, if called upon. No contribution would be regarded as too small or too large. The members of the Inter-Society Color Council are urged to write to the Committee to Save the Cooper Union Museum, Room 416, 509 Madison Avenue, New York, New York - 10022, and indicate to the committee their willingness to contribute any specified sum to save the museum. Members of our member-body delegations should bring this worthy cause to the attention of their societies and associations. Remember no solicitation for money is now being made, only an expression of your willingness to help the museum in a financial way if the need arises.

W. J. Kiernan

ABSTRACTS OF ARTICLES FROM JAPANESE STUDIES OF COLOR

The following are abstracts of articles from Studies of Color by Japan Color Research Institute, Vol. 9, No. 4, 1962.

"An Investigation of the Method of Indication Used for Railway Signals," by Genro Kawakami and Ichiro Soma. The visual indication used for railway signals depends on the condition of the shape and color because it is necessary to

convey the matter of indication rapidly. The visual indication is indispensable in our life, as in the case not only of railway signals but of the advertisement of merchandise. As to railway signals in Japan, electronics is taking the place of visual sensation. As it is impossible, however, to discriminate an unexpected accident by means of the mechanism of electronics, the visual signals can not be abolished. Signals are now increasing in kind as the result of the speed-up in railway transportation, and the misconception of a signal causes a serious matter. The misconception should naturally be due to the similarity and complexity of the color and shape of the signals.

Recently the authors have investigated the colors, shapes, arrangements, comfortable distance of signal-lamps of Japan National Railway. It has been found that there are 97 kinds of signals, and that round-shaped signals, monochromatic ones, and point-indicating ones count for 50% of all the signals. The authors suggest that it should be better to use a signal with two colors placed side by side.

The article contains four pages of text and illustrations showing different kinds and combinations of signal arrangements and five pages of tables listing data on such signals. The whole article is in Japanese so it is impossible for the writer to give a review.

"Modes of Color Perception Processes," by Physiology Section, Research Division 2, Japan Color Research Institute. Unfortunately the abstract, as well as the text, is in Japanese but this is an ambitious article including 12 pages of text containing two full page tables, illustrations and formulas. The names of Young-Helmholtz, König-Judd, Fick-Pitt, Hering, Adams, Müller-Judd, Hurvich-Jameson, Ladd-Franklin, Boynton and Von Kries-Schrodinger are seen and the first table lists the cone pigments and color confusions along with the respective formulas for these different color theories. The paper ends with a table listing the unitary hues expressed in millimicrons determined by 26 experimenters for red, yellow, green, and blue.

"Color Discrimination under Different Light Sources," by Genro Kawakami and S. Yoshida. This is a one-page article with a six-part bibliography and three illustrations. The color discrimination under different light sources was determined by the Farnsworth Munsell 100 hue test. There are no English words used in the text. Anyone wishing more information on this paper should write the authors in care of the Japan Color Research Institute.

(Sent to the Newsletter
by Kenneth Kelly)

COLOR ENGINEERING
MAGAZINE

The Newsletter would like to call your attention to a number of interesting items in the January 1964 Color Engineering Magazine.

On page 12 is a reprint of Carlton B. Spencer's excellent lecture presented at the 22nd Annual Meeting of ISCC, "Automotive Color Production from Premise to Product."

Forrest Dimmick and S. M. Luria joined forces to publish an excellent article on color discrimination, pp. 15-22. We will not attempt to summarize this article here because many ISCC readers receive Color Engineering, and those who do not should get the magazine and read the item first hand.

ISAY BALINKIN PRESENTED
ENGINEER AWARD

Dr. Isay Balinkin, Professor of Experimental Physics at the University of Cincinnati, was presented with the Engineer of the Year Award at the February meeting of the Engineering Society of Cincinnati.

The following is reprinted from the Post and Times Star of Cincinnati:

"Balinkin is a native of Odessa, Russia. He came to this country after receiving his Mechanical Engineering Degree in Istanbul, Turkey. He received his M. S. at the University of Cincinnati in 1926 and his doctorate in 1929. He joined the UC faculty in 1927. He is consultant for the Cambridge Tile Company, has served as designer for the Central Scientific Company and was planning assistant for the Hall of Fame at the Chicago's World Fair."

INTERCHEMICAL AT
WORLD'S FAIR

The Interchemical exhibit at the World's Fair will be the Color Center located in the Hall of Science. Focal point of the Color Center will be a 14-foot high rotating "color tree" representing various color notation systems. At the base of the tree and around the outer edge of the exhibit area demonstrations will explain such color principles as absorption, reflection, additive and subtractive color mixture, and the effects of different kinds of light on color. Other demonstrations planned for the center include a color memory test, "the physicist's rainbow," demonstrations of negative afterimage, simultaneous contrast, and metamerism.

The General Aniline and Film Corporation will also be exhibiting in the Hall of Science. Their display will be called "Chemistry and Color."

The Hall of Science will be located in the Transportation Section of the World's Fair. The structure and exhibits by 11 exhibitors will become the New York Museum of Science and Technology when the fair closes in 1965.

COMPUTER COLOR MATCHING
FOR TEXTILES

American Cyanamid Company announced the availability of a new service, Computer Color Matching for Textiles. Benefits claimed for the service are quick starting formulas, approximate cost to match shade, selection of economical formulas from among many proposed formulas, and reduction in the number of dyeings required to arrive at an accurate match. Computer color matching, called CCM, operates on spectrophotometric data on dyes stored in a 1620 computer. When a match is to be made, the sample to be matched is measured in a Color Eye colorimeter at 16 points. Using a mathematical relationship developed in 1944 by E. I. Stearns, the computer will calculate a formulation for a color match. This first calculation will not ordinarily produce a satisfactory match. Formulation is improved by measuring the produced sample on the colorimeter and repeating the process. The computer multiplies the amount of dyeing called for by the price of the dye and arrives at a total cost for each dye in the formulation and the cost of the total formulation. CCM is based upon work done in the laboratories of American Cyanamid.

According to the brochure produced by American Cyanamid, the first such color matches made anywhere in the world were made in the laboratories of American Cyanamid and reported in American Dyestuff Reporter, Vol. 33, No. 1, 1944, by E. I. Stearns. A satisfactory and complete mathematical theory for predicting a color match was also published in that same year by R. H. Park and E. I. Stearns in the Journal of the Optical Society of America, Vol. 34, No. 112. This formulation forms the basis of operation of the TDC component of the COMIC color matching equipment. F. Noechel and E. I. Stearns also reported on a study of mixed fibers which resulted in a proposed additive function. This article was published in American Dyestuff Reporter, Vol. 33, 1944. The step-by-step procedure of solving color matching formulations was proposed by Park and patented, U. S. Patent No. 2, 542, 564 (1959). The present application of the data to the 1620 was developed by Dr. Eugene Allen.

HELMHOLTZ'S TREATISE ON PHYSIOLOGICAL OPTICS

The following review is reprinted from Sight-Saving Review. The book was published by Dover Publications, New York, 1962, in a 2-volume set. Volume 1 contained 479 pages; Volume 2, 734. The English translation of this book was made from the third German edition, and edited by James P. C. Southall under the sponsorship of the Optical Society of America which published the translation in three volumes, 1924 to 1925. It has long been out of print. Price of Dover edition, \$15.00.

"Helmholtz's 19th century classic, supplemented with material by other outstanding scientists in the field, was used in 1925 as the basis for a work which contained everything known about physiological optics up to that time. The present edition is a corrected re-publication of this 1925 translation.

"It begins with a careful anatomical description of the eye. The main body of the text is divided into three general categories: the dioptrics (science of refracted light) of the eye, the sensations and the perceptions of vision. This last part deals not so much with physiological as psychological optics.

"In 1866 Helmholtz wrote that his chief aim with the work was 'to verify all the fairly important facts by the evidence of my own eyes and by my own experience.' His treatise introduced law and order in an area which, at the time, was marked by contradictions that impeded progress. The scope of his writing was vast and the material so timeless that it is still useful today for advanced students in physics, psychologists and ophthalmologists."

MISCELLANY

Eagle Shirtmakers Inc.
Quakertown, Pennsylvania

Gentlemen:

We are heartily in accord with new commercial names for colors which you publicized recently in the Inter-Society Color Council News Letter. Needless to say, it inspired us to augment the list with a few suggestions which you might dump into the pot along with the thousands of others you must have received by now.

To the pathological group we would like to add Dysentera Cotta. We like Willie Maize and offer Imogene Cocoa or Rin Tin Tan as accent colors for two-toning. We think you might also include the color so popular in Australia this year,

Down Umber, not to mention the new IBM development of Think Pink for their computer line wherein machines that are improperly wired automatically turn to Shocking Pink.

We missed Missed Mist on your list and are fearful that some presidential candidate may come up with Square Teal for a campaign color but feel certain that here in the effete East, Gent Teal will have more appeal.

In our own company color is a big business and we are just about to suggest Beatlechrome for a new shaggy dog type of film that by its sheer informality would drown out the conventional palette. But then, one can always fall back on the ubiquitous Ball Blue and of course, Ala Bastard as a natural for an off-white. As a complementary hue to your Unforeseeable Fuchsia, how about I Don't Sienna Mo? Ouch!

Theodore G. Clement
Industrial Design Department
Eastman Kodak

* * * * *

Lighting Effects in the Supermarket (from Consumer's Reports).

When it comes to stage lighting, supermarkets have no business in show business. Yet they sometimes try to create theatrical illusions of freshness by bathing meat in red light and fruits and vegetables in green light. Readers of the Reports often complain of this petty deceit.

In publishing some angry thoughts of a New York City reader along these lines, CU last year commented that, in New York at least, an artificial roseate glow on meat is illegal. But when people elsewhere went armed with this information to their supermarkets, they were assured, in several instances, that the colored lights were perfectly legal. One market manager even claimed that red light keeps meat from "turning."

Maybe they get away with tricks on the road that they can't put over on Broadway. In New York State, the health code is interpreted as prohibiting the use of pink or red lights over meat counters under a section stating that food shall be deemed to be adulterated if "damage or inferiority has been concealed in any manner." An Inspector of the State Department of Agriculture and Markets will, upon request look at any store's meat in the cold light of day. If he finds that it looks any different from the way it looked on the counter, he orders the store to correct its lighting. So far, the state has never had to prosecute a store to make the order stick.

The same action could as easily be taken by other states. For the New York law banning food adulteration is abstracted word for word from the Federal Pure Food Law, upon which most states have modeled their health codes.

The Georgia statute, for example, contains wording identical to New York's. Yet, a CU reader in Atlanta, the state capital, said that when she complained to a supermarket there about its deceptive lighting, the local chain supervisor "informed me...he did not think colored lights were dishonest. I was also informed that I wasn't in New York now, either."

CU's advice to anyone whose dander is up because of phony supermarket lighting is to write to the cognizant authority in his state--the health or agriculture department--and send a copy of the letter to the home offices of the offending supermarket chain.

Eventually, either your state may stop the show or the supermarket showmen themselves may come to realize that they aren't putting anything over on the audience.

(Submitted by L. A. Graham,
Chairman, Color Marketing
Group)

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