NUMBER 245 November-december 1976

# Inter-Society Color Council Newsletter

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# ANNOUNCEMENT

Members of the Council are invited to submit nominations for the 1978 Macbeth Award. The provisions for the award state that "The Macbeth Award shall be given in recognition of recent important contributions in the field of color, preferably within the 5 to 10 years preceding the Award. The work may concern a specific project, application, service or use of color, or other accomplishment related to color in science, art, industry, education, merchandising, etc. The candidate need not be a member of the ISCC, nor be a citizen of the United States."

Nominations should be submitted by June 30, 1977 to the Chairman of the Awards Committee: Henry Hemendinger, R. D. 1, Box 213, Pequest Bend, Belvidere, New Jersey 07823.

#### In Memorium

It is with deep regret that I must tell you I have just learned through the SMPTE that Bill Wintringham passed away on Friday, November 19. No details were given.

I shall send a card and note of condolences on behalf of the Board and presume that many of you will wish to do the same.

FWB

# **NEWS OF MEMBERS**

Former NBS Laboratory Apprentice Begins 50th Year In Chosen Field – Has Headed Own Appearance Evaluation Laboratory for Past 25 Years

After finishing high school in 1927, Richard S. Hunter began work in the Colorimetry Section of the National Bureau of Standards as a Laboratory Apprentice. He continued his studies at night at George Washington University, majoring in psychology and physics. His major interest during his entire career has been the design of instruments and the development of test methods for objectively evaluating the appearance characteristics of objects and materials. In the early days he received much on-the-job training at NBS from Senior Scientists such as Irwin G. Priest, Kasson S. Gibson, and Deane B. Judd. He wrote a number of classic papers, including "A Multipurpose Photoelectric Reflectometer" (1940) and "Photoelectric Tristimulus Colorimetry With Three Filters" (1942), which are still consulted by every serious student of these subjects.

As a result of his research in gloss evaluation, the importance of which had been indicated by ASTM Committee D-1 on Paint, he published "Methods of Determining Gloss" (1927) in the NBS Journal of Research. This work was expanded and later culminated in the publication by ASTM of Method of Test for Specular Gloss (of Paint Finishes), D523. The method was originally published in the ASTM Book of Standards in 1939. It has been revised and expanded a number of times since then, but the basic requirements are contained in the current edition, reapproved in 1972 and which will either be reapproved in 1977 or revised only slightly. This method has been so well received that its basic requirements have been written into the gloss test methods of several foreign countries as well as the method published by the Paint Testing Committee of the International Standards Organization. Mr. Hunter always dreamed of publishing a book, and John Wiley published his book, "The Measurement of Appearance" in 1975.

After nineteen years at NBS, Mr. Hunter resigned in 1946 to become Chief Optical Engineer of the Henry A. Gardner Laboratory, Bethesda, Maryland. After six years of designing instruments for Gardner Laboratory, Mr. Hunter decided to establish his own laboratory. He still heads Hunter Associates Laboratory, which now occupies 16,000 square feet in Fairfax, Virginia. The laboratory employs 65 full-time people, one of whom is his son Phillip. It has sales representatives throughout the United States and Canada and in 27 foreign countries. His wife, Elizabeth L. Hunter, handled foreign sales until recently.

Mr. Hunter has always been a scientist at heart. He has worked long and hard on many committees dealing with color, gloss, and haze of materials such as paint, plastic, paper, ceramics, porcelain enamel, metals, and textiles. In 1976, he was elected to head ASTM Committee E-12 on Appearance, but he was a charter member when the committee was founded in 1948. For the first 28 years he preferred to work with the task groups and subcommittees though he did serve as Secretary of E-12 from 1954 to 1960.

> Harry K. Hammond III ASTM

#### Don't Short-change Color in Decorating

"The natural, neutral tones have dominated home furnishings for all the wrong reasons. In these conservative times, people choose beiges, taupes, and browns for their homes because they seem safe. Actually, modern technology has made most colors practical. People shouldn't short-change themselves when it comes to color in decorating."

James May advises that color in the home should be dictated, not by fashion, but by three basic factors: the architecture of the building; the lifestyle of the family; and the climate. A period home, for example, takes better to traditional pastels, rather than vivid primaries. A family with children and pets should obviously steer away from very hard-to-keep combinations.

"Climate is the factor that most people forget," he notes. "To create the most pleasing atmosphere in a warm climate, I would advise cool colors – blues and pale greens. Likewise, cool climates call for warm reds, oranges, and yellows. An all-beige scheme may be safe, but it's not too exciting, and it rarely satisfies the three basic requirements."

With this in mind, Mr. May suggests that home decorators consider the new pastel and middle tones. "We've gotten away from the stark contrasts of the 60's to wonderful pale greens, rusts, and peach tones. The blues, particularly pale slate, are very easy on the eye over long periods. If consumers choose stain-resistant fabrbics, they're as easy to care for as any color."

To color up the neutrals in existing schemes, he suggests bright accent shades. "A consumer with a beige sofa might consider reupholstering a chair in a pale blue, or choosing a pattern in rust, aqua, or, particularly pretty, navy with the beige."

Although gray is an important fashion color right now, May cautions against using too much of it, as people do not look their best in a gray background. He suggests using it as a coordinate for some of the brighter tones, rather than as the basis for an entire scheme.

"In talking about the natural look in decorating, we tend to forget that Nature herself mixes color freely. A yellow or pink flower is surrounded by green; desert sand seems beautiful to us in contrast to a brilliant blue sky. We should use color in today's decorating just as freely."

## **NEWS OF MEMBER-BODIES**

### COLOR MARKETING GROUP

The Color Marketing Group (CMG) as usual had a most successful meeting in San Francisco at the Fairmont Hotel, October 9th to 12th. The theme of this assembly was "Prospecting on Nob Hill," and we certainly panned our share of gold -a wealth of knowledge.

Saturday afternoon, the early arrivers were treated to a delightful cruise on the bay, in a warm and friendly atmosphere of renewing old acquaintances as far away as Costa Rica (many ISCC members will remember Ruth Strauss). CMG members are staunch and loyal to their group.

Sunday, October 10th was the official opening of the meeting, which began with a past president's reception and presentations, "Color Directions Gallery" (a visual experience) and "Some Very Special People."

A general session Monday, October 11th included the nominating committee report and slide presentations. Lois B. Zolliker, American Motors, gracefully and competently stepped into Richard A. Teague's place to present "Western Influence on Colors/Styling in Transportation and The Automotive Industry." This was not a "Commercial Sell" for AMC; in fact, the name was never mentioned, that is the type of integrity one sees with CMG members – the key word is *color*, not pitch!

A five panel discussion featuring, "Western Influence on Color in Environmental Use" was most informative. Other presentations included "Color Directions Gallery" and "Color is a Dimension," Bob Mitchell of Mitchell/ Mann showrooms.

Tuesday, October 12th, began with a general session and a visual presentation by Deborah Sussman, "Design Sources and Their Application to Products and Interiors."

All the presentations were excellent, although all were in unanimous agreement that the highlight of the meeting was Frances and Yale Forman's collection of slides and commentary on "Color Report from Peoples Republic of China," a magnificent synopsis of their recent visit to Mainland China. It was a superb and informative insight into this land we have been unable to visit for too many years. The report dispelled many misconceptions of this society and gave an indepth view of clothing, art, architecture, and the people. The Formans brought back and displayed fabrics, needlework, and other articles they had purchased during their visit. I only wish all ISCC members could have been there to enjoy and observe it with us.

CMG makes sure we have a good cross-section of the industries participating in our group and outdid themselves by featuring the fashion industry. In the most elegant surroundings, a preview of American Designer, Michael Novaresse's collection of women's designer clothes was presented. Mr. Novaresse will be escorting and showing this collection at the American Embassies in Iran and the Middle East. Another special was his own favorite collection of sumptuous gowns from previous collections. Breathtaking, luxurious, and, to most of us, unattainable.

The meeting ended with a banquet and slide presentation of "The California Influence," although we know all our America (and Canada) are colorful and beautiful places to live.

Accepted to the Board of Directors for a three year term were:

Joyce S. Davenport–Desoto, Inc. Ian McMeekin–Burlington Industries Murray Smith–Westinghouse Electric Corporation

Joyce S. Davenport

## FEDERATION OF SOCIETIES FOR COATINGS TECHNOLOGY

#### Armin J. Bruning Award

Established in 1962 in honor of Armin "Joe" Bruning, pioneer in the application of color science to the paint industry, this award is for "the most outstanding contribution to the science of color in the field of coatings technology."

The 1976 award plaque was presented to S.R. Mountsier, Jr., retired from Whittaker, Clark & Daniels, Inc., for his role in developing the "Color Additive System," which became the "Tube System," and which evolved into the basis of today's color systems.

Well known for his work in functional pigments, Mr. Mountsier became active in the New York Paint & Production Club in 1927, and had a long career in the coatings industry. He was associated with Sipes Paint, L. Sonneborn Co., and the Murphy Co. (which became Interchemical Corp., and today is known as Inmont Corp.), prior to joining Whittaker, Clark & Daniels in 1948, from where he retired in December 1971.

S. Leonard Davidson has been reappointed for another term as chairman of the Bruning Award Committee.

1977 FSCT Annual Meeting and Paint Industries' Show To Be Held October 26-28 At Astrohall, Houston

The 55th Annual Meeting and 42nd Paint Industries' Show of the Federation of Societies for Coatings Technology will be held at the Astrohall, Houston, Tex., October 26-28, 1977.

The Houston and Dallas Societies for Coatings Technology will serve as joint hosts for the Federation's national convention — the first ever to be held in Texas.

The Chairman of the Program Committee is Elder C. Larson, of Shell Development Co., Houston. Chairing the Host Committee is Robert L. Klepser, of PPG Industries, Inc., Houston.

The Shamrock Hilton will serve as Federation Headquarters with the Astroworld Hotels as co-headquarters.

#### AMERICAN SOCIETY OF INTERIOR DESIGNERS (ASID)

#### **Celebration and Challenge**

President Richard W. Jones, FASID, spoke of "pride, prejudice, celebration and challenge" when he gave his State of the Society report at the second National Conference of ASID. "Prejudice, in terms of pre-conceived ideas or preference, is what is driving us to make the profession what we conceive it to be. The concept of one great, all encompassing organization was the prejudice of a few and now in just one and one half years it is the pride of over 14,000 of us, and the envy of many, many more waiting to join us."

Jones praised the activities of many liaisons whose work has been reported in previous ASID reports, including the Inter-Society Color Council, the Legislative Minuteman Program, the National Trust for Historic Preservation, the International Centre Committee, the Illumination Engineering Society, the Resources Council, and the International Association of Lighting Designers. Copies of the complete text of President Jones' speech are available from ASID Headquarters.

#### ASID Mailing List Available

The ASID membership mailing list of about 10,000 names and addresses is available for a one-time mailing of a specific mailing piece only. A sample must be submitted to Headquarters for approval before any order will be processed.

The following price schedule will apply to all orders:  $$35 \text{ per } M - Participating Firms of the ASID Industry Foundation.}$ 

\$35 per M - Trade Publications (approved by the Director of Communications.) NOTE: Editors who use the ASID appellation may request a list of names, without addresses, for identification purposes, free of charge.

\$25 per M – Schools or colleges who plan to use the list to announce interior design related programs or courses.

50 per M – All other firms and individuals (including ASID members.) These costs are in addition to the computer print-out charges which vary between \$45 and \$140 depending on the order size.

The entire mailing list or any portion of the list may be purchased and will be supplied on either peel-off or Cheshire mailing labels. Labels can be shipped within ten days of receipt of a purchase order and mailing piece.

All orders or questions should be sent to Susan Weist of the Data Processing Dept. at Headquarters.

Reprinted from ASID Report, September 1976.

## ASID Donates Library To Museum

The donation of the ASID Library to the Cooper-Hewitt Museum marked the first step toward a national design library. During the dedication ceremony held in the Henry and Doris Dreyfuss Study Center of the Museum, President Jones presented a check for \$6500 to help defray the expenses of maintaining a library, and to assist in preparing a national interior design bibliography. When the computer cataloguing and bibliography are completed, the books will be available nationally. In the past they were easily accessible only to members in the New York area.

#### FYI

The Cooper-Hewitt Museum, the Smithsonian Institution's National Museum of Design, will offer a wide variety of programs and tours in the decorative arts and design fields this winter, including a series of luncheon lectures by leading interior designers. The new semesters will begin January 24. For a complete brochure, write the Cooper-Hewitt Museum, 2 East 91 St., NY, NY 10028 or call (212)860-2011.

An "Energy Conscious Design Check List" prepared by Jeffrey Ellis Aronin, AIA, FRIBA, energy consultant, is available at no cost through ASID Headquarters.

Reprinted from ASID Report, November 1976.

#### INDUSTRIAL DESIGNERS SOCIETY OF AMERICA (IDSA)

#### **Annual Meeting a Success**

Evolution/Revolution was the theme of the 1976 IDSA Annual Meeting, held October 9-12 at the Ben Franklin Hotel, Philadelphia. Over 370 designers and students attended the meeting, which featured major addresses by Jules Bergman, Science Editor for ABC news; Arthur J. Pulos of Pulos Design Associates and Syracuse University; Ray Spilman of Ray Spilman Industrial Design; and John Graham, a consultant designer.

Pulos provided an in-depth analysis of the background and history of Industrial Design in America, much of which was taken from material compiled for a future

publication on the same topic. He was followed by Mr. Spilman's presentation on the roots of the profession, and through slides and tapes, a look at the individuals and personalities having shaped Industrial Design. This presentation took place at a banquet held in the University of Pennsylvania Museum's ancient Egyptian art section.

Mr. Graham supplied an overview of the various forms professional design activities take, and their good and bad points. Jules Bergman commented on the state of our society and its needs, and how this might affect the roles of designers and the direction design should take.

Sandwiched among the aforementioned addresses, were workshops on the Relationship of Design to the History of Photography (Art Crapsey of Kodak); Furniture (Robert Blaich of Herman Miller); Glass Industry (Robert Ivers of Corning Glass); Packaging (Dr. Len Barol and Jules Lambeck of Container Corporation of America); Business Machines (Ray Wheeler of Honeywell Information Systems); Design for the Handicapped (Robert Bartholomew); Exhibits (Ed Webber of AMP Special Industries);

The following taped reproductions of the seminars and speeches given at the Annual Meeting are available for sale:

C1	Opening	Meeting	with	Arthur	Pulos	
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- The Relationship of Design to the History of:
- C2 Photography, Art Crapsey
- C3 Furniture, Robert Blaich
- C4 Glass, Robert Ivers
- C5 Packaging, Jules Lambeck
- C6 Business Machines, Ray Wheeler
- C7 Design/Handicapped, R. Hollerith
- C8 Exhibits, Ed Webber
- C9 Transportation, T.H. White
- C10 Power Hand Tools, Carroll Gantz
- C11 Dinner, Keynote Speaker: Ray Spilman
- C12 John W. Graham: How the Designer Practices
- C13 Designing in Consultant Offices
- C14 Designing for a Corporation
- C15 How to Manage A Successful Design Studio
- C16 "Futures" by Jules Bergman

When ordering tapes, indicate the identifying number for each session and submit requests directly to Robert Glen Sound Transfers, 519 Willow Grove Ave., Glenside, PA 19038. Tapes are \$6 each and *cannot be duplicated without the express permission of the Industrial Designers* Society of America.

Reprinted from IDSA, October/November 1976.

## SOCIETY OF PHOTOGRAPHIC SCIENTISTS AND ENGINEERS (SPSE)

## SPSE Announces Move To New Location

The Society of Photographic Scientists and Engineers announced the moving of its headquarters to a new location effective January 1, 1977. The Society has had as its location for over eleven years an office in an apartment complex, The Thomas House, in Washington, D.C. The Thomas House, however, has recently been sold to the Baptist Home of the District of Columbia and will become completely residential.

SPSE's new headquarters will be at the following location: Society of Photographic Scientists and Engineers, 1411 K Street, N.W., Suite 930, Washington, D.C. 20005.

## SPSE Announces Coming Technical and Scientific Meetings

The Society of Photographic Scientists and Engineers announced technical and scientific meetings to be held in 1977. Professionals in the Imaging Technology fields are expected to attend these meetings, which are designed to disseminate current technical information.

SPSE has set the following calendar of meetings for 1977:

Date	Meeting		
April 18-21, 1977	SPSE/SPIE TECHNICAL SYMPO- SIUM EAST "Materials for Scientific Photography" Sheraton Inn, Reston, VA		
May 1-6, 1977	SPSE 30TH ANNUAL CONFERENCE Seminars in Image Processing and Technology Sheraton-Universal Hotel North Hollywood, CA		
September 15-17, 1977	SPIE/SPSE APPLICATION OF OP- TICAL INSTRUMENTATION IN MEDICINE VI Boston, MA		
September 26-30, 1977	SPSE/SPIE TOKYO SYMPOSIUM '77 ON PHOTO- AND ELECTRO- IMAGING Tokai University Members' Club Tokyo, Japan		
September 24- October 9, 1977	ORIENT TOUR PROGRAM I (TOKYO SYMPOSIUM '77)		
September 24- October 16, 1977	ORIENT TOUR PROGRAM II (TOKYO SUMPOSIUM '77)		
November 9-12, 1977	SPSE INTERNATIONAL CONFER- ENCE ON ELECTRO- PHOTOGRAPHY Marriott Twin Bridges Hotel Washington, D.C.		

SPSE/SPIE To Sponsor International Symposium On "Photo- and Electro-Imaging" in Tokyo, Japan

General Chairman Toshibumi Sakata of the Department of Electro-Photo-Optics at Tokai University announced the TOKYO SYMPOSIUM '77 on Photo- and Electro-Imaging which will be held at the Tokai University Members' Club in Tokyo. The Symposium is scheduled for September 26-30, 1977.

This international Symposium is sponsored by the Society of Photographic Scientists and Engineers in conjunction with the Society of Photo-Optical Instrumentation Engineers and in cooperation with the Society of Photographic Science and Technology of Japan and the Society of Electro photography of Japan.

The symposium will explore many theoretical and practical aspects of modern imaging, with some emphasis on "Innovation in Photography and Electrography," "Scientific Foundations of Future Imaging," and "Frontier Imaging Technology."

The scope covers all topics in Materials, processing and application of photography and electrography, Electronic imaging, Computer-aided imaging, Laser imaging, Image evaluation, Image processing, Optical information storage, Remote sensing, Microfabrication, Facsimile and business graphics.

Professionals in the Imaging field are invited to contribute original papers on Symposium topics. Those who wish to present a paper are requested to submit an abstract of 150 words to the Papers Chairman no later than February 1, 1977.

For further information regarding registration or contributing papers at SPSE meetings contact: Robert H. Wood, Executive Director, SPSE.

## **MEETING REPORTS**

Through the initiative of Professor Alexander F. Styne, School of Engineering and Environmental Design, University of Miami, the National Bureau of Standards held a workshop on COLOR IN HEALTHCARE FACILITIES on November 16, 1976. The topic was expanded into discussion on the influences of Lighting and Radiation by some of the speakers. The participants were: Dr. William C. Beck, president of the Donald Guthrie Medical Research Foundation, Professor John E. Flynn of Pennsylvania State University, Mrs. Marcella Graham, Institutional Design Consultant, Kenneth L. Kelly, National Bureau of Standards, Professor Thomas Sisson, M.D., of Temple University, Mr. Robert Spiegel, Naval Ship Engineering Center, Corwin Strong, National Institutes of Health and Professor Styne.

Subjects ranged from "Hospital Color Viewed by the Concerned Physician" (Beck), "The Planning of Lighting & Color From the Designer's Perspective" (Styne), "Color in Deprived Environment" (Spiegel), to "Physiological Effects of Color" (Sisson).

Officials from Government facilities joined with hospital administrators, designers, architects and physicians in this lively event. For further information: Alexander F. Styne, 15206 N.E. 8th Avenue, Miami, Florida 33162. Phone: 305/949-9412.

## BOOK REVIEW

Color Perception in Art, Faber Birren, Van Nostrand Reinhold, 1976, 63 pp., 12 color plates plus cover and 23 black and white illustrations, paper, \$7.95, cloth, \$12.50.

Faber Birren, that veteran and inveterate investigator and commentator on color, has graced us with yet another book on his favorite topic. This, after having written 24 books and edited an additional eight. Still and all, while within his usual sphere, it does represent quite a departure, rather a journey to the other side of the fence. Until this one he has dealt mainly with inductive color. Here he has switched to the receiver; as he states: 'over and above vision by itself', the very means of perception. As such, I am no less convinced than he that this is a most fertile field perhaps the major issue of import to impress itself now upon artists and of art to come.

Let me state right at the outset that this is a most marvelous small but precious book. Yet despite its brevity, it is an incredible data feed, akin to a very rich and well prepared meal, a proverbial feast where every other bite is a different and, at times, a new taste experience. Many a course could alone have been the main thrust of a book. The very nature of such an opulent repast has, as an inevitable consequence, the seeds of indigestion, some no doubt due to omission of extended explanations, sacrificed here for brevity's sake. Further, his ventures into art history call for a strong stomach, if not strong remedies to withstand his hierarchies as to the relative merits that he seeks to accumulate to his cause. These tend to lead him to some rather peculiar conclusions. I really do not know on what ground one can conclude that Monet and Pissaro had lesser foresight and insight into perceptionism than Turner. Even if this could be factually established, was this part of their aim and how does it make itself visible in their work? If one prefers Turner because he makes for a better and more desirable heritage, fine. Yet one has to wonder if the author has seen the utterly phenomenal 1917-1924 expressionist landscapes of Monet's, now reposited in Paris' Marmottan Museum after having been rolled up since the mid-twenties. These are in full and disciplined color, something Faber Birren states to be an impossibility (Frankly, until I saw these I would have agreed with him). Or, while it is true that the postimpressionists, expressionists, fauvists, orphists, and synchromists all prided themselves on their color aptitudes, this again suffers by a similar comparison to Turner. It is really an out of focus view when considering that this was hardly their sole aim, being otherwise directed while loosely adhering to a synthesis of impressionist color thinking. He also goes along with the superficial impression that analytic Cubism is grey. Closer inspection would reveal that the impressionist three analogous hue description was very much in effect but only with greatly lowered saturation. And again the question of respectable ancestry. If a choice must be made among colorists who foreshadowed modern, western abastraction, I shall take Giotto. If this is too distant, my vote will go to Goethe, not merely as a precursor and most important influence upon Turner, fully acknowledged here, nor based on his writings on color. I do not know where Turner might have seen Goethe's paintings, but he did geometric color abstractions and color field paintings in the 18th century. These can still be seen at the Weimar Archives, the latter the specific reason for locating the original Bauhaus there. In the early 1920's, Johannes Itten, the great color man and pedagogical innovator at the Bauhaus, hired Paul Klee as his painting instructor and advised him to study the paintings at the Goethe Archives. The early 1920's geometric color abstractions of Klee are direct descendants from Goethe's, fully confirmed by Josef Albers, who was Klee's assistant instructor at the time. I am also troubled by such statements as: The theories of neo-impressionism were technically invalid. Insufficient, partially incorrect, misapplied, yes, but invalid? The Metropolitan Museum owns that marvelous Seurat 'La Parade,' a small pointilist painting operating on a red-green polarity, one side dominated by green, the other by red. If viewed from afar, especially under the Met's poor illumination, the result is a dull brown, if too close, nothing but dots. But if the proper individual viewing distance is found, it becomes a wonderfully clear, yet atompsheric painting with a lustrous beauty that, according to the statements advanced here, is not possible. Actually, two of Birren's enunciations here become quite applicable: his 'law of field size' and the application of opaque pigment to show transparency and luminosity. Conversely speaking, while recent color field painting may have displayed simple colors in large areas. "childishly naive in color choices," (possibly even a desired end result on part of the practicioners) one must wonder what so called sophisticated color choices would have done, at that in whose judgment, when all this was totally aside from its intentions.

Then on the strictly technical side there are understatements or overstatements that tend to confuse the reader. There is an equation drawn from pigments as printing inks in his investigation of visual effects such as luminosity, luster, and iridescence that could convey the appearance of chromatic light. As aside from light or related natural or synthetic pearlescence, are there other agents or colorants aside from pigments, including dyestuffs, that could be used here in inductive systems? And is this then only possible if compounded into printing inks? Or, why is it specious to say that all color exists in white light? While it does not by itself include other means such as pressure on the eyeball, hallucinogenic drugs, etc., I prefer to think as did Goethe, who called the eye the invention of light. Without the advent of this apparatus there surely would be no other means of color perception, thereby making these inner experiences possible only after the fact. Similarly, while the film in a camera can be under- or over-exposed, "human vision adjustment to light is constant and automatic," making under and over-exposure impossible, is also questionable. The very drugs already mentioned or those used by the ophthalmologist to dilate the pupil can easily interfere with this constancy. Or, how often does a breached retina occur while facing the sun even with eyes

closed when lying on a beach. Surely these events are not everyday, yet they cannot be considered as abnormal. He proceeds to invent his own 6 color spectrum of the rainbow including red, orange, yellow, green, blue, and violet, corresponding neither to the Newtonian, which includes indigo, nor to ASTM, which omits orange. No explanation or reason for this is given. The explanations for Color Study V states that the identical white appears near the center of all four areas. It is also the perceptionally common denominator and is the only identical note throughout this demonstration. This is fine as far as it goes, making its point. However, the actuality was not true in my copy. The four squared rings in question were neither white as the stock they were printed on, nor identical in color temperature. I know, I cut mine up. Either the print job should have been adjusted or the text slightly altered since the general point does not suffer. His comments on color constancy are magic indeed if not somewhat shaky. But he does provide himself with an out by observing that "nature has given man an innate sense of normalcy in his perception of the world." That seems to take care of all the associable data that goes into the making of color constancy. Is this not really a sort of local color labelling, subsequent to actual viewing, the psychological aspect of vision? If these associations are removed, is there still a color constancy? This connects directly to his observation that few artists have endeavored to feature color constancy in non-objective art. This appears to me to be a direct contradiction in terms since its make-up seems to be based upon these associable labels, i.e. fruit, portrait, vase, etc., once these are removed to attain non-objectivity, will not this color constancy collapse? Or, if maintained, will it not defeat non-objectivity. Finally here, in explaining how the palettes for Color Study XII were developed no mention is made that these are repetitions and extensions of Goethe's experiment into murky and turbid media.

I can of course be accused of excessive nit-picking, something I'll readily admit to. But it is hoped that this is just a small indication of the extraordinary scope of this book. I wish it to be a stimulus to extensive readership by simply getting under your skin. And if this doesn't get you, the marvelous color study demonstrations, 12 in all, are worth the price of the book by themselves even if you do not agree to accept their attributes. They are precise definitions of what they set out to demonstrate. Nor should the annotated bibliography of 35 books be ignored here, particularly when considering the essential diversity of its topic.

Herb Aach

## LETTERS TO THE EDITOR

Dear Sirs,

We are interested in importing from States and should be most grateful if you could get this letter circulated to some members of your Council and get them to supply us with their booklets and samples of their goods with export prices indicating preferable on CIF Kota Kinabal basia. Your members could be assured of substantial orders from us if their quotations are competitive.

We are the sole supplier of office furniture and equipments to the Sabah State Government in East Malaysia, and have large annual requirements for many outlets throughout East Malaysia.

Yours sincerely,

Lim Guan Yee Interior Decorator Syarikat Perniagaan Asia 89, Jalan Gaya, Peti Surat No. 462 Kota Kinabalu, Sabah, Malasia In reply quote: SPA/FOR/GE/51

# EXHIBITS

#### The Textile Museum

Uzbek Textiles – a Parade of Color. Brilliant colors and magnificent floral motifs dominate the embroideries and ikats made by the Uzbeks during the 19th century. The Uzbeks have long lived in the Emirate of Bukhara, now Uzbekistan in the southern Soviet Union.

Both the embroideries and ikats display bold and colorful designs; their patterns, however, were achieved in very different ways. The embroidered covers were worked by the girls and women at home, often for the dowry. The ikat process, a highly skilled craft, is the province of men and is learned by them through apprenticeship.

"Ikat" refers to a kind of resit dyeing in which the pattern is dyed into the fibers before the fabric is woven. In the warp ikats of the Uzbeks groups of silk threads were bound tightly together to prevent the dyes from penetrating these areas. The threads were then submerged in the dye, followed by additional binding and submersion, repeated again as many as seven times in order to achieve multiple colors. The yarns would then be wound carefully on the loom for weaving. The finished yard goods were used as covers and hangings, were worn by both men and women and were often considered status symbols.

This special exhibition will open to the public on Saturday, November 13th, and will remain on view through February 1977. The ikats are being made available for viewing through the courtesy of Mr. and Mrs. Leon Harris. Most of the exhibit embroideries are from the Textile Museum collection. Come and enjoy our parade of color!

Reprinted from *The Textile Museum Newsletter*, October-November-December 1976. 2320 S Street, NW, Washington, DC.

#### Library of Congress

Mars: Reality and Fantasy. A single showcase exhibit featuring photographs of Mars taken by the cameras of NASA's Viking Mission in 1976 juxtaposed with earlier imaginative drawings of the planet from the collections of the Library of Congress. In the west foyer, Ground Floor, Library of Congress Building, thorugh March 31. Can any of you give our readers any color information on "the red planet?"

Ed.

## **PRODUCTS AND SERVICES**

1977 Spring-Summer Program in Color Technology at Rensselaer

A spring-summer program of three intensive continuingeducation courses in color technology is being offered for the thirteenth consecutive year by The Rensselaer Color Measurement Laboratory at Rensselaer Polytechnic Institute. The courses are:

Principles of Color Technology, June 6-10. Color Technology for Management, June 13-14. Advances in Color Technology, June 20-24.

For further information on enrollment contact the Office of Continuing Studies, Color Technology Program, Rensselaer Polytechnic Institute, Troy, N.Y. 12181, telephone: (518)270-6442. For technical information contact The Rensselaer Color Measurement Laboratory, at the same address, telephone: (518)270-6458.

Graphic Arts Research Center (GARC) Rochester Institute of Technology (RIT)

New 100-Line TRAND Kit Available. The Graphic Arts Research Center announced the addition of the 100-line TRAND Kit to their quality control device product line. The Tone Reproduction and Neutral Determination System (TRAND) uses the printer's own ink-paper-press conditions and allows him to determine optimum tone reproduction and color balance with direct and indirect color separation halftones. A neutral gray appears in each of five test areas of the printed chart. The printer then takes reflection densities of the identified neutrals and plots them on special graph paper. The result is a set of required halftone characteristics or a set of required continuoustone separation characteristics that will provide good gray balance and good tone reproduction from normal copy.

The 100-line TRAND Kit allows the user to employ eliptical dot halftone films  $(11\frac{1}{2} \times 12\frac{3}{4} \text{ inches})$ . Extra fine dot sizes have been included which make the version ideal for heat transfer (sublimation) testing. This TRAND Kit is also suitable for DiLitho, flexography or any printing method requiring 100-line halftones.

A 150-line TRAND Kit and 65-line TRAND Kit are also currently part of GARC's standard product line. The 150-line TRAND ( $7\frac{3}{4} \times 8\frac{1}{2}$  inches) is designed for conventional sheetfed and web lithography and is priced at \$80.00. Additional film sets are \$30.00. The 65-line TRAND Kit ( $11\frac{1}{2} \times 12\frac{3}{4}$  inches) is intended for letterpress on newsprint and screen process applications. The cost of the 65-line TRAND Kit is \$150.00 with additional film sets at \$55.00.

Cost of the 100-line TRAND Kit is \$150.00. Additional film sets may be purchased for \$55.00 each. Informa-

tion concerning any of the TRAND Kits may be obtained by contacting GARC, One Lomb Memorial Drive, Rochester, N.Y. 14623 (716-464-2737).

EQUIPMENT: GARC Specializes in the Unusual. As a research oriented organization, GARC has often been unable to obtain necessary equipment for special research projects. As a result, new and innovative conversion techniques have been exercised by GARC staff members to achieve the proper testing equipment. In 1973, an instrument requiring special spectrophotometic capabilities was designed by Milt Pearson. At that time, no commercial spectrophotometer offered these characteristics. The modified version resulted in the conversion of a normal spectrophotometer to one with white light illumination and monochromatic collection.

GARC can and does utilize commercially available equipment but also has the ability to convert equipment to specially-designed instrumentation to suit the project requirements. Equipment flexibility in research and testing is unusual but this is part of GARC's uniqueness.

RESEARCH: What GARC Is All About. During the 1950's, RIT, with the help of industry, formed the Graphic Arts Research Center. Research projects, then, concentrated in the areas of optimum tone reproduction in color and black and white photography. Results of the research lead to the expansion of the projects undertaken by GARC and now include the printing process, its variables and the photomechanical specifications required to achieve good reproductions.

Coordination of projects at GARC is administered by Sven Ahrenkilde. Under his supervision, research programs in the areas of press evaluation, instrumentation and the establishment of quality control methods to assist in the obtainment of consistent reproduction from the press are conducted. With a Chemistry background, Sven has completed research in the areas of reproduction photography and the graphic arts processes. He has published articles on Reproduction Photography and technical papers for TAGA Proceedings.

Industry evaluation, an important portion of research services offered by GARC, is done by many of GARC's staff members. In conjunction with inplant analysis, GARC staff troubleshoot press-related, photographic and materials problems at their own facility.

Research involving the area of color reproduction in photomechanical printing is done by Milton Pearson. Milt has centered interests in colorimetry, spectrophotometry and principles and theories of halftone printing and lithographic printing as well as basic concepts of color reproduction.

Where photographic theory and mathematical models are required, Irving Pobboravsky, Senior Technologist, is given the project. With a concentration in the photographic sciences, Irving also excells in color reproduction.

Many projects undertaken by GARC require the work of one or more staff members. Each, expert in their own field, thoroughly evaluates and researches their area. The resultant being a conclusive, concise and complete evaluation of the subject.

Color printing projects involving color reproduction are assigned to Zenon Elyjiw. With a background in Physics,

Zenon has researched and developed control devices for color reproduction and presswork. The Slur Gauge, Gray Balance Chart, Dot Gain Scale, Color Separation Guide, Standard Color Proofing Bars and the Process Ink Gamut Chart have been the result of Zenon's work while at GARC.

GARC in cooperation with industry is asked to assist in their feasibility studies. In the area of photographic process/methods, control devices, densitometry measurements and instrumentation, Brent Archer is a most capable individual. Brent has published a number of technical articles and conference papers on Patents on Color Halftone Screen and Exposure Computers, Color Halftone Screen, Halftone Dot Area Meter, Graphic Arts Exposure Control Device and Scanning Densitometer for Printed Process Color Targets.

Through the combined efforts of these talented individuals, GARC research is a step ahead of tomorrow's technology in the graphic arts industry. New and innovative techniques for implementation into the graphic arts are incorporated into the educational programs and are included as part of the timely and informative seminar and workshop agenda offered throughout the calendar to industry and education of the graphic arts community. Pantone<sup>®</sup> Tokyo Show Huge Success Says Company President

The Pantone World of Color Exhibition, held in Japan recently, was a huge success according to Lawrence Herbert, President of Pantone, Inc.

"The show was designed to display the advances Pantone and its licensees have made since we first began marketing our products in that country," says Herbert. "During the first two days of the formal exhibition in Tokyo, more than 2,000 persons visited the show and talked with our representatives."

Herbert, who was in Japan along with Pantone's Norbert Klein, reports that the show attracted ink manufacturers, designers, art directors, printers, converters and color consultants.

Among the products and systems on display were Pantone's Color Artists' Materials, the Pantone-by-Gallus Ink Color Proofing Press and the Pantone Color Data System.

It was no surprise that the Pantone Color Data System, a computer-based system to assist in every step of ink manufacturing – including analysis, formulation quality and inventory control – was the star of the show.

"It drew the largest percentage of the audience," says Herbert. "People came back to see it a second time and brought others from their company. They, in turn, enthusiastically brought others to see it.

"Even once the show was over, we still have an audience for the system. So we continued demonstrating in our hotel suite for an additional four days."

According to Herbert, nearly 100 persons from ink manufacturing companies - in such areas as technical, plant operation and administration - saw the Pantone Color Data System.

"Their comments were most gratifying," says Herbert. "One man called it the answer to his growth problem while another wanted to be the first in Japan to use the system.

"And," I may add, "he now is."

William Benson, Chairman Milton J. Pearson Ruth M. Johnston Donald Genaro Send Newsletter Items to Editor: Dr. William Benson 618 Constitution Ave., N.E. Washington, D.C. 20002

## **OFFICERS and DIRECTORS**

#### **OFFICERS**, 1976-1978

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- 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 III, Section 2). Application forms for individual membership may be obtained from the Secretary (address given above).
- 2. The Council re-affirms its community of interest and cooperation with the Munsell Color Foundation, a tax exempt organization set up to acquire and use its funds to further aims and purposes very similar to those of the ISCC: to further the scientific and practical advancement of color knowledge relating to standardization, nomenclature and specification of color, and to promote the practical application of these results to color problems arising in science, art and industry. The Council recommends and encourages contributions for the advancement of these purposes to the Munsell Color Foundation. For information, write 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.