

# Inter-Society Color Council *News*

## Editor's Comment

This is your new format. I might have warned you that your *Newsletter* was going to take on a new look in the last issue, but it is cheerier to say hello to something new rather than goodby to something that is changing. Besides, Miniver Cheevy that I am, I might have gone all teary-eyed and nostalgic for the passing of the old, and that would never do. The new format was designed by Karl Fink, who generously contributed a great deal of time and energy not only in the work of design but also in making the arrangements for having it printed. Carl Foss lent his technical assistance in overseeing the color aspects of the printing, which was done by Pantone, Inc.

We hope you like the new format.

## BILLMEYER TO RECEIVE ISCC 1978 MACBETH AWARD

Fred W. Billmeyer, Jr., secretary of the ISCC and professor of analytical chemistry at Rensselaer Polytechnic Institute, has been nominated to receive the 1978 Macbeth Award of the Inter-Society Color Council which will be presented at its annual meeting in Washington, D.C. The Macbeth Award, presented biennially by the ISCC "in recognition of recent important contributions in the field of color . . . in science, art, industry, education, [or] merchandising . . ." cites Dr. Billmeyer for his past and continuing efforts in the entire field of color science and specifically his contributions in four areas:

Teaching and research: in organizing a program of undergraduate, graduate, and extension teaching that is of major importance for training personnel for color research and its industrial application as a new field;

Writing: in journal publications and joint authorship, with Max Saltzman, of *Principles of Color Technology*;

Editorial: in planning a new journal, *COLOR research and application*; and

Organizational: in activities on behalf of the ISCC, the International Commission on Illumination (CIE), and the International Colour Association (AIC).

In summary, the Macbeth Award Committee concluded that Dr. Billmeyer's efforts have made and are continuing to make a most important contribution to the vitality and effectiveness of color research and of color science in all fields of application.

The Macbeth Award was established in 1970 by Norman Macbeth in memory of his father.

## NEWS OF THE PROBLEMS COMMITTEE

Several subcommittees have reported progress and given agendas for the forthcoming Annual Meeting.

### 18. Colorimetry of Fluorescent Materials—Tom Cullen, Chairman.

- Daylight Simulators—F. Simon
- Method for Testing Daylight Simulators for Evaluation of Fluorescent Materials—R. Funk.

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- Comparison of Formulae for Predicting Total Radiance Spectra of Fluorescent Material for Any Illuminant—P. Chong.
- Discussion of ISO Fluorescent Standards—R. Hoban.
- Progress Report-National Bureau of Standards Instrumentation Design Program for Fluorescence Measurement—W. Venable.

### 22. Procedures & Material Standards for Accurate Color Measurement—Ellen Carter, Chairman.

Subcommittee work.

- A brief review of the past year's work.
- Presentation and Voting on the finished draft of "Guide to Material Standards & Their Use in Color Measurement"—all comments have been submitted to the chairman in writing by February 15 and draft has been sent to committee members.
- Discussion of new work and directions for the Subcommittee. All members are invited to bring their ideas.

CORMSAG

- Business meeting—R. Marcus, Chairman
- Report on Activities at NBS of interest to the group—W. Venable.

### 25F. Strength of Colorants—Mass Colored Fibers Section—George Sohn, Chairman.

Two round-robins have been performed by members of the subcommittee. Two pigments, one organic and one inorganic, were spun in polypropylene, wound, and measured. The results will be the main topic for the agenda.

### 27. Indices of Metamerism—Ralph Besnoy & Allan Rodrigues, Co-chairmen.

A light booth providing six different light sources and three sets of color chips (a blue, a green and a beige), each having ten metamers were prepared by the subcommittee a year ago. Ruth Rich's experimental design for the observation tests was adopted at the 1977 meeting. Initial tests have been run using observers at Rensselaer Polytechnic Institute and at the Army base at Natick, Mass. Preliminary results will be discussed at the 1978 meeting. The light booth and color chips will be sent on to other committee members who wish to participate in the tests.

- Review subcommittee's activities to date
- Review observation test data collected.—F. Billmeyer
- Entertain comments and suggestions from the membership.
- Report on activities of CIE subcommittee on metamerism.—E. Allen.

### 33. Human Response to Color—Alexander F. Styne, Chairman.

The first workshop on Color in Healthcare Facilities in November 1976 stimulated discussions between interested people at the National Institute of Mental Health and the Bureau of

Standards. Mr. Clyde Dorsett, Architectural Consultant for NIMH, and Mr. Brian Pierman, NBS, arranged a workshop on *Color in Mental Health Facilities* held June 16, 1977. To quote from their premise, "Professionals are becoming increasingly more interested in the effects of color in mental health treatment facilities and generally more concerned with the effects of color on mental health in man-made environments. Very little research has been conducted to study the relationship between color in the physical environment and the mental health of the occupant . . ." Mr. Clyde H. Dorsett introduced the roster of speakers. Dr. Humphrey Osmond, Professor at Bryce Hospital, Tuscaloosa, Alabama, an authority in environments for mentally ill, spoke on "Color and Psychiatry." Dr. Mayer Spivach, Director of the Environmental Analysis and Design Laboratory, Harvard Medical School, spoke on "Perception and the Mentally Ill." Mr. Peter Coxe, Associate of well known lighting designer William Lam, spoke on "Color and Light," and Elwood Bickford, Manager of Environmental Lighting Division, Duro-Test Corporation, spoke on "Biological Implications of Light and Color." Mr. Robert Spiegel, Architect, Naval Ship Engineering Center, ended the morning session with a splendid show of his "moodivation" techniques, which he recommends for mental health facilities as an environmental stimulus. After lunch the audience formed groups around four of the speakers to formalize their concerns and structure questions for the panel discussion that followed. Mr. Spiegel unfortunately could not stay the entire day.

This novel approach gave the participants a good chance for closer contact with the speaker they selected and seemed to stimulate many to address well thought-out questions in the discussion that followed. The audience was very responsive to the presentations and to the opportunity to make contact with people of mutual interests.

The second major activity of the year, held on December 8 at NBS, was a sequel to the first workshop on *Color in Healthcare Facilities*. The content and format had been discussed in two planning meetings between the Chairman, Brian Pierman, Corwin Strong, Ken Kelly, with designer Ms. Gloria Weissberg and architect Charles Blumberg of NIH as newly interested participants.

As at the first meeting, presentations covered a much broader area than the title of the workshop promised. Dr. William Beck, known to many ISCC members, especially from his presentation before our subcommittee two years ago, spoke on "Developments of Standards for Color and Light in Hospitals." Standards for light sources for general clinical purposes are presently under close study by Dr. Beck and his research team at the Donald Guthrie Medical Foundation in Sayre, Pa. Ms. Gloria Weissberg and Ms. M. Thomas, both contract designers with obviously vast experience in hospital interiors, showed beautiful examples where they have shaped, by thoughtful planning and by clever and sensitive use of colors, spaces conducive to the well-being of patients and proper functioning as good working environments for nursing and medical staff. Ms. S. Fishman spoke on "Color for an Art Therapist" with examples of art produced by mentally sick patients. She explained how warning signs can be diagnosed and interpretive diagnostic evaluation on the state of a patient is possible.

A tour of NBS color facilities with a display of some experiments on the evaluation of the legibility of signs depending on background and figure relationships and on color and brightness contrasts concluded the morning session.

The afternoon featured a mock planning session of a medical facility at the early design stage. The participants acted out their actual occupations or functions closely related to these. They were Mr. Avery Faulkner, architect; Mrs. B. Graff, Interior designer; Dr. William Beck, medical director, Mr. L. Napper of NIH, administrative officer; and Mrs. M. Gearhart, representative of the nursing staff. Mr. Kenneth Kelly of NBS was the capable color consultant, and Mr. R. Hyman spoke as artist and art consultant. Professor Alexander Styne filled the double role of lighting consultant and moderator for the panel. In a warm-up session the day before, parameters for a theoretical planning goal had been set, and after explaining this premise to the audience the "Design Process" was under way. The audience was captivated by the lively interchange of the panelists and participated with many questions.

This second edition of the workshop may be the beginning of a tradition. The hope is expressed that a continuation and expansion will occur again in the fall of 1978.

Dr. Devra Lee Davis of the Environmental Protection Agency, who attended the meeting of our subcommittee last year, arranged a symposium on "THE RELATIONSHIP BETWEEN THE HEALTHCARE ENVIRONMENT AND HUMAN BEHAVIOR" on February 13th, 1978, at the Annual Conference of the AAAS in Washington. Mr. Brian Pierman of the National Bureau of Standards spoke on "WHAT DO WE REALLY KNOW ABOUT COLOR IN MEDICAL FACILITIES." Professor Alexander Styne of the University of Miami discussed "RECENT INNOVATIONS IN DESIGN AND LIGHTING OF HEALTHCARE FACILITIES." Ms. Gloria Weissberg and Ms. M. Thomas, speakers at the earlier mentioned workshop, covered "RENOVATION FOR A LESS STRESSFUL HEALTHCARE ENVIRONMENT." Changing from the original plan, four earlier announced "Discussants" became speakers: Dr. Aristide H. Esser, President, Association for the Study of Man-Environment Relations, Dr. Larry Plumlee, Medical Science Advisor, EPA, Mr. Barry White, Blue Cross, and Prof. Vilma Hunt, Penn State University. Unfortunately, these speakers pre-empted the time so that Dr. Davis' paper "Toward a Theory of the Healthcare Environment" was not given. The additional speakers expanded the viewpoints on the subject further so that this report must be confined to just one example. Dr. Plumlee mentioned that we really do not know for certain many of the effects possibly caused by chemicals released into the atmosphere from petrochemical products, such as from vinyl polymers. There are indications that they may need to be considered carcinogens or even mutagens, similar to such toxic substances as lead. There are suspicions that traces of five retardants found in human milk may result in decreased learning ability of children. Dr. Plumlee believes that we must think of creating "chemical free" hospitals.

Enough to say that this gathering of scientists, designers, engineers, and hospital administrators was much too short and much too diversified to allow a close look at the wealth of material presented—and other material unfortunately left out.

It should be clear from the foregoing that some members of subcommittee 33 as well as the Chairman are seriously engaged in discussions of the subject initially selected within the broad scope of Human Response to Color, and we feel optimistic over the response and the interest in the environment needed for the improvement and care of people's health.

Recent correspondence between Professor John E. Flynn and Mr. Richard Hunter, Chairman of the Grants Committee

of the Munsell Color Foundation, has evaluated progress on the problem of the effects of room color on user impression and possible subjective interaction with spatial lighting effects. It may be recalled that the possible effect of surface color on tests, conducted earlier, was first discussed by the Chairman with Professor Flynn in 1975 and that this led to a research proposal submitted to the Munsell Color Foundation in February 1976. At the international meeting of CIE TC-3.5 (Light in the Environment) in Berlin, July 1977, a subcommittee was formed to review the question "Surface color as a coordinated spatial influence (with lighting)." Professor Flynn and Dr. Fred Rohles, Director of the Environmental Research Laboratory at Kansas State University, have prepared a joint proposal for the study of effects of room lighting, surface colors and furnishings on subjective sensations of thermal comfort, on which the chairman has accepted to act as consultant. It seems evident that the Subcommittee for Problem 33 can function in many different directions.

When I was asked to chair the ISCC Annual Meeting in 1978, I decided to delegate arrangements for the meeting of the Subcommittee. Raymond Spilman, Chairman of the IDSA delegation to the Council, acceded to my request readily and got together an interesting program with speakers of high promise in a totally different area that needs to be investigated. The theme for the meeting will be "Human Response to Color on Objects." As this relates directly to the problems and interests of the Industrial Design Profession, I was glad to extend an invitation to the membership of the Industrial Designers Society of America to attend the ISCC meeting.

I am certain that the presence of more industrial designers than we had in the past and Ray Spilman's program will add another interesting aspect to the broad subject area of our subcommittee.

#### Erratum

In the November-December issue (No. 251), Robert E. Schmelk, Director of Design, Pitney-Bowes, Inc., should be added to the list of speakers for the announcement of the meeting of Subcommittee 33, and Jay Doblin should be deleted from the list. The announcement appears on page 5.

#### 34. Color Difference Problems—Rolf Kuehni, Chairman.

- Introduction of new chairman and secretary
- Report of Rolf Kuehni and Robert Marcus
- Discussion of CIE TC 1.3 subcommittee on  $\Delta E$  activities—A. Robertson
- International Developments—AIC Meeting, CIE Meetings
- Discussion of proposed new scope and vote
- Ideas and Proposals of new work to be done
- Who will do what and by when

#### 36. Color Acceptability Standards—Anthony Pentz, Chairman.

- Background and accomplishments of Design Task Group—A. Pentz
- Present typical set of samples illustrating color tolerances acceptable in the automobile industry—W. Longley
- Present techniques of prototype sets of uniform tolerance—J. Davidson
- Validation—F. Billmeyer

Robert F. Hoban  
Chairman, Problems Committee

#### A NOTE ON THE UNDERGROUND

The Washington subway system, called "Metro" by its operators and many of its users, may make your attendance at the Annual Meeting a bit more convenient and cheaper than it might otherwise be. There is a Metro stop at L'Enfant Plaza, and there are stops throughout the downtown area close to many interesting places and good restaurants. For example, the Dupont Circle stop is just a few blocks from the Phillips Gallery. There are also stops at Union Station and National Airport, but you will not be able to use them when arriving because the system does not operate on Sunday. There will be brochures at the registration desk to tell you how to use the system.

#### HIGHLIGHTS OF THE FEBRUARY 5, 1978 MEETING OF THE BOARD OF DIRECTORS

The Board of Directors held its Winter meeting in Williamsburg just before the Conference on the Optimum Pictorial Reproduction of Color. President Jerome opened the meeting by asking for a moment of silence in memory of Dr. Roland E. Derby, Jr., Past President; Dr. Peter Goldmark, IMG and first recipient of the Macbeth Award; and Honorary Members Fred-eric Rahr and Helen D. Taylor.

The Board approved twenty-four applications for individual membership, listed elsewhere in this issue. In addition, the application for member-body status from the Mycological Society of America (MSA) was approved. This brings the number of member-bodies in the Council to 33. The Delegation Chairman will be Mr. Kent H. McKnight, IMG. The MSA has expressed its willingness to prepare an article on the new member body and its interests in color for later publication in the *Newsletter*.

The Secretary reported that the candidates nominated for the position of President-Elect for the 1978-1980 term (William D. Schaeffer), and Director for the 1978-1981 term (Bonnie Bender, Stephen Bergen, and Edward Cairns), had duly been elected. He also reported that as of January 1, the Council had 615 IMG's, 15 retired IMG's and 15 library subscribers; 226 Delegates, 15 Honorary Members (living), and 28 AIC members on the mailing list. The total mailing list was 863, consisting of 755 domestic and 105 foreign members. He also reminded the Board that he would prepare copy for the new issue of the membership list as soon as possible after the annual meeting.

Some changes in Delegation chairmen were reported: Linda Lewis Taylor replaces Joy Turner Luke, AEA, Joyce Davenport replaces Louis Graham, CMG, Stephen Bergen replaces Robert Sproull, ACP, and Therese Commerford replaces Dr. Roland Derby, AATCC.

A letter received recently from the Secretary of the AIC had three announcements of interest:

1. The formation of an AIC Study group, the first of its kind, was planned, with the terms of reference being "to assemble data that define the colorimetric specification and describe the perceptual purposes of color-order systems intended for use with reflecting samples."

2. The 1979 Judd-AIC Award will be given to Dr. Gunter Wyszecki.

3. There will be an interim meeting of the AIC on color appearance, to be held in Tokyo on August 15-16, 1979, just before the CIE meetings in Kyoto.

Some time was spent in planning the 1978 Annual Meeting in Washington, April 16-18. These plans will not be discussed here, since the notice of the meeting has already been distributed. It was reaffirmed that the 1979 Annual Meeting would be held in New York, at a location still to be determined, on April 22-24, 1979. Approval was obtained to hold the 1980 Annual Meeting at the Holiday Inn (downtown), Rochester, New York, on April 21-22, 1980.

The program for the 1979 annual meeting will be furnished by the Society of Motion Picture and Television Engineers and will include material covering both aesthetics and science.

News from the Problems Committee included a revised scope for the Subcommittee for Problem 30, *Color in the Building Industry*, emphasizing the presentation of colored building products. Mr. Waldron Faulkner, AIA/C, will again chair this Subcommittee.

Plans for two future Williamsburg Conferences were considered. The 1979 Conference will be titled the Judd Memorial Conference on Color Metrics, and will be chaired by Rolf G. Kuehni. The program of invited speakers is essentially complete, and the First Circular will issue soon. The dates are February 11-14, 1979, and participants will be housed in the Lodge and the Inn, utilizing a "package" accommodation plan similar to the one which proved popular at this year's successful conference.

Space was reserved at the Cascades Meeting Center at Williamsburg for a conference on Chromatic Adaptation to be held on February 3-6, 1980. It was anticipated that this will be sponsored by the AIC as an interim meeting to the quadrennial AIC Congresses. No further details were available. The Council also holds space reservations for a Williamsburg Conference on February 8-11, 1981. The topic for this meeting has not yet been selected.

Finally, the Board approved copy for a revised version of its symbol, a revised membership application form, and a certificate of appreciation for service rendered to the Council. It is expected that these will be printed and in use in the near future.

The next Board meeting was set for the traditional Sunday before the Annual Meeting, April 16, at L'Enfant Plaza Hotel in Washington.

C.W. Jerome and F.W. Billmeyer, Jr.

## APPLICATIONS APPROVED FOR INDIVIDUAL MEMBERSHIP

### Board of Directors Meeting—February 5, 1978

Ms. Carrie J. Ahrens ASID, IES. Educational publication 1003 Meadow View Circle and interior design consultation Richardson, Texas 75080

Mrs. Elisabeth Alford Inter-relation of color in painting, 1663 Huff Avenue plus the use of color to communicate ideas, feelings, form, and optical effects. Uses the Munsell System and the Maxwell color wheel. Wichita Falls, Texas 76301 Interested in standardization of colors for manufacturers of paints.

Col. Ronald B. Blackman, ACP, other dental associations not USAF member bodies. The development of methods for improving the clinical utilization of dental ceramic materials as relates to color matching and shade formulating.  
801 Buckboard Boulevard  
Papillion, Nebraska  
68046

Mrs. Miriam K. Fredenthal Understanding and use of color as basic to design study. Color is an integral part of her teaching and weaving. (Assistant Professor, Fashion Institute of Technology; member several craft and weaving societies.)  
129 West 56th Street  
New York, New York  
10019

Dr. N. S. Gangakhedkar Paint-color measurement and color control in production.  
Asian Paints (India) Ltd.  
LBS MARG., Bhanduo  
Bombay 400 078, India

Mr. Gary A. Halvorsen (No information.)  
Magnuson Engineers, Inc.  
P.O. Box 5846  
San Jose, California 95150

Mr. Thomas V. Haney, Jr. SPE. Pigment dispersions; color and appearance as related to plastics.  
Custom Chemicals  
Company, Inc.  
30 Paul Kohler Place  
Elmwood Park, New Jersey  
07407

Mr. Joseph Kettenacker Spectrophotometry.  
130 Mendham Avenue  
Hastings-on-Hudson  
New York, New York  
10706

Miss Barbara Malarek Psychophysiological reactions of the human being to color; a history of color words, associations and responses. Plans to use this information on research on color therapy—the use of colored light on the organism.  
6135 Wilshire Blvd.,  
Suite 205  
Los Angeles, California  
90048

Ms. Rosemary L. McClard CAUS. Color and its effect on physical and emotional wellbeing. Color application to daily living. Research leading to a book on these subjects.  
7816 Potrero Avenue  
El Cerrito, California  
93010

Dr. Don R. Morris, DDS, ACP (Fellow). Matching living tissues as a specialist in "crown and bridge" dentistry. Teaching color to students—a very challenging task. Member American Dental Association.  
MS  
158 Cypress Street  
Laurel Bay, South  
Carolina 29902

Ms. Karen Mortillaro History, physical and psychological awareness of color.  
Orange Coast College  
2701 Fairview Road  
Costa Mesa, California 92626

Professor John B. Moser, Ph.D. Increasing awareness of scientific color management in dentistry and man's general environment. Member, several dental societies not member bodies.  
Northwestern University  
Dental School  
311 Chicago Avenue  
Chicago, Illinois 60611

Mr. Alan Newberg  
925 Burlington Avenue  
Billings, Montana 59102

Color notation and color interaction, colorfast materials for outdoor applications. Teaches color theory for artists at Eastern Montana College.

Dr. Rolf H. Odenthal  
Mobay Chemical Corporation  
Penn Lincoln Parkway  
West  
Pittsburgh, Pennsylvania 15205

Application of pigments in coatings, plastics, and cement-like materials; new development in the area of standardization of color systems.

Mr. Robert J. Ott  
1865 Summit Road  
Cincinnati, Ohio 45237

AChS. The ultimate causes of color strength in pigments, e.g. particle size distribution, crystal phase and alignment, etc., and how these parameters relate to what the eye perceives.

Mr. Brian C. Pierman  
National Bureau of Standards  
Center for Building Technology  
Washington, D.C. 20234

Safety colors, color in building design.

Dr. Klaus Richter  
BAM  
Unter den Eichen 87  
D-1000 Berlin, Germany

Color appearance, color scaling, chromatic adaptation, color metrics. Member, Deutsches Farbenzentrum, Editor, "Farbe + Design".

Mr. Edwin K. Robinson  
2217 North Kentucky Street  
Arlington, Virginia 22205

IES. Illuminant color and space finishes, particularly as related to museum displays. Also the color problems associated with the conservation of museum objects. Exhibits Lighting Designer, Smithsonian Museum of History and Technology; also teaches lighting to museum designers.

Mr. Rolf Rolles  
Finishes Division  
Aluminum Company of America  
Alcoa Technical Center  
Alcoa Center, Pennsylvania 15069

Replaces C. J. Walton as IMG representing Alcoa. Member American Society for Metals others.

Ms. Angela C. Rosich  
ARCO/Polymers, Inc.  
Frankfort Road  
Monaca, Pennsylvania  
15061

All applications of color science related to plastics. Responsible for color control and computer color matching since 1970.

Mr. Ken Sweeny  
P.O. Box 141  
Belleville, New Jersey  
07109

Design usage of perception for appearance to work effectively and psychologically correct.

Dr. P. L. Walraven  
Institute for Perception  
TNO  
Kamoweg 5, Soesterberg  
The Netherlands

OSA (Fellow). Theory of color vision. AIC Baord, 1973-1977.

Ms. Idaherma Williams  
Copper Mine Road, Rd. 1  
Princeton, New Jersey  
08540

AEA. Painting, prints, and teaching (Fleisher Art Memorial)

## ILLUSION

Faber Birren has generously contributed the insert for this issue of the *Newsletter*. The illusion, though based on well known phenomena, is unique in its design. To achieve two different effects from the *same* range of colors in two sequences is perhaps new in concept. To our observation, Birren's diamonds (and crosses) are not to be found illustrated in the many books devoted to perception and visual illusions over the years.

## REPORT FROM COLOR MARKETING GROUP (CMG)

The Mayflower Hotel, Washington, D. C. was the location for the fall meeting of CMG. The theme of the program "Take Stock in Color" presented by Ken Charbonneau and Nadine Gross, was indeed, a most informative and entertaining program.

The speakers included twelve top professionals representing the worlds of the arts, fashion, home furnishings, advertising, retail and wholesale paint sales, market research and graphics. Eight of these professionals are our own CMG chairholders and one of the non-members asked for a membership application as he left. This is an impressive performance and one in which we can all take pride. It is illustrative of our basic CMG charter. Daisy Goldsmith of Fashion Communications was a charming and stimulating moderator for the fall session.

The officers, board and past presidents met (last October) for three days of discussion, review, and planning. It was an intensive session. All the thoughts and ideas will be summarized for the members as a whole in the near future; However a very decisive step was taken in creating new basic outlines for CMG, by introducing three new workshops which were presented to the members at this meeting.

They are Marketing Directions, Educational Directions and Technical Directions. These workshops are being developed to ensure that we take full advantage of all the talents and knowledge available to us in CMG. These new workshops are to further augment the information and projections we formulate through out Color Directions program.

Chairmen of the New Directional Committees are:  
Marketing—Nadine Gross/Arnis Zeeberg  
Education—Lois Zolliker/Jon Hall  
Technical—Joyce S. Davenport

## 1978 Officers

Officers for 1978 were introduced: Betty Jennings of Champion Building Products will be our new President; Vice President will be Ken Charbonneau of Benjamin Moore & Company; CMG's Treasurer is Bob Miracle of Interpace Corporation and Independent Joyce Nacker will be Secretary. The Officers plus Yale Forman as immediate Past President and Everett Call constitute the Executive Committee for 1978. Excellent leadership for CMG's expansion years. Betty Jenning's first official act was to name Yale Forman the Chairman of the Board.

## Board of Directors Election

Five members of the Board of Directors were elected for three year terms by the general membership. These were Eileen Bichsel of Bichsel Photographic Illustrators, Inc.; William C.

Capehart, Tenneco Chemicals Inc.; Robert H. Hurley, Independent; Anne S. Leaf, Gibson Greeting Cards, Inc.; and William Marley, GAF Corporation.

New business responsibilities have prevented Paul Britt being as active on the Board of Directors as he feels CMG is due—he has resigned so that CMG would not suffer the inactivity of a Board Member. President Yale Forman has announced the appointment of Victor A. Brown of Dow Badische Company to complete Paul's term.

The next CMG meeting will be held in Montreal, May 21 - May 24, 1978 at the Hotel Boneventure.

Joyce S. Davenport  
Chairman

## NEWS OF MEMBERS

### Southworth Receives Sabbatical

Professor Miles Southworth has received a leave for faculty growth and development from Rochester Institute of Technology during the next winter quarter. During this time he plans to write extensively in the area of quality control in the graphic arts. Southworth regularly teaches in the area of color separation photography.

### Hunter Receives Alumni Achievement Award

Dr. Richard S. Hunter received the Alumni Achievement Award of George Washington University at its Winter Convocation on February 20, 1978. The award is given "for achievements which reflect distinction upon the University." In this instance, the achievements referred to are Dr. Hunter's contributions to color science and the measurement of appearance. Dr. Hunter received the Macbeth Award at the 1976 Annual Meeting.

### Books on Color

In 1971 Faber Birren presented to Yale a library of books on color assembled by him over a period of some 40 years. These books were less concerned with physics than with color theory, color systems and color standards, color psychology and perception, biological and physiological reactions to color, and color in painting, printing, religion, medicine, music, nature, and the occult. Included were original works by Descartes (1677), Boyle (1680), Newton (1706) and early writers on color and the technique of painting by Corneille (1684), Moses Harris (1766), Larisse (1778). There were Voltaire's defense of Newton (1738), Cartel's early work on color-music (1740), most of the publications of Chevreul, and the unique contributions of Ogden Rood and Charles Henry who inspired the French school of Neo-Impressionism.

These works were annotated and listed in the Yale University Library Gazette of July, 1974, and covered 48 pages.

With an endowment fund established, 220 more publications have since been added to the Collection. Among them are such rare items as a book of color names drawn from antiquity by Thylesius (1529), a manual of color and its emotional effects by Mantuan Morato (1558), a treatise on artists' pigments by Claude Boutet (1676), a book on the painting of miniatures by Mayal (1771), a special treatise on purple (1779), a treatise on painting by du Fresnoy with notes by Sir Joshua Reynolds (1783), and an original manuscript on color by George Bellas Greenough (1778-1855), the noted British geologist.

These recent additions have again been annotated and are listed in the January, 1978, issue of the Yale University Library Gazette in a bibliography covering 39 pages prepared by Robert L. Herbert, Robert Lehman Professor of the History of Art at Yale. The collection as it now stands is rich in the psychological, physiological, and esthetic aspects of color and it reflects Faber Birren's interest in the more human and cultural aspects of color.

### Hughes Joins Duro-Test Corporation

Dr. Philip C. Hughes has joined the Duro-Test Corporation of North Bergen, N.J. as director of marketing, it was announced by G. Raymond McGruther, president.

Dr. Hughes was formerly a marketing manager for General Electric Corporation where he specialized in applied lighting research and application engineering in addition to developing marketing strategies for its lighting division. He was also involved in leading G.E.'s management training program.

He served as a staff scientist on the faculty of Massachusetts Institute of Technology, was a Fellow at the University of Oklahoma Medical Center, and of the National Institute of Mental Health, and is a Fellow of the American Academy of Optometry, was named one of the Outstanding Young Men of America in 1975 and is listed in Who's Who in American Universities. He has served on numerous committees of the Illuminating Engineering Society and has written technical papers relating to light and the quality of work life.

A native of Teaneck, New Jersey, Dr. Hughes received a B.S. Degree with honors in Psychology from Sterling College, Sterling, Kansas, an M.A. Degree in Psychology from California State University in Los Angeles, a Ph.D. in Medical Psychology and Physiology from the University of Oklahoma Medical Center and has studied Marketing, Economics, and Management at Case Western Reserve University.

## NEWS OF MEMBER-BODIES

### American Society of Interior Designers (ASID)

#### ASID International Design Awards Program Announced

ASID will present its prestigious International Design Awards during the International Federation of Interior Designers (IFI) World Congress to be held in Washington, May 17-20. The bi-annual presentation was to have been made last year, but was postponed to honor IFI's first conference in the United States.

The unique program is intended to recognize the foster inter-professional cooperation not only among design professionals, but among all public and private sectors concerned with environmental design. It is given specifically to those individuals and/or teams who have provided leadership and made substantial contributions toward improving the beauty and design standards of our man-made environment.

Open to individuals, associations, corporations, and cultural and civic bodies, the awards will be made in five categories which include: Urban Design; Education; Public Office; Private Endeavor; and Delight and Fantasy.

Norman DeHaan, FASID, National Chairman of the International Design Awards Program, underscored the fact that the Awards are to recognize inter-disciplinary efforts, and while they might be given to individuals, the project must have been executed through the interaction of more than one discipline, or must have displayed encouragement of such efforts.

## IFI Conference Program Set

Final plans for the 1978 IFI (International Federation of Interior Designers) Conference to be held in Washington, DC May 15-20, have been completed by the ASID, the host member.

The theme "Designing for and with the Government" was chosen to allow for discussion and exchange of ideas about a subject that each day affects the livelihoods of designers and their clients all over the world.

Numerous sessions concern Federal government programs, such as "United States Government Improvement Programs" by Jerome Perlmutter, Coordinator of the Federal Design Improvement Assembly; a slide presentation of the interiors of government buildings in nations represented by IFI member associations; "The Design of Official U. S. Government Offices and Embassies Around the World" by Susan Reed McQueen, ASID, Director of Interior Design, Foreign Building Operations, U. S. Department of State; and "The U. S. Government's Role in Interior Space Planning and Design," by Jay Solomon, GSA Administrator.

"The Museum's Responsibility to Preserve and Present Design" will be presented by Lloyd Herman, Honorary Member ASID, Director of the Renwick Gallery; "The Interior Design of Government Hospitals and Health Facilities" will be presented by Emily Malino, ASID, and similar work of other IFI members will be shown and discussed. "The U. S. Government's Role in Historic Preservation" will be presented by Fletcher Cox, Director, Media Services Division of the National Trust for Historic Preservation; and Norman DeHaan, FASID, will conduct a panel on "Government Regulations, Codes and Building Standards." Emphasis will be on an exchange of information among the IFI delegates, about 200 of whom are expected to attend from other countries.

Of necessity conference registration will be limited, and facilities will also restrict the number of attendants to some of the seminars. In both cases visiting delegates registrations will be honored first. ASID members planning to attend the conference should contact Ed Gips at Headquarters. The fee is \$125; only full registration will be accepted and they will be acknowledged on a first come basis.

Reprinted from *ASID Report*, December 1977.

## Graphic Arts Technical Foundation (GATF)

### GATF Receives Award

The Foundation recently received an award from the New York Type Directors Club for a poster promoting the GATF Munsell-Foss Color Chart.

The award presented to the Foundation credited GATF with typographic excellence in printing of the poster. Printing of the promotional poster was done at GATF's Technical Center in Pittsburgh.

The design of the poster was created for and contributed to GATF by Eddie Byrd Graphic Design of Pittsburgh.

### New Graphic Communications Scholarship Established

Roberts & Porter, Inc., Des Plaines, Ill., has established a graphic communications scholarship endowment with the National Scholarship Trust Fund.

The new, self-perpetuating scholarship will be known as the Harry H. Grandt/Roberts & Porter, Inc., Scholarship, in honor of the firm's board chairman, Harry H. Grandt.

The National Scholarship Trust Fund is a nonprofit fund, established in 1957, to award scholarships to outstanding scholars pursuing graphic communications careers. Funding for the scholarships is provided by graphic communications firms, individuals, and national and local associations. The NSTF is currently assisting 218 graphic arts students in the pursuit of educational goals. The NSTF is administered by the Education Council of the Graphic Arts Industry, Inc., an affiliate of the Graphic Arts Technical Foundation, Pittsburgh, Pa.

## Optical Society of America (OSA)

### Topical Meeting on Meteorological Optics, August 28-29, 1978

**Objective.** The Topical Meeting on Meteorological Optics is devoted to all aspects of meteorological and atmospheric optics that are visible to the unaided eye. The purpose is to draw together scientists actively working in the field of halos, rainbows, coronae, the glory, mirages, sky colors, and other phenomena. Our goals are to survey the field; to present and discuss new research; and to suggest future approaches.

**Scientific and Technical Sessions.** The scope of meteorological optics is broad. Papers will be welcome on, but not limited to, the following topics:

- Optics of water drops, rainbows, glory, coronae, drop distortion, interference, size distribution, and descent rates.
- Ice crystal optics, halos, orientation mechanisms, diffraction, and polarization.
- Atmospheric refraction, mirages, distortions, optics of stratified media, optics of pollution, and green flash.
- Atmospheric scattering, rays, shadows, sky colors, colorimetric analyses, dust and haze, and Rayleigh scattering.
- Optical instrumentation and observing techniques.

Each session will be opened by an invited paper followed by a number of contributed papers. Additionally, one evening session will be set aside for informal presentations of outstanding slides and observations.

### Topical Meeting on Atmospheric Spectroscopy, August 30 - September 1, 1978

**Objective.** The Topical Meeting on Atmospheric Spectroscopy will cover spectroscopic measurements of the atmosphere. All parts of the terrestrial atmosphere are included: from the troposphere to the thermosphere; spectroscopy may be at any wavelength from EUV to microwave. The purpose of the meeting is to provide an opportunity for scientists working in all phases of atmospheric spectroscopy to share their results and their solutions to common problems.

**Scientific and Technical Sessions.** The scope of the conference is broad. Primary emphasis will be placed on information about the atmosphere derived from spectroscopic methods rather than on the methods themselves, although reports of new spectroscopic methods applied to the atmosphere are welcome. Papers are solicited on (but not limited to) the following topics:

- Transmittance of the natural atmosphere.
- Spectroscopic studies of atmospheric pollution.
- Studies related to ozone chemistry.
- Auroras, airglow, and other non-thermal radiation, at all wavelengths.
- Atmospheric spectroscopy from space.
- New computational and observational methods.

Each session will be opened by one or two invited papers, followed by a number of contributed papers.

## Society of Photographic Scientists and Engineers (SPSE)

### SPSE Offers "Preview" of Coming Events

Forthcoming events to be held by the Society of Photographic Scientists and Engineers over the next two to three years were announced by Dietrich Schultze, Conference Vice President of the Organization.

The conferences scheduled include:

31st Annual Conference, April 30 to May 5, 1978, at the Sheraton-Park Hotel, Washington, D. C. Howard Daly, Eastman Kodak, is General Chairman with Robert Mason, Hunter Associates Laboratory, serving as Papers Chairman.

In August, the Society will hold its International Congress of Photographic Sciences, August 20 to 26, 1978, at the Rochester Institute of Technology, Rochester, N. Y. Co-Chairmen of this Conference are Professor G. Bird, Rutgers University, and Dr. P. Gilman, Eastman Kodak. Papers Chairman will be Jack Hamilton, Eastman Kodak.

November 14-17, 1978, will see the SPSE meeting on Advances in the Science and Technology of Photopolymers at the Twin Bridges Marriott Hotel, Washington, D. C. Dr. A. Cohen will be General Chairman and Dr. P. Walker will be Papers Chairman. Both men are with DuPont.

The first week in May, 1979 has been set for the Annual Conference, to be held in Boston. W. Kelly is Chairman of the Conference Committee.

November 5-9, 1979, will see the Business Graphics Symposium, Washington, D. C. The Symposium Chairman is S. L. Hou with K. Shimazu, Dr. J. Gaynor, and Mr. S. L. Hou as members of the committee.

April 1980 has been set aside for the Annual Conference, with a Topical Conference planned for the Fall of 1980.

The ICEP Conference on Electrophotography will take place November, 1981, in Washington, D. C., and the Photopolymer Conference has been scheduled for the Fall of 1982.

In announcing his conference schedule, Dr. Schultze noted that the climate for conferences has improved, apparently due to the improved economy and the realization of research management in various institutions that exchanges in the advances in science are serving a creative purpose.

## Society of Plastics Engineers (SPE) Color and Appearance Division (CAD)

### Fall '78 RETEC Concentrates on Automotives

The Color and Appearance Division is planning an extremely interesting RETEC for October, 1978 in northern Ohio on an automotive color theme. Papers are being developed on all phases of the process of producing color-coordinated trims, including color styling, matching to standards, color measurement, pigment applications, processing and problems relating to specific materials. One of the highlights will be a panel discussion on color styling by designers from the automotive companies.

The two-day session is tentatively planned for the week of October 1, 1978.

W. V. Longley & B. J. Meyers,  
Program Co-Chairmen

### Color Seminar for Fabricators, Etc.

Under the sponsorship of CAD, a seminar entitled "Color Management and Control for the Plastics Applicator" was put together by Bob Swain of Chroma and Vic Mimeault of Ferro and presented in Elgin, IL, on September 21st. The seminar was intended to acquaint the molder, extruder, etc., with the basics of coloring plastics so that he can better appreciate the need for good customer/supplier dialogue and minimize his coloring problems. Apparently it met its objective well, based on comments received from the 27 attendees.

### Technical Association of the Pulp and Paper Industry (TAPPI)

The test procedures currently being studied by the Optical Methods Committee and the chairmen of the task groups are given in the following list. The chairman of the Optical Methods Committee is R. A. Aubey.

Test Procedure	Task Group Chairman
Brightness of Pulp, Paper & Paperboard (Directional Reflectance at 457 nm)	S. J. Popson
Illuminants for Visual Grading & Color Matching of Paper (Wave Lengths 400-700 nm Only)	R. S. Hunter
Specular Gloss of Paper & Paperboard at 75 Degrees	H. Hammond
Diffuse Brightness of Pulp	H. Hammond
Diffuse Opacity of Paper (Paper Backing)	P. J. Frost
Transparency of Paper	S. J. Popson
Calibration of Reflectance Standards for Hemispherical Geometry	H. Hammond
Opacity of Paper (15°/Diffuse Illuminant A)	S. J. Popson
Whiteness of Non-fluorescent Materials, Especially Pigments and Fillers	F. Trowbridge
Spectral Reflectance, Transmittance, & Color of Paper & Pulp (Using Spectrophotometer with Reversed Optics)	Van den Akker
Color of Paper and Paperboard by Direct-Reading Hunter L,a,b, 45° 0° Colorimetry	R. S. Hunter
Color of Paper & Paperboard in CIE Y,x,y, or Y, Dominant Wavelength	H. Schuierer

Projects that have been completed and published by the Optical Methods Committee are given in the following list.

### Published Test Procedures and Year of Automatic Review

T#	Title	Year for Review
218 os 75	Forming Handsheets for Reflectance Tests of Pulp	1980
646 os 75	Brightness of Clay and Other Mineral Pigments (0°-45° Directional)	1980
515 os 76	Visual Grading & Color Matching of Paper with an Ultraviolet-Containing Daylight Illuminant	1981

534 pm 76	Diffuse Blue Reflectance Factor of Clay & Mineral Pigments (Diffuse Brightness)	1981
653 os 76	Specular Gloss of Waxed Paper (20-degree)	1981
672 ox 76	Preparation of White Powder Tablets for Reflectometry	1981

## CIE

### Technical Committee on Fundamentals of Visual Signalling (TC 1.6)

Charles A. Douglas resigned as chairman of TC 1.6 the U. S. National Committee and as U. S. representative to the International Committee. He has been succeeded by Cdr. David A. Naus of the U. S. Coast Guard.

### Technical Committee on Radiation Detectors (TC-2.2)

**Second Meeting, September 15-16, 1977, Budapest.** The Committee discussed the work of the Subcommittees as follows:

*Subcommittee on Silicon cells:* The silicon cells and amplifiers to be used in an international comparison of spectral responsivity and linearity have been prepared by Dr. Budde, National Research Council of Canada, Div. of Physics, Ottawa, Ontario K1A 0R6. Laboratories have signed in to perform the measurements. Further request for participation should be directed to Dr. Budde directly. It is hoped that the measurements will not last beyond January 1, 1979 and that an evaluation of the international comparisons can be discussed at the Kyoto meeting of the Committee.

The *Subcommittee on Rating Photometers* prepared its third draft, which has been discussed in detail. A number of suggestions have been made. The Subcommittee will now prepare the fourth draft, and it is hoped that this can be used as final draft of the technical report. A discussion of this will take place at the next meeting of the committee.

The *Subcommittee on Rating Color Measuring Instruments* began its work with a proposition given by Dr. Lukacs, chairman of the Subcommittee.

Detailed discussions on the proposed working program of the *Subcommittee on Problems of Measuring Laser Radiation* were concluded with the recommendation that the Subcommittee should prepare a guide for those who are themselves not laser experts on how laser radiation measurements should be performed. The Subcommittee will also keep strong liaison with other international organizations working in the field of lasers, regulations for laser safety, and laser measurements.

The meeting discussed the reports of the *Subcommittee on Terminology*, TER 77/2 and TER 77/3, and prepared the wording of the terms and definitions related to detectors, which will be handed over to the Vocabulary Committee.

It has been decided that preparatory work for establishing two new Subcommittees should be started in the field of absolute radiometers and preparing a compendium on photo-detectors and instruments.

The Committee decided to have its next meeting attached to the IMEKO Photodetector Symposium, scheduled for August 21-24, 1978 in Prague, most probably on August 25-26, 1978.

J. Schanda, Chairman  
Budapest, September 1977

## MEETINGS

### The Colour Group (Great Britain)

**Food Colour & Appearance**  
University of Surrey  
Guilford  
April 3-5, 1978

**Background.** "Colour Phenomena; the Scientist's Approach." A.W.S. Tarrant, University of Surrey.

"Principles of Colour Measurement and the Effect of Light." M. B. Halstead, Thorn Lighting Research.

"Panelling Requirements for the Assessment of Food Appearance." A. J. Lyle, Kellogg Co. Ltd.

"Defective Colour Vision—a Problem in the Food Industry?" J. Voke, City University.

**Applications.** "Colour and Opacity of Meat." D. B. MacDougall, Meat Research Institute.

"Consumer Attitudes to Fresh Beef." D. E. Hood, The Agricultural Institute, Dunsinea Research Centre, Ireland.

"Technical and Acceptance Benefits of Colour in Foods and Drinks." D. Hicks, Beecham Products.

"Measurement of the Colour of Tea Infusions." G. W. White, Lyons Central Laboratories.

"Pitfalls in Food Colour Specification." J. B. Hutchings, Unilever Research, Colworth Laboratory.

**Instrumental.** "An Up to Date Approach to Colour Instrumentation in the Food Industry." P. Dickinson, B.O.C. Automation.

"The Use of Tristimulus Colorimeters in the Measurement of Food Samples and Problems of Sample Presentation." T. K. Batty, Westlairs Ltd.

"Visual Measurement and Colour Quality Control." D. G. Chamberlin, Tintometer Ltd.

"Use of Instrumentation in Food Coloration." K. McLaren, Instrumental Colour Systems.

**Additives.** "Permitted Colouring Matters in Food." H. Denner, Food Science Division, Ministry of Agriculture and Foods.

"Prospects for the Use of Natural Colouring Materials in the Food Industry." J. Coulson, Pointing Limited.

"The Present and Future Scope of Synthetic Food Colours." J. Walford, Imperial Chemical Industries.

## Intercolor 77

Color is the essence of Intercolor 77, the first in a series of comprehensive and highly specialized trade fairs presenting the total concept and technology of industrial color to the paint, plastics, textiles, printing ink, and allied industries. Plans for Basle in 1977 have now been made to promote to international markets the industry behind the world of man-made color—the manufacturers and suppliers of the raw materials, the intermediates and associated chemicals, the production plant, equipment, instrumentation and specialized services.

Plans for staging a full-scale three-day technical conference, presented by a team of international speakers from the industry, together with a series of seminars, are now being discussed.

An announcement will be made when the complete program has been finalized. Advanced production techniques, current developments and progress in color technology will be included. The conference will be open to delegates from many different countries.

For further information, write to: Mack-Brooks Exhibitions Ltd., 62-64 Victoria Street, St. Albans, Herts AL1 3XT England.

## NATIONAL BUREAU OF STANDARDS (NBS)

### Reprints Available

The article "1976 Remeasurement of NBS Spectrophotometer—Integrator Filters," by K. L. Eckerle and W. H. Venable, Jr., appeared in the Fall 1977 issue of *Color Research and Application*. Reprints of this article are available from NBS. Contact the authors directly on 301-921-2453.

### Two More Chapters of the Self-Study Manual Published

Chapters 4 and 5 of the *Self-Study Manual on Optical Radiation Measurements* have been published. Chapter 4 defines and discusses most of the radiometric quantities and Chapter 5 introduces the measurement equation, the core of our treatment of radiometry. That text has now been released for publication. It will be available, as NBS Technical Note 910-2, issued January 1978, from the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402, price \$3.00 (add 25 percent additional for other than U.S. mailing), order by Stock No. 003-003-01880-5.

Reprinted from *Optical Radiation News*, National Bureau of Standards, Number 23, January 1978.

### New Definition for Photometric Unit is Reconfirmed But Will Not Be Adopted for At Least Two Years

The Consultative Committee for Photometry and Radiometry (CCPR), meeting at the International Bureau of Weights and Measures on September 7 and 8, reconfirmed its recommendation made in 1975 to redefine the photometric unit in terms of the watt. This Committee again recommended to the CIPM that the lumen replace the candela as a base unit of the International System of Units (SI) and that the lumen be defined as the luminous flux of a monochromatic radiation whose radiant flux is  $1/683$  watt and whose frequency is  $540.0154 \times 10^{12}$  hertz corresponding to a wavelength of 555 nm in standard air. It was further recommended that if difficulties arose in obtaining international agreement for replacing the candela with the lumen as the SI base unit for photometry, the candela be retained but it be defined in terms of the watt in a manner consistent with that of the proposed definition for the lumen. For example, the candela would be defined as the luminous intensity of a source emitting only monochromatic radiation of frequency  $540.0154 \times 10^{12}$  hertz, in a direction for which the radiant intensity is  $1/683$  watt per steradian.

If one of the above recommendations is approved by the Consultative Committee for Units, the new definition, with either the lumen or the candela as the SI base unit for photometry, is expected to be approved by the CIPM and adopted by the General Conference on Weights and Measures in the fall of 1979, when this latter body next meets. Until this occurs, the photometric unit is still defined in terms of the platinum-

point blackbody, and the recommended value for  $K_m$ , 683 lumens per watt, is simply the best current estimate for relating the photometric and radiometric units maintained by the major national laboratories. Also, until the General Conference adopts the new definition, NBS intends to continue to disseminate photometric standards and calibrations based on the same scales and units that it has maintained in recent years and is currently maintaining.

The proposal\* for defining  $K_m = 1$  so that photometric quantities would have the same units as the corresponding radiometric quantities received considerable opposition in the CCPR meeting. Though many agreed that the proposal was a logical approach, they also claimed that it was not acceptable, at least at this time, to most workers in photometry. This proposal was therefore dropped. However, because there was still concern over the increasingly large number of quantities involving electromagnetic radiations and biological factors that need to be measured and over the possible correspondingly large increase in the number of units in the SI having special names for these quantities, the CCPR made the following recommendation:

"That before the introduction into SI of any additional special name for a unit of a quantity involving electromagnetic radiations and biological factors, careful consideration be given to the possibility of choosing one of the existing SI units. For instance, for a quantity involving a spectral distribution of radiant power weighted by a photo-biological spectral function, the weighting function might be made dimensionless and the quantity therefore be expressed in terms of the watt."

This recommendation, along with those on the redefinition, was passed on by the CIPM to the Consultative Committee for Units for their consideration.

Reprinted from *Optical Radiation News*, National Bureau of Standards, Number 22, October 1977.

## LIBRARY OF CONGRESS

### China: 19th-Century Drawings by Unknown Artists

In the 19th Century, several unknown artists, possibly Russians, drew some charming sketches of daily life and architecture in China. Little else is known of the 350 drawings, which came to the Library of Congress in 1907 as part of the private library of G. V. Yudin, a Russian collector. Fifty of the drawings will be placed on exhibit, with the hope that viewers will be able to provide clues as to their origin and authorship. The sketches include carefully executed pen drawings of Chinese architecture, such as Christian churches, gardens, and details. Other drawings are portraits, figure sketches, costume details, animals, scenery, processions, and other formalities. In the Great Hall, Library of Congress Building, March 20 through May 22.

### Miniature Books.

An exhibit of 100 miniature books from the Stanley Neiman Marcus collection provides a glimpse into the variety and beauty of small books. The items vary from a 16th-century illuminated Book of Hours to small propaganda pamphlets distributed during World War II. The small books are well-crafted, attesting to the skill of bookbinders and printers. Several miniature bookcases are also on view. In the Great Hall, Library of Congress Building, March 20 through May 8.

## HOW TO ACT ON TV TALK SHOWS

If you're faced with your first appearance on a TV talk show, relax. The atmosphere is very informal. The host and the producer want a good show and will do everything possible to make you look good. They are mostly concerned about whether you will say something interesting to their audience. Be informal, but don't be flip or breezy.

Be prepared. Know before you go what you want to say-- what message you want to leave behind. Have your opening line ready. Think of **yourself** as the host and take the lead. After all, you have only given the producer brief background material, and you are the expert in your field.

If you have a point to make, don't be afraid to repeat it or rephrase it. Take interesting remarks with you for if you are boring and there's another guest handy, you'll be cut short. However, don't "rehearse" until it sounds like a canned speech--and don't hog the mike.

Have a question or two ready in case you want to put the conversation back on track to make a point. For example, if the host asks you what the latest colors are, and you want to talk about what a professional designer is, gently ask, "Do you agree that color reflects one's personality?" Then regardless of the answer, you can point out that trends are primarily created by merchandising programs, and that designers create individual environments--they are problem-solvers, etc.

Spend a little time watching yourself in the mirror or on a candid movie. Do you do strange things with your mouth-- like biting the corner of your lip? Do you roll your eyes upward when asked a question? Check your habits. And, get into the habit of putting your "best face" on. Look as if you're really "up." Look confident.

Don't spend your time looking at the monitor. Do look at the camera once in a while so the audience feels as if you're talking to them. You will notice the host is dividing his or her time when talking with you between looking at you and at the "audience" (camera).

About your appearance. It's still best to wear medium to soft colors. Don't wear jewelry that jangles or that you fidget with. Avoid sparkling and highly-polished jewelry. You'll get more attention if you avoid sharply contrasting patterns and colors. Don't try out a new hair style the day of the show. Women should avoid heavy makeup; men should cover a heavy beard with pancake makeup, and could use a little powder on a bald head.

Be comfortable and relaxed, but don't slouch or throw your arm over the back of a chair. Don't keep uncrossing and recrossing your legs, and don't swivel even in a swivel chair.

There are about 45 companies listed in the American Society for Training and Development that offer coaching services, but if you don't want to spend the time or the money, spend a little time in front of your set, watching guests on talk shows and copy the best.

Reprinted from *ASID Report*, December 1977.

I think the major quarrel an ISCC member would have with this advice is: Why change the subject away from color? This would give us just the chance we were looking for to whip out our *Munsell Book of Color* and perhaps a CIE diagram or two. Or we could squint at the studio lights, smile knowingly, and say, "Ah, Illuminant T." Or we might look at the announcer's suit and say, "5.0 Y 8/12," glance at his tie and suavely com-

ment, "5.0 RP 5/12." Really, can you imagine changing the subject when you are given the chance to talk about the most fascinating topic on earth (to an audience of millions, no less)?

## COLOUR IN ART, DESIGN, SCIENCE AND INDUSTRY--BRIDGING THE GAP

The Colour Group Symposium was planned to prepare the ground for a better understanding between those concerned with the science and technology of colour and those involved with its many applications, particularly in art and design. It was held at the Royal College of Art, Kensington Gore, London on April 25th and 26th, 1977.

In opening the symposium the Chairman of the Colour Group, Dr. A.W.S. Tarrant (University of Surrey) said that the main function of the Group was to talk about colour. Talking about colour in scientific and technical terms is easy-- we can measure all the quantities concerned precisely, and we define our use of the words with equal precision. When we think in artistic and aesthetic terms, however, it is much more difficult-- we cannot quantify anything and we, in general, do not define our terms.

In speaking of 'Bridging the Gap' the first question to ask is 'is there a gap to bridge?'. We all use colour, whatever our background. However, most people would agree that those of us who have an 'art' background tend to think differently from those with a scientific training. Nevertheless there is considerable interplay between the two disciplines. Go into any art school, and you will see students learning highly skilled techniques--and they generally take to them like a duck to water, though they avoid the awful rigidity of thought that is the lot of technical students. On the other hand technical men in the colour field often find themselves in the position of sometimes having to have to make quite consequential decisions for which they have no training.

And so the function of the symposium is to try to improve this interplay, so that by hearing about each other's work, our own may be enriched. This is two-way communications in an area where, at the moment, it is not as strong as it should be.

The symposium was divided into seven sessions and the papers presented under four main headings. 'Colour Measurement and Perception' was covered by J. Saunders and T. Troscianko, both of the City University. Dr. Saunders showed that the visual system is limited in its ability to discriminate colour. Trichromacy prevents an observer distinguishing the individual components of a mixture of wavelengths and restricts vision to three dimensions of colour. Other parts of the total scene greatly influence the colour appearance of an object giving rise to so called contrast and assimilation phenomena. Changes in adaptation can have an almost immediate influence or take a considerable time to be fully operative.

Although the fine detail of the visual process remains to be explained, a useful prediction of colour response can be derived from a general knowledge of trichromacy, contrast, adaptation, the spatial and temporal properties of vision, and the colour mechanisms of the eye and brain. T. Troscianko continued by showing how the concept of trichromacy could be used as a basis for the measurement of colour, i.e. the classification of numerical scales of colour.

A useful result of additive colour-mixing using three, usually red, green, and blue primaries, is the ability to match an unknown 'test' colour with a known mixture of the three primaries. The two fields, although usually different physically,

can be made to match visually, and this match is unique. Although the appearance of both fields can be altered by changing the colour of the surround, they still match each other. This is the basis of colorimetry. 'Colour spaces,' representations of colours in two or three dimensions, have been devised to help in the classification of the results obtained by such matches.

Since it has been shown that a given colour changes in appearance when, for example, its surround is changed, results of simple colorimetric matches cannot give a unique description of the subjective appearance of a colour. A methodology has been devised for the measurement of colour differences when the viewing conditions are changed, but perhaps the most simple and direct method of determining colour appearance is to ask the observer to describe the colour himself, although words mean different things to different people. A method for scaling the attributes of colour appearance on three scales; those of hue, saturation and lightness or brightness, was described. Both the above speakers illustrated their talks with a large number of demonstrations of visual effects.

*Continued in next issue.*

1. Any person interested in color and desirous of participating in the activities of the Council for the furtherance of its aims and purposes . . . shall be eligible for individual membership (By-Laws, Article I, Section 2). Application forms for individual membership may be obtained from the Secretary (address given above).
2. The Council re-affirms its community to interest and co-operation with the Munsell Color Foundation, an independent private foundation devoted solely to the advancement of color knowledge in science, art, and industry. It serves as Foundation Associate of the Inter-Society Color Council. The Council recommends and encourages contributions for the advancement of these purposes of the Munsell Color Foundation. For information, write to S. L. Davidson, NL Industries, P.O. Box 700, Hightstown, N.J. 08520.
3. The Council promotes color education by its association with the Cooper-Hewitt Museum. It recommends that intended gifts of historical significance, past or present, related to the artistic or scientific usage of color be brought to the attention of Christian Rohlfing, Cooper-Hewitt Museum, 9 East 90th Street, New York, New York 10028.

Deadlines for submitting items to be included in the *Newsletter* are: February 15, April 15, June 15, August 15, October 15, and December 15, in other words, the fifteenth of the even-numbered months.

Send *Newsletter* items to Editor:

Dr. William Benson  
618 Constitution Ave., N.E.  
Washington, D.C. 20002

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