

Inter-Society Color Council *News*

Number 347

January/February 1994

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PRESIDENT'S COLUMN

PA

I'd like to begin by thanking Nick Hale for responding to my request for a liaison to the American History Museum at the Smithsonian.

The details have not

been fully worked out, but it looks like we will be able to preserve some of the personal effects of our color pioneers with Nick's help.

In the spirit of keeping the ISCC general membership well-informed, I would like to highlight the important events that took place at our October 8, 1993 Board of Directors' Meeting. It was held at the Holiday Inn Four Seasons in Greensboro, North Carolina, which will be the site of our 1995 Annual Meeting. All members of the Executive Committee were present. The following directors were present: Ann Laidlaw, Gary Beebe, Ellen Carter, Joel Pokorny, Joann Taylor, and Bob Marcus. Also we were happy to welcome Jim Keiser, Chair of the 1994 Annual Meeting. The presence of a quorum was confirmed, noting that Ellen Carter held a proxy for Mike Brill.

Annual Meetings

Detroit, MI April 24-26, 1994 - Jim Keiser handed out a preliminary budget and program for the joint ISCC/DCC (Detroit Color Council) symposium entitled Auto Design Tech to be held on April 26. The program will feature the following speakers: Prof. Sivon Reznikoff from the College of Architecture at Arizona State University on "Multi-dimensional Color Data", Robert Daily from DuPont on "Color-Concept to Customer", Trevor Creed from Chrysler on "All You Ever Wanted to Know About Color and Trim and Some More...", Tom Matano from Mazda on "Colorful Cultures", Harold Fitzpatrick, Esq. from Fitzpatrick & Israels, Esqs. on "Recent Legislative, Regulatory, and Judicial Issues Facing the Color Pigments Industry", Allan Rodrigues from DuPont on "ASTM E-12.03.02: Measurement of Metallic and Pearlescent Colors" and Roy Berns from the Rochester Institute of Technology Munsell Color Science Lab on "The Mathematical Development of CIE TC 1-29 Proposed Color Difference Equation". The symposium will close with a panel discussion focusing on industrial applications of the CIE TC 1-29 and the CMC color difference formulae. The panelists will be Roy Berns, James Fencil from Gibraltar Chemical Works, and Johnny Suthers from Eastman Chemical Company. Many thanks to Jim Keiser for all his hard work in planning what is shaping up to be an exciting symposium. Jim is also to be commended for setting an excellent example as a very well-organized Annual Meeting Chairperson! This 1994 Annual ISCC Meeting is sure to be a smashing success due to Jim's efforts.

1995 - Greensboro, N.C. - April 23-25, 1995 - "Color and Textiles..." Ann Laidlaw is the 1995 Annual ISCC Meeting Chairperson. This will be a joint meeting with AATCC. Dave Randall will represent AATCC. Ann presented a tentative schedule for the joint ISCC/AATCC symposium featuring three papers on Quality Control Applications, three papers on Color Formulation Applications, three papers on Computer-Aided Textile Design Applications, three papers on other miscellaneous topics such as vision systems, and a moderated discussion with all speakers to close the symposium. The papers should emphasize novel approaches to solving textile problems. The Posters Papers Session held during the ISCC Annual Meeting should include papers emphasizing problem samples from textile manufacturers, such as samples that are difficult to measure, particularly bad metamers, samples whose color matches but whose appearance does not, etc. We had a good opportunity to

witness first-hand that the Koury Convention Center, adjoining the Holiday Inn Four Seasons, has excellent facilities for all aspects of our Annual Meeting and the joint symposium. Ann Laidlaw is also to be congratulated for starting so early to lay the groundwork for another successful Annual ISCC Meeting at a time when her life is already busy enough with a job and a new baby! Thank you so much Ann for all your impressive hard work!

The dates and locations for the 1996 and 1997 Annual ISCC Meetings will be set at the Board of Directors' Meeting in Williamsburg, VA in February 1994. Roland Connelly and Ellen Carter will prepare a list of possible conflicts. If you have a desire to host an ISCC Annual Meeting in your city or have an idea for a good symposium topic, please contact Ellen or Roland as soon as possible.

Williamsburg Conferences

Williamsburg 1994 - February 21-23 - We had the opportunity to see the registration forms and abstracts of all papers. Authors will submit manuscripts to Color Research & Application. All conference registrants will receive a vinyl notebook and paper pad. Discussion focused on the desire to improve the quality of meeting room and registration table signs. A motion was passed for Romesh Kumar to create a nice sign that can be maintained for long-term use by ISCC. We are fortunate to have Richard Harold as the 1994 ISCC Williamsburg Conference Chairperson. He has put together an excellent conference with prominent national and international speakers. Registrations are rolling in at such a rate that it is sure to be a sell-out. Many thanks to Richard for all his successful volunteer efforts.

Williamsburg - Feb. 5-8, 1995 - Ellen Carter reported on Mike Brill's behalf. This panchromatic conference will feature colorimetry, computer graphics, human color vision, and machine vision and remote sensing as four major topics. Each major topic will have a program coordinator responsible for

seeking speakers. This will be the first conference of its kind in ISCC history. Mike Brill and Steve Shafer have an exciting vision for this unique event. We are all looking forward to it!

Standing Committee Reports

Membership Committee: Ann Laidlaw reported that, as of September 20, 1993, there were 734 ISCC members; including 32 students, 34 retired, 11 honorary, 79 foreign (IMG), 382 domestic (IMG) and 194 member-body delegates, liaisons, and editors. A new updated membership directory will be issued in 1994.

Education Committee: Bob Chung reported that the Education Committee will hold a session on "Demystifying Color" at the 1994 Annual Meeting. This session will be held on Sunday, April 24 from 10:00 AM - 12:00 noon.

Student Chapters: Bob Chung requested approval for a student chapter banner that was designed by the RIT student chapter. The cost should be no more than \$300. Discussion indicated that more work needed to be done on the design to make it easily extendable to other student chapters.

Nickerson Service Award: Bob Marcus reported that he received a nomination of Terry Commerford for the Nickerson Service Award from Lou Graham. A motion was made and passed to accept the nomination. This award will be presented to Terry at the 1994 Annual ISCC Meeting Awards Luncheon.

Member Body Liaison: Joann Taylor reported that a delegation for the Imaging Science and Technology (IS&T) Society has finally been appointed consisting of seven delegates. Joann worked with IS&T and Society for Information Displays (SID) on the November 1993 Color Imaging conference where ISCC was a contributing society. Joann is preparing a survey for Member Body delegates. The survey will focus on two questions: what is ISCC currently doing that the Member-Bodies value and what should ISCC do to improve its relationship with the Member Bodies? Harry Hammond suggested appointing a Newsletter recording group to prepare

articles/notes for the Newsletter. Joann will follow-up on this with Member Bodies.

Planning Committee: Magenta Yglesias has kindly accepted the Chair from Lou Graham, who had asked to be relieved of his responsibilities. Lou will be assisting Magenta with help from Sy Commanday and Mike Brill. Magenta would like to find one more member for her committee from the mid-west or west. Thanks to Magenta for accepting this position and to Lou for being an excellent Chair, dedicated enough to continue to serve on the committee.

Ad-Hoc Committee on Executive Staff: Roland Connelly reported that we will look for someone to begin working 15 hours/week and hope that those hours could eventually be increased to 30 hours/week. The office will be housed in the old HunterLab building. We will pay salary and telephone. Roland Connelly was asked to provide the Finance Committee with a breakdown of costs associated with this executive staff position, including start-up costs. This information will be used, along with other pertinent financial information, to produce a 1994 ISCC budget to be approved at the Williamsburg Board of Directors' Meeting.

Problems Committee: Hugh Fairman reported that Project Committee 32 is submitting its report. Project Committee 44 was to write a report this year. Project Committee 49 will meet at the ISCC Annual Meeting in Detroit to entertain additional experiments. Thus PC 49 will be the only active Project Committee. Joel Pokorny suggested the idea of documenting spectral power distribution of lamps as a good possibility for a new Project Committee. Roland Connelly will prepare a scope and objectives, and look for a Chairman with help from Hugh Fairman and Danny Rich. Anyone interested in such a Project Committee is encouraged to contact Roland Connelly.

I will close by wishing all a very happy, healthy and prosperous 1994! If you have any comments or concerns please don't hesitate to contact me.

Paula J. Alessi

1994 ISCC WILLIAMSBURG CONFERENCE

"Colorimetry of Fluorescent Materials"



The Inter-Society Color Council is sponsoring a conference on "Colorimetry of Fluorescent Materials" to be held in Williamsburg, Virginia, February 20-23, 1994. The meeting will be held in the New Cascades Meeting Center located in "The Woodlands" section of Colonial Williamsburg. This two-and-a-half day program of presentations by well-known speakers in this field will offer a balanced coverage of the following and other relevant subjects:

What is Fluorescence?

How to Measure Fluorescence - Problems and Pitfalls.

Applications of Fluorescent Materials.

State and Federal Laws on Safety Colors.

Standards and Specifications.

Fluorescent Whitening Agents (FWA's).

Progress in the Development of Daylight Simulators.

Security Applications.

Fluorescent Colorant Formulation.

The conference objective is to conduct a specialized meeting which investigates production and evaluation of fluorescence and to exchange views on current technology. The conference format allows ample time for discussion of the papers and for individual discussions so that speakers and attendees may actively exchange information.

Abstracts of the papers will be provided to the attendees during the meeting. The Proceedings of the meeting will be published in a special issue of the journal "Color Research and Application". A special "Speakers Forum" will be held at the end of each day's session for an open exchange of views for that day's moderators, speakers, and attendees.

The following speakers will be presenting at the 1994 Williamsburg Conference: Michael J. Barker, A. Nurhan Becidyan, Dr. Fred W. Billmeyer, Jr., Dr. Jim Bonham, Dr. J. Anthony Bristow, David M. Burns, Rolf Griesser, Dr. Romesh Kumar, Gary Lesley, Calvin S. McCamy, Ricardo J. Motta, Lee A. Pavelka, Dr. Wayne B. Robbins, Michael Sansonetti, Jr., Frederick T. Simon, Stevel Streitel, Dr. Heinz Tersteige, Dr. Jürgen Wiczoreck, and Dr. Joanne Zwinkles.

CIE Technical Committee TC 2-25, "Calibration Methods and Photoluminescent Standards for Total Radiance Factor Measurements," will also meet during the conference.

For more information on the conference, contact Ginny Baca, Hunter Associates Lab, Inc., 11491 Sunset Hills Rd., Reston, VA 22090, USA, (703) 471-6870, Fax (703) 471-4237.

NEW MEMBERS

We are pleased to list the latest members to the ISCC. Welcome!

Ms. Arlene Bosch
The Gillette Company
Gillette Park
South Boston MA 02127-1096 USA

Mr. Gregory D. Castillo
INX International Ink Co.
1130 Howard St.
Elk Grove Village IL 60007 USA

Mr. Christopher R. Hauf
RIT Munsell Color Science Lab
121 Countess Drive
West Henrietta NY 14586-9403 USA

Mr. Robert A. Mallinger
Sherwin Williams
10909 S Cottage Grove Ave
Chicago IL 60688 USA

Mr. Jeff Moore
Milliken & Co.
PO Box 1927
Spartanburg SC 29304 USA

Mr. John Seymour
Quad Tech International
N64 W23110 Main Street
Sussex WI 53089 USA

Mr. Louis F. Slapshak
Anheuser-Busch Company
One Busch Place
St. Louis MO 63118 USA

Ms. Ruth A. Theobald
DuPont Company
3500 Grays Ferry Ave.
Philadelphia PA 19146 USA

Ms. Lisa Thieme
Colwell/General, Inc.
200 Sixth Street
Fort Wayne IN 46808 USA

Mr. Michael A. Veve
Hunter Associates Laboratory, Inc.
11491 Sunset Hills Road
Reston VA 22090 USA

Dr. Waletha Wasson
Univ. of TN Memphis, Col of Dentistry
Dept General Dentistry
875 Union Avenue
Memphis TN 38163 USA

Mr. Huanzhao Zeng
RIT Carlson Center for Imaging Scienc
54 Lomb Memorial Drive
Rochester NY 14623 USA

OBITUARY WALTER C. GRANVILLE

Walter C. Granville, ISCC President, 1958-60, died Monday, December 13, 1993, at age 81. A week earlier he went to the hospital for a blood transfusion. He is survived by his wife of 51 years, Virginia (Ginny). The Granvilles lived for many years at 312 Elm Court, Libertyville, Illinois 60048, a Chicago suburb. However, communication is most direct by telephone, (708) 362-4646. Memorial contributions may be sent to Lake Forest Hospital Hospice, Lake Forest, IL 60045, or to Leukemia Research.

Harry K. Hammond III

VERY BASIC BLACK

After several years of brilliant color, black is back with a vengeance. This year it is unadorned and painfully plain, displaying its nuances primarily through texture: the shadings of crushed velvet, shiny vinyl and supple leathers; the ambiguity of heavy black rubber soled boots underscoring a long black lace skirt.

What has plunged many designers into darkness? Who turned off the lights? There are several answers: first, pure practicality - its low maintenance yet hi-tech demeanor travels well. Black is the perfect background for all manner of accessories and makes the wearer feel wonderfully slim.

Black is not a color, it's an attitude. As a personal or fashion statement, black's message comes across loud and clear: I'm chic, I'm cool, I'm in control. It's the ultimate when-in-doubt, I-never-have-to-be-worried clothing choice.

A BIOGRAPHY OF ELIZABETH HUNTER

Women have always held positions of responsibility at HunterLab. Among them is Elizabeth Hunter, wife of HunterLab's founder, Richard Hunter. In the beginning, she was somewhat reticent about starting a new business, but after much consideration agreed to dust off her high school shorthand, typing, and bookkeeping to take the plunge. Her job description covered secretary, bookkeeper, shipping and receiving, janitorial work, and entertainment. In 1962, she started HunterLab's "Reflections and Transmissions" newsletter and was editor for many years.

As the company grew and began to ship overseas, Elizabeth became Export Manager and established a network of representatives, chiefly in Europe, Mexico, Canada, South America, and several countries in the Far East. This was before women had entered into work of this kind, particularly in Europe, and some men had difficulty adapting to dealing with a woman. This was soon overcome and some have remained longtime friends.

Elizabeth handed export responsibilities over to Malcolm Lloyd in the early 1980s. That gave her more time for her avocation,

decorating HunterLab with thematic art. She constructed the colorful wall hangings herself from yarn, metallic strips, and other customer samples sent in for laboratory evaluation. Elizabeth decorated the panels of adjoining open office areas with felt abstract patterns to coordinate with a 120 foot spectrum wall. Each office area coordinated with the color of the spectrum.

Elizabeth still comes to the Lab two days a week to keep up with her various chores. This schedule allows her time to play bridge with longtime friends, tend her garden, make flower arrangements for the Lab and friends, and to keep up with her "therapy" dancing several times a week at a studio in Arlington where she and Richard had danced for over 25 years. She still considers herself a good dancer, but gave up competitive dancing a few years ago.

Elizabeth has led an interesting life and feels very fortunate to have been a part of HunterLab for over 40 years. Her career predates women's liberation, but she is a strong proponent of it. Elizabeth Hunter is but the first example of leading women in HunterLab.

*from Reflections and Transmissions,
HunterLab's newsletter*

But is it technically a color? In terms of lighting, it has been described as the negation of color; in pigment, it is said to contain all color. We do know that it is a strong psychological presence: powerful, dominant, pervasive, persuasive. Consumers buying habits and attitudes concerning black have changed drastically in the last decade. The "no-nos" of the past have gone away. Food is served on black plates, children are dressed in black and we are no longer obliged to wear black to funerals.

Occasionally we read that navy blue,

brown, or charcoal is replacing black, but this hasn't happened. Just as there are infinite shadings of red, green, blue, yellow, purple, etc., there is no generic, one-size-fits-all, definitive black. Black can range from Raven to Phantom or Licorice to Caviar and just as the names imply, all very capable of creating a variety of moods, attitudes and ambiance.

Because the consumer continues to demand black, just like the battery commercial on television, "it just keeps going...and going...and going...."

Pantone Color News

NEWS FROM MEMBER BODIES

CAUS HOLDS CONFERENCE ON COLOR IN THE YEAR 2000



On Friday evening, October 15th at the Montauk Yacht Club, Long Island, N.Y., about ninety designers, architects, manufacturers, and educators gathered for a three-day conference of presentations and meetings on color in the 21st century.

Jean-Philippe Lenclos, founder of Atelier 3D Couleur in Paris and author of *The Colors of France*, opened the conference with a stirring socio-cultural presentation on "Color and Matter of Factors of Seduction." He also spoke on the geography of color worldwide, using the example of a lady's electric shaver which was initially introduced only in white. He noted that the addition of twelve colors to the product tripled the price and was an example of how one might give a third dimension of value.

He observed that muted and off-shades tended to be more easily accepted in northern countries and among more affluent populations, while brighter and high-contrast color design tended to appeal to less prosperous people in the south. He noted that western France is dominated by blue-gray roofs, the south by brown tonalities, and the east by gray and yellow tones, while the Loire region is predominantly white. Lenclos, who is preparing a book on color worldwide, shared some of his research by showing Guatemalan building facades of turquoise and warm brights and Greenwich Village's patchwork of darks and lights. His message was that different regions have their own color languages and that these convey special meanings.

Reporting on current color tendencies in Europe, he observed that

in Milan a high contrast of bright color presently prevails in office systems, and that pastels and pearlescent effects were providing color seduction in cosmetic markets. In European streets, weathered shades of grunge were pervasive, particularly with the young. He called these "current fashion statements." Noting black and white and gray in surfboards for 1994, he recalled previous years in full bright ranges. He pointed out that new materials and new fabrics resulted in new colors. Seeking the mysterious effects of color has led him to a hands-on approach to drawing with color. "I am a practitioner, not a theorist," he declared.

Color in Health Care

Interior designer Deborah Kasmir discussed color in health care projects with the specific objective of creating dignified environments for people in crisis and need. Beige and white, she said, do not create a comforting space for everyone — health care is more and more consumer-driven. In one veterans project, a client, who had been through three wars and three wives, knew he liked beige, which is just what she installed for him. Clinical areas are clearly marked from others to instill a sense of confidence. Among Ms. Kasmir's projects: Children's National Medical Center and Walter Reed Army Medical Center, Washington, D.C., and Shady Grove Adventist Hospital Nursery Renovation and Nursing Center, Gaithersburg, Maryland.

Jean-Philippe Lenclos Reports from Paris On Automobile Colors

At the showroom of Automobil Ausstellung in Frankfurt, beginning in September 1993, trends towards pearlescent and iridescent color effects were confirmed. Also shown were yellowish greens - moss, jade, and leaf green. Plum, aubergine, and a raspberry tone were seen. Purple was very popular, particularly with Porsche. Blue-greens are now less popular. In

small models, there were ensembles of colors, with each model presenting a range of four to six body colors which were coordinated between them. This was the case with Renault (Twingo), Ford, and Fiat (Punto). In the context of cars, cool blue now encapsulates the notion of a high-tech image. The seat textiles are in jacquards, playfully colored.

IS&T CONGRESS ON ADVANCES IN NON-IMPACT PRINTING TECHNOLOGIES



You are cordially invited to participate in the Tenth International

Congress on Advances in Non-Impact Printing Technologies, sponsored by The Society for Imaging Science and Technology. The scientific and technical program will include sessions related to the following topics:

- Electrostatic Marking Processes
- Electrostatic Marking Materials
- Electrophotographic Photoreceptors
- Liquid Toners & Printing Systems
- Ionography & Electron Beam Imaging
- Digital Color Printing Systems
- Production Printing Systems
- New and Novel Printing Technologies
- Image Quality & Measurement
- Color: Reproduction, Science & Standards
- Magnetography
- Electrography
- Ink Jet Printing
- Thermal Printing
- Input-Output Scanners
- Halftone Printing
- Media for NIP

IS&T, continued from page 5

Image Acquisition & Processing New Applications of NIP Technology

Those wishing to present a paper are requested to send an abstract before April 1, 1994. Please contact the Publications Chair:

Dr. Andrew Melnyk, Xerox Corporation
0103-05B
800 Phillips Road, Webster, NY 14580
716-422-7292 fax 716-422-4797;
E-mail: Melnyk.Wbst130@Xerox.com

In addition to contributed technical papers, attendees will have the opportunity to hear talks with a broader perspective. Keynote Addresses will be given each day on a topic of general interest. Furthermore, Focal Papers at the beginning of each session will provide a more in-depth overview or report on a major advance. A full day of tutorials in areas of major interest, a Gallery of Prints, and an Exhibition of Products are also planned.

For further information or to receive the preliminary program, contact: P.J. Forness, Conference Manager, IS&T,

7003 Kilworth Lane, Springfield, VA 22151. (703) 642-9090 or FAX (703) 642-9094.

IS&T 8TH INTERNATIONAL PHOTOFINISHING SYMPOSIUM PROGRAM FINALIZED

February 13-16 - Atlanta, Georgia

IS&T's 8th International Symposium on Photofinishing Technologies will present 33 papers and two tutorials at the Atlanta Renaissance Hotel, Atlanta Georgia on February 13-16, 1994. Attendees will have an opportunity to visit the Photo Marketing Association's International PMA '94 Convention, which will immediately follow the Symposium.

Sunday, February 13 will be devoted to two Tutorial Seminars, both presented by the Rochester Institute of Technology. "Photographers and Prepress - The Link" will cover considerations of moving images through the production process. "Electronic Imaging - A Systems Perspective" is intended for those who want to understand the principles and technologies of electronic imaging from a systems perspective.

For program details, and symposium and hotel reservation forms contact:

IS&T, 7003 Kilworth Lane, Springfield, VA 22151. (703) 642-9090, Fax (703) 642-9094.

COLOR MARKETING GROUP ANNOUNCES MOVE OF INTERNATIONAL HEADQUARTERS



The Color Marketing Group (CMG) announces the moving of its international headquarters to Alexandria,

Virginia, effective December 14, 1993. The new address and telephone number are:

Color Marketing Group
5904 Richmond Highway, Suite 408
Alexandria, VA 22303 USA
Phone: (703) 329-8500
Fax: (703) 329-0155

As the consumer has become more sophisticated and confident in the selection of color in manufactured products, corporations from all industries have recognized the need for accurate advance knowledge of color directions. This information is provided by the Color Marketing Group, a 32-year old international non-profit association of 1,400 design and color professionals who forecast Color Directions™ one to three years out for all industries, manufactured products and services. These include: Residential, Commercial and Consumer Products, Transportation,

Architectural/Building Products, Communications/Graphics, Fashion, Recreational, Retail, Hospitality, Office and Health Care Environments.

Color Marketing Group Elects 1994 Color Leaders and Five New Board Members

Nada Napoletan Rutka, Nada Associates, Pittsburgh, Pa., and President of Color Marketing Group, announced the results of the election of three officers for 1994. James A. Boone, Signature Color & Design, Marietta, Ga., was re-elected Vice-President; Ann A. Price, The Glidden Company, Cleveland, Ohio, was re-elected Treasurer; and Laraine Turner, The Jolley/Turner Group, Inc., Long Beach, Calif., was elected Secretary. Rutka will serve the second half of her two-year term as President, as will Patricia Verlodt, Color Services, Hanover Park, Ill., serving as Immediate Past President.

Board of Directors members elected for a three-year term starting January 1, 1994 are: Jay de Sibour, Pantone, Inc. Carlstadt, N.J.; Carole D'Arconte, Color Portfolio, Inc., New York, N.Y.; Allen J. Farrell, (✉)

Samsonite Corporation, Denver, Colo.; Patty Flauto, Design Consultant, Cleveland, Ohio; and Andrea H. Sapon, Lands' End, Inc., Dodgeville, Wis.

Joyce S. Davenport, a long-time member of the Color Marketing Group, has been awarded a Lifetime Membership in the Group. Over the years, she has served as Chairman of ISCC Delegates to CMG and has held various offices in the group including those of Secretary and Treasurer. Davenport served as President of ISCC, 1984-1988, and as a member of the Board of Directors, 1976-79.

Thom Randolph

JOHN P. LANNING ELECTED 72ND PRESIDENT OF FEDERATION

FSCT John A.
Lanning
(Louisville)

Society), Product Quality Manager at Courtaulds Coatings, Inc./Porter Paints Division, Louisville, KY, became the 72nd President of the Federation of Societies for Coatings Technology (FSCT), on October 29, at the Federation's Annual Meeting, in Atlanta, GA.

Mr. Lanning most recently served as President-Elect of the Federation. He served as Secretary-Treasurer of FSCT (1991-92), and is a member of the Executive Committee. Mr. Lanning has been a member of the Board of Directors since 1989, and served on the Board as Member-at-Large from 1985-87. He is a member of the Finance Committee, and has served as Chairman of the Annual Meeting Program, Paint Show Exhibits' Awards, and Society Speaker Awards Committees. In addition, Mr. Lanning was a Trustee of the Coatings Industry Education Fund, an ex-Officio member of the Professional Development Committee, and a member of the Ad-Hoc Strategic Planning Committee.

Joseph P. Walton (Cleveland Society), Executive Vice President, Jamestown Paint, Jamestown, PA, was named President-Elect, and Darlene Brezinski (Chicago Society), President, Consolidated Research, Mount Prospect, IL, was elected Secretary-Treasurer.

Mr. Walton previously served as Secretary-Treasurer and is a member of the Executive Committee. He is Secretary-Treasurer of the Coatings Industry Education Fund, serves as a member of the Finance Committee, and is an ex-Officio member of the Professional Development Committee. Mr. Walton was a member of the

Manufacturing Committee from 1987 to 1992, having served as Chairman from 1987 to 1990. He was also a member of the Annual Meeting Program and the Ad-Hoc Strategic Planning Committees.

Dr. Brezinski is a member of the FSCT Board of Directors, the Publications Committee, the Editorial Review Board of the Journal of Coating Technology, Co-Editor of the Federation Series on Coatings Technology, and Editor of An Infrared Spectroscopy Atlas for the Coatings Industry (4th Edition). She has also served as Chairman of the Annual Meetings Program, George Baugh Heckel, Mattiello Lecture, and Room Committees. In 1983, Dr. Brezinski was the recipient of FSCT's George Baugh Heckel Award, and in 1991, she received the Union Carbide Award.

Forest Fleming (Piedmont Society), Technical Director of Wood Coatings Building Products Group, Akzo Coatings, Inc., High Point, NC, has been elected for a three-year term on the Federation Executive Committee. Milton Glaser (Chicago Society), Consultant, a Past-President of FSCT (1956-57), has been elected for a two-year term on the FSCT Board of Directors.

Elected to serve two-year terms as Members-at-Large on the Board of Directors are Thomas E. Hill (Western New York Society), Corporate Director-Total Quality, Pratt & Lambert, Inc., Buffalo, NY; Rose A. Ryntz (Detroit Society), Technical Specialist/Paint & Materials, Plastic & Trim Preproducts, Ford Motor Company, Detroit, MI; and Freidun Anwari (Cleveland Society), Chemist, Coatings Research Group, Inc., Cleveland, OH.

1993-94 Committee Chairmen Appointed by President Lanning

Chairmen of 30 committees of the Federation of Societies for Coatings Technology for 1993-94 have been named by President John A. Lanning. Two of the chairmen are members of ISCC. Dr. Robert T. Marcus, of Pantone Inc., Carlstadt, N.J., has been selected to chair the Armin J. Bruning Award Committee. Mr. Ralph Stanzola, of Neshanic Station, N.J. will chair the Inter-Society Color Council Committee. A complete roster of all committees will be published in the 1994 FSCT Year Book.

FSCT News Release

O T H E R N E W S

CALL FOR PAPERS

IMAGES IN COLOUR SYMPOSIUM

The Colour Group of Great Britain
April 10 - 12, 1994
Robinson College
Cambridge

The Color Group of Great Britain is organizing "Images in Colour" on behalf of the AIC and with co-operation from

the Imaging Science & Technology (IS&T) group of the Royal Photographic Society.

The overall theme, "Images in Color," may be interpreted in its broadest sense to include photographic, graphic arts, television, and visual display imaging.

Please send abstracts (200 words) and inquiries to:

Dr. M. R. Pointer
Kodak Ltd., Research Division
Headstone Drive
Harrow, Middlesex
HA1 4TY, England

CIE REPORTS ON DAYTIME RUNNING LIGHTS FOR VEHICLES



The International Commission on Illumination (CIE) has released a

technical report analyzing the use of lights on vehicles during daylight. This report, CIE Publication No. 104, is entitled "Daytime Running Lights (DRL)"

Lack of vehicle conspicuity is a large road safety problem, judging from accident statistics in the world, from in-depth accident studies, and from road-user explanations of collisions. One way to increase vehicle conspicuity in daytime conditions is to equip the front of vehicles with lights. In this report, lights with this purpose are called Daytime Running Lights (DRL).

Initially, variables that influence vehicle daytime front conspicuity are analyzed and the results of various experimental studies are summarized. It is concluded that lights are an effective measure provided they have certain technical specifications concerning intensity, light distribution, colour, number, and other characteristics. Accident statistics from Finland, Sweden, Norway, and the United States, where comparisons of vehicles with and without DRL have been carried out, support the concept. The reduction of daytime collisions due to DRL is estimated to be around 10 percent. The reduction of daytime collisions between cars and unprotected road users is even larger. While there are some negative effects of DRL, these are judged to be of minor importance in comparison with the advantages.

Several countries have legislation requiring motorcycles to drive with low beams turned on during daytime. Some countries have legislation requiring low beam or special DRL for all vehicles during daytime (Finland, Sweden,

Norway, Denmark). Canada has corresponding legislation for all new vehicles. The Economic Commission for Europe has produced a regulation for DRL. United States and some other countries do not require DRL, but allow it. The European Community has recently shown some interest in DRL as a road safety measure. However, except for the standard low beam as a DRL, lighting specifications of DRL in most of these legislations, standards, and regulations differ.

Finally, the report analyzes what kind of lighting specifications should be required of a special DRL, what kind of standard vehicle lights could be accepted as DRL, and what special DRL solutions could be recommended for motorcycles to improve vehicle conspicuity in an optimal way. For automobiles, the recommendations for special DRL are two white lights each with a central intensity of 400-1200 cd and with a specified light distribution.

The report is written in English, with a summary in English, French, and German. It contains 20 pages with 1 figure. It is readily available from the CIE National Committee or the Central Bureau of the CIE in Vienna.

Dr. Janos Schanda
Executive Director, CIE

TC 1-31 COLOUR NOTATIONS AND COLOUR- ORDER SYSTEMS (CHAIRMAN: C.S. MCCAMY, USA)

Technical Committee (TC) 1-31 is attempting to standardize a colour-order system in response to a series of questions posed by an ISO committee, organized under the direction of the Swedish secretariat. The CIE has gone through three drafts which discourage the international standardization of any one color-order system. Each of the several different systems being considered has its own merits. The committee has amassed about 65 documents including these three drafts, comments from around the world, and the list of documents.

For over a year, there has been

general consensus within the committee but the Swedish delegates have been dissatisfied. The committee met in Budapest on June 12, 1993. One Swedish delegate felt that the dissatisfaction could be traced largely to the direction of the effort in the ISO committee itself, and the questions that committee posed to the CIE, rather than the way in which the CIE committee has proposed to respond. The chairman asked the dissenting members to prepare specific proposals of wording of the report that they would consider acceptable. Proposals have been presented and a fourth draft is being prepared for submission to a letter ballot. If a substantial consensus is established, the report will be forwarded to CIE Division 1 with the recommendation that it be adopted as the final report. If the dissenting members insist, CIE procedures for the preparation of a minority report will be instituted.

Calvin S. McCamy
Chairman, TC 1-31

CIE DIVISION 1, VISION AND COLOR

Progress is being made in Technical Committee 21, "Testing of Supplemental Systems of Photometry." Committee Chairman, Ken Sagawa, Japan, distributed a 66-page, second-draft report in November 1993 to Committee members. Much of the material was presented at the Division 1 meeting in Budapest, Hungary in June 1993. The report contains results of tests of photometric systems based on heterochromatic brightness matching designed to assess lights in terms of comparative brightness at any level of adaptation of the eye. It includes the results obtained in brightness matching experiments conducted by several research groups that used the same colored samples under the same experimental conditions. The report presents the results of the tests and makes no recommendation for a new CIE system of photometry.

Harry K. Hammond III

NATIONAL PHYSICAL LABORATORY

Fluorescent Standards for Surface Color Club

The National Physical Laboratory (NPL) is establishing a major new research and development program to provide calibrated fluorescent surface color standards. The program is to be jointly funded by the Department of Trade and Industry and a Club of industrial companies.

The principal objectives of the program are:

(i) The development of a Reference Spectrofluorimeter at National Physical Laboratory for the measurement of fluorescent transfer standards. This needs to be a high speed instrument in order to keep the costs of calibration of the standards down to an acceptable level.

(ii) The development of stable fluorescent materials at the Loughborough University of Technology. Fluorescent yellow, orange, and red colors are being considered together with white samples in four different strengths of fluorescence.

(iii) A program to evaluate and characterize the newly developed materials.

The benefits will be a Reference Spectrofluorimeter with a target uncertainty of ± 1 CIELAB unit; a stock of stable fluorescent transfer standards, each Club member to receive a calibrated set; and a calibration service for the measurement of surface color of fluorescent materials, including calibration of customers' samples.

The membership fee will be by two annual payments of 5,000 pounds. If you wish to join the Club please contact:

John Verrill, Division of Quantum Metrology, National Physical Laboratory, Teddington, Middlesex, England TW110LW, +44 81 943 6646, Fax: +44 81 943 6283.

John F. Verrill
National Physical Laboratory

THE SECOND OXFORD CONFERENCE ON SPECTROSCOPY

June 20-23, 1994

CORM

The Council for Optical Radiation Measurements (CORM) and the UV Spectrometry Group (UVSG) of the UK are holding their second joint International Conference on Spectrometry in Rindge, New Hampshire, USA. The conference will focus on advances in UV-VIS and near IR spectrometry and related topics. Formal lectures given by invited speakers include:

Standards and State of the Art in Spectrometry
Compliance and Validation in Spectrometry
Fluorescence
Novel Approaches to Applications and Instruments

The National Laboratories of the USA (NIST), UK (NPL), and Canada (NRCC) will be represented and will have a special poster session devoted to the latest developments in equipment, standards and measurement techniques at these facilities.

Poster papers are invited from participants on the above topics. Invited papers and poster sessions will be published in an Elsevier monograph.

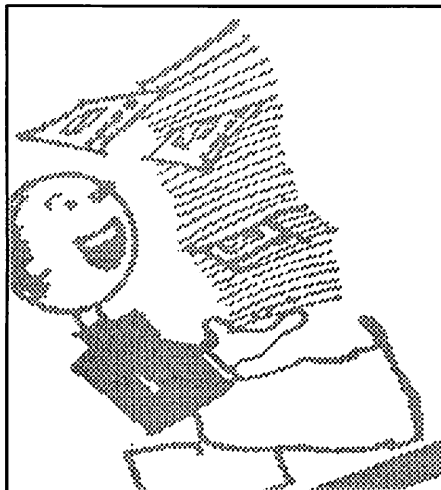
An instrument exhibit will be held in conjunction with the conference. The format of the conference is designed to promote the active involvement of all participants in the lectures, poster presentations, and discussion sessions.

For additional information, please contact:

Art Springsteen
Labsphere, Inc.
P.O.Box 70
North Sutton, NH 03260
(603) 927-4266

Diana G. Jones
SciOptics Corporation
7266 W. Colonial Dr.
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UK
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**THE ISCC
WELCOMES
CONTRIBUTIONS
FROM ALL
MEMBERS**

CALL FOR PAPERS INTERNATIONAL CONFERENCE ON COLOR EDUCATION

UNIVERSITY OF ART AND DESIGN, HELSINKI, UIAH
AUGUST 16-19, 1994

The University of Art and Design in Helsinki (UIAH) announces the International Conference on Color Education, to be held at UIAH, August 16-19, 1994. This conference offers for the first time an opportunity for all those involved in teaching the understanding and use of color in professional visual art and design education to discuss this challenging and many-faceted subject. However, all those interested in color, whether professionally or otherwise, are warmly welcomed to participate.

The themes of the Conference endeavor to offer a forum for the exchange of ideas and information concerning color education in the entire fine art and applied area, including lighting design and architecture. The keynote speakers, coming from Europe and the United States, represent the highest expertise in their field:

Ellen Marx is a well known author and speaker on color theory, particularly on phenomena related to the aesthetic dimensions of contrast and color perception.

Michel Albert-Vanel has taught color for many years at the École Nationale Supérieure des Arts Décoratifs in France and has developed a unique color system and educational method which is also used in French primary and secondary schools.

Hans Joachim Albrecht is a sculptor and teacher of color with experience concerning both the fine and applied arts. He is an authority on color ranging from the theories of Philipp Otto Runge to color in contemporary art.

Juhana Blomstedt is professor of painting at the Finnish Academy of Visual Art and is one of Finland's leading and internationally best known artists.

Nicholas Fox Weber is director of the Josef Albers Foundation in Orange, Connecticut in the United States and a world authority on the life and work of Albers.

Leonhard Lapin, an experienced teacher and leading figure of his generation in the artistic and architectural life of Estonia, is also an authority on the writings and theories of the Russian Suprematist Kasimir Malevich.

Moritz Zwimpfer is professor of color studies and graphic design at the Schule für Gestaltung Basel in Switzerland and author of the book 'Color, Light, Sight, Sense.' He will bring to the conference his many years of experience in teaching color to students of diverse design disciplines.

The conference will include exhibitions and excursions related to the themes of the conference. Further information on these and the social program will be supplied in the spring of 1994. We kindly invite you to submit papers and wish you cordially welcome to Helsinki next August.

Harald Arnkil
Chairman, Organizing Committee

COLOR SNIPS

☞ Have you noticed that colors are often imbued with human characteristics? Playful or serious, romantic or comical, bold or conservative, natural or artificial, gentle or harsh, strong or weak? Researchers say that there is an association between the way people describe their favorite colors and the way they see themselves.

☞ In other words, if you describe periwinkle blue as playful and choose it as a favorite color, you perceive yourself as playful.

☞ We often hear that drivers of red cars get more speeding tickets than any other car color. A new study indicates that it's not all shades of red, but specifically warm red/orange that will get you into trouble.

☞ The biggest surprise? After red/orange, gray and brown were the two colors most likely to get speeding citations! Researchers say that "results refute the notion that bright colored cars give the impression of speed, resulting in a high estimation of actual velocity." This could encourage a whole new trend in brighter car colors.

☞ Speaking of brighter colors, transportation experts are voicing louder opinions concerning the safety of red fire engines, claiming that bright yellow/greens (lime yellow) are much more visible, especially at fading twilight when red turns into muddy brown. Some fire departments have already made the transition, while others find it difficult to waiver from the tradition of the big red trucks.

☞ Imagine the ramifications: Will toy companies have to recall the little red trucks and will fire engine red be struck from our color lexicons forever?

Pantone Color News

COLOR RESEARCH AND APPLICATION

In This Issue, February 1994

CR&A

In the color reproduction field

and in studying color constancy, the relatively smooth reflectance curves of natural materials are repeatedly used. Often researchers refer to the curves of Munsell color chips and paints, and to a collection of reflectance spectra of natural materials published by Krinov in 1947. The Krinov data were mainly measured from 400 to 650 nm at 10 nm intervals. Michael J. Vrhel, Ron Gershon, and Lawrence S. Iwan measured the spectral reflectance of Munsell chips, paints, and various natural materials in the 390 to 730 nm range with the same device and under similar conditions. In "The Measurement and Analysis of Object Reflectance Spectra," the authors present basis vectors derived from this data set and discuss errors introduced in recovery of a material's spectrum with different numbers of basis vectors.

It has been known for a number of years that transformations of MacAdam's ellipses (or other color-discrimination threshold ellipsoids) from CIE x, y, Y space to CIE 1976 L^*, a^*, b^* generate distortions. That is, the figures are no longer ellipses when using two dimensions, or ellipsoids for three dimensions. The distortions are usually considered to be small and have generally been ignored. However, Manuel Melgosa, Enrique Hita, Javier Romero, and Luis Jiménez del Barco have studied this transformation in detail and report their findings in "Color-Discrimination Thresholds Translated from the CIE (x, y, Y) Space to the CIE 1976 (L^*, a^*, b^*)."

In another article from the same department, Manuel Rubiño, Jose A. García, Luis Jimenez del Barco, and Javier Romero join forces to examine

the "Colour Measurement of Human Teeth and Evaluation of a Colour Guide." When replacing or repairing teeth, it is not sufficient to assess whiteness; one must choose an appropriate color to match the existing teeth. Usually a restorative dentist uses a shade guide to visually select the hue that most closely matches the patient's teeth. It is common to have no color on the guide closely resemble the patient's tooth color. Based on their measurements of tooth color of a broader population, Dr. Rubino and his colleagues point out the need for enlarged shade guides.

The Hunt color vision model has been the topic of several articles in this journal, most recently "Revised Colour-Appearance Model for Related and Unrelated Colours" published in 1991 [Vol. 14 pp 146-165]. In this issue, R. W. G. Hunt presents "An Improved Predictor of Colourfulness in a Model of Colour Vision." Because the perceived colorfulness of related colors is greatly influenced by the reflectance of the background, Dr. Hunt has developed a new chroma predictor. The reader can see, in the color figure, that dark colors become more colorful as the background becomes darker, and the mathematical formula for this effect is given in the article.

In a second article authored by R. W. G. Hunt with M. Ronnier Luo, several evaluations of the Hunt '91 model of color vision are discussed. In four separate articles since 1991, the LUTCHI (Loughborough University of Technology Computer Human Interface) dataset has been described. This large database consists of magnitude scaling data for the percepts of related colors in diverse viewing conditions. In "Evaluation of Colour Vision by Magnitude Scalings: Discussion of Collected Results," adjustments to Hunt's model and the full implications of these adjustments are discussed.

This month's Color Forum includes a piece by Michael H. Brill about "The

Perception of a Colored Translucent Sheet on a Background." This piece was inspired by Osvaldo Da Pos's recent book, *Transparenze* which describes, using color illustrations, when blocks of color will be perceived as translucent sheets over a patchwork background. Dr. Brill presents the rules that govern these relationships for chromatic translucency which are important for graphical applications on computer displays and in hardcopy.

The second featured historic article about color is included in this issue. Edwin Schrödinger first published "Über das Verhältnis der Vierfarben-zur Dreifarben-theorie" in *Sitzungsberichte der Akademie der Wissenschaften in Wien* in 1925. A translation, "The Relationship of the Four-Color Theory to the Three-Color Theory," is included in the "Classical Articles in Color" section with a commentary by Qasim Zaidi. This article contains a reconciliation of Hering and Young-Helmholtz theory, as well as a definitive explanation of the alychne, and the formal underpinnings of the theory of chromatic moments. (This theory was later developed by MacAdam [J. Opt. Am. Vol. 28, 103-111 (1938)] and used by many others.) Readers might be surprised to find other observations in this article that were thought to have originated much later... and perhaps some that have yet to be rediscovered.

Also this month, there is a lengthy communication from Paula Alessi, chairman of CIE Technical Committee 1-27 on the Specification of Colour Appearance for Reflective Media and Self-Luminous Display Comparisons. Ms. Alessi presents "CIE Guidelines for Coordinated Research on Evaluation of Colour Appearance Models for Reflection Print and Self-Luminous Display Image Comparisons." Using these guidelines, experimenters are encouraged to perform the prescribed techniques and report the results to TC 1-27 so that a unified compilation and evaluation can be accomplished.

Ellen Carter,
Editor, CR&A

C A L E N D A R

Please send information on Member Body and other organization meetings involving color with dates, places, and information source to:

Harry K. Hammond, III
BYK-Gardner, Inc.
2435 Linden Lane
Silver Spring, MD 20910
301-495-7150 FAX 301-585-4067

1994

ASTM COMMITTEE D-1 ON PAINT, Jan. 23-26
Crown Sterling Suites, Fort Lauderdale South, Florida.
Information: Scott Orthey, (215) 299-5507.

ASTM COMMITTEE E-12 ON APPEARANCE, Jan. 23-26
Crown Sterling Suites, Fort Lauderdale South, Florida.
Information: Bode Buckley, (215) 299-5599.

IS&T ELECTRONIC IMAGING: SCIENCE AND TECHNOLOGY, Feb. 6-10
Society for Imaging Science and Technology, San Jose Convention Center, San Jose, California. Information: SPIE (206) 676-3290, Fax (206) 647-1445.

37th ANNUAL SOUTHERN DECORATING PRODUCTS SHOW, Feb. 11-13
National Decorating Product Association (NDPA), Atlanta, Georgia. Information: Ruth Wilms, NDPA 1050 n. Lindbergh Blvd., St. Louis MO 63132

38th ANNUAL CANADIAN DECORATING PRODUCTS SHOW, Feb. 11-13
National Decorating Product Association (NDPA), Toronto, Ontario, Canada. Information: Ruth Wilms, NDPA 1050 n. Lindbergh Blvd., St. Louis MO 63132

VISION SCIENCE & ITS APPLICATIONS, Feb. 11-15
Optical Society of America, Topical Symposium on Visual Science and Its Applications, Hilton of Santa Fe, Santa Fe, New Mexico. Information: OSA Meetings Department (202) 416-1980.

8TH INTERNATIONAL SYMPOSIUM ON PHOTOFINISHING TECHNOLOGY, Feb. 13-16
IS&T and PMA, Atlanta Renaissance Hotel, Atlanta, Georgia. Information: IS&T (703) 642-9090, Fax (703) 642-9094

WILLIAMSBURG CONFERENCE, Feb. 21-23
Inter-Society Color Council Williamsburg Conference on Fluorescence, Williamsburg, Virginia. Information: Richard Harold (703) 471-6870.

GATF ANNUAL MEETING, Mar. 14-16
Graphic Arts Technical Foundation, SPC Annual Meeting, Drake Hotel, Chicago, Illinois. Information: (412) 621-6941.

IMAGES IN COLOUR, Apr. 10-12
The Royal Photographic Society Imaging Science and Technology Group and The Colour Group (Great Britain) host AIC '94 Interim Meeting on Images in Colour. University of Cambridge, Cambridge, England. Information: Michael Pointer 44 81 424 4524, Fax 44 81 424 3750.

BARTLESON SYMPOSIUM, Apr. 11
Cambridge University, Cambridge, England. Included in Images in Colour.

ISCC - ANNUAL MEETING, Apr. 24-26, 1994
Inter-Society Color Council Annual Meeting & Joint Symposium with Detroit Colour Council, Troy Marriott, Detroit, Michigan. Information: Jim Kaiser.

TAGA ANNUAL CONFERENCE, May 1-4
Technical Association of the Graphic Arts Annual Technical Conference, Baltimore, Maryland. Information: Karen Lawrence, (716) 475-7470.

CMG - CONFERENCE, May 8-10
Color Marketing Group International Color Directions Conference, Sheraton New York Hotel & Towers, New York, New York. Information: Katie Register (703) 329-8500, Fax (703) 329-0155.

PRINCIPLES OF INDUSTRIAL COLOR MEASUREMENT, May 10-12
Munsell Color Science Laboratory, Rochester Institute of Technology, Rochester, New York. Information: Colleen Desimone (716) 475-7189, Fax (716) 475-5988.

FATIEPEC CONGRESS, May 15-19
Development of the Lacquer and Paint Industry, Budapest. Information: Fatiepec Congress Secretariat, Hungarian Chemical Society (36-1) 201 6883, Fax (36-1) 156 1215.

IS&T 47th ANNUAL CONFERENCE, May 15-20
International Committee on the Science of Photography, ICPS '94: The Physics and Chemistry of Imaging Systems, and IS&T's 47th Annual Conference, Stouffer Rochester Plaza Hotel, Rochester, N.Y. Information: IS&T (703) 642-9090, Fax (703) 642-9094

SID '94, Jun. 12-17

Society for Information Display, International Symposium, Seminar, and Exhibition, San Jose Convention Center, San Jose, California. Information: Joyce Farrell, Conference Chair (415) 857-2807, Fax (415) 857-4320, E-mail "farrell@hplabs.hp.com".

ASTM COMMITTEE E-12 ON APPEARANCE, Jun. 19-23

Montreal, Canada. Information: Bode Buckley, (215) 299-5599.

ASTM COMMITTEE D-1 ON PAINT, Jun. 26-29

Marriott Crab Tree Valley, Raleigh, North Carolina. Information: Scott Orthey, (215) 299-5507.

INTERNATIONAL SYMPOSIUM, Jul. 26-28

Illuminating Engineering Institute of Japan, Tokyo, Japan

IESNA ANNUAL CONFERENCE, Aug. 7-11

Illuminating Engineering Society of North America, 88th Annual Conference, Maimi, Florida. Information: Valerie Landers, (212) 705-7269.

INTERNATIONAL CONFERENCE ON COLOR EDUCATION, Aug. 17-19

University of Industrial Arts, Helsinki (UIAH), Helsinki, Finland. Information: Harald Arnkil (+358 0) 799 827, 75631, Fax (+358 0) 7563 223.

1994 EUROPEAN CONFERENCE ON VISUAL PERCEPTION, Sep. 4-8

Institute for Perception Research, Veldhoven, Netherlands, Information: H. de Ridder, P.O. Box 513, 5600 MB Eindhoven, The Netherlands.

JOHN DALTON CONFERENCE, Sep. 9-13

An International Color Vision Meeting to commemorate the 200th anniversary of Dalton's first description of his own color vision defect, UMIST, Manchester. Information: Dr. C. Dickinson, UMIST, P.O. Box 88, Manchester

COLOR COMMUNICATION, Sep. 12-13

Jointly organized by The Colour Measurement Committee of the Society of Dyers and Colourists, The National Physical Laboratory, Spectrophotometry and Colorimetry Club, and The Department of Textiles, UMIST, Manchester, UK.

IS&T PHOTOFINISHING TECHNOLOGY, Sep. 19-21

IS&T Minilabs and Photokina, Cologne Germany. Information: IS&T (703) 642-9090, Fax (703) 642-9094

CMG - CONFERENCE, Sep. 25-27

Color Marketing Group International Color Directions Conference, Sheraton Bal Harbour, Bal Harbour, Florida. Information: Katie Register (703) 329-8500, Fax (703) 329-0155.

COLOR AND COLORIMETRY, Sep. 29-Oct. 1

Fourth International Color Symposium, Slovene Centre for Color, University of Maribor, Maribor, Slovenia. Information: (+3862) 25 461, Fax (+3862) 255 013.

OSA - ANNUAL MEETING, Oct. 2-7

Optical Society of America Annual Meeting, Dallas, Texas. Information: OSA Meetings Department (202) 416-1980.

INTERNATIONAL DISPLAY RESEARCH CONFERENCE, Oct. 10-13

Society for Information Display, Advisory Group on Electron Devices, and IEEE Electron Devices Society, Hyatt Regency Hotel, Monterey, California. Information: Thomas Credelle, General Chair, (408) 862-7271.

AATCC - CONFERENCE AND EXHIBITION, Oct. 11-14

American Association of Textile Chemists and Colorists, Convention Center, Charlotte, North Carolina. Information: AATCC (919) 549-8141.

GATF/NSTF ANNUAL CONFERENCE, Oct. 16-19

Graphic Arts Technical Foundation, Saddlebrook Resort, Tampa, Florida. Information: (412) 621-6941, Fax (412) 621-3049.

10th INTERNATIONAL CONGRESS ON ADVANCES IN NON-IMPACT PRINTING TECHNOLOGIES, Oct. 30- Nov. 4

IS&T, Sheraton Hotel, New Orleans, LA. Information: IS&T (703) 642-9090, Fax (703) 642-9094

ADVANCES IN PHOTOMETRY, Dec. 1-3

CIE Expert Symposium on Advances in Photometry, CIE Central Bureau, Vienna, Austria. Information: CIE (+43-1) 714-3187, Fax (+43-1) 713-0838

1995

ASTM COMMITTEE D-1 ON PAINT, Jan. 22-24

San Antonio, Texas. Information: Scott Orthey, (215) 299-5507.

ASTM COMMITTEE E-12 ON APPEARANCE, Jan. 23-25

San Antonio, Texas. Information: Bode Buckley, (215) 299-5599.

ISCC WILLIAMSBURG CONFERENCE, Feb. 5-7
Inter-Society Color Council Williamsburg Conference,
Williamsburg, Virginia. Information: Michael Brill (703) 734-
4027.

TAGA ANNUAL CONFERENCE, Apr. 2-5
Technical Association of the Graphic Arts Annual Technical
Conference, Orlando, Florida. Information: Karen Lawrence
(716) 475-7470.

ISCC ANNUAL MEETING, Apr. 23-25
Inter-Society Color Council, Holiday Inn Four Seasons,
Greensboro, North Carolina. Information: Ann Laidlaw (919)
274-1963.

CMG - CONFERENCE, May 14-16
Color Marketing Group International Color Directions
Conference, Fairmont Hotel, Dallas, Texas. Information: Katie
Register (703) 329-8500, Fax (703) 329-0155.

OSA - ANNUAL MEETING, Sep. 10-15
Optical Society of America Annual Meeting, Portland,
Oregon. Information: OSA Meetings Department (202) 416-
1980.

AATCC - CONFERENCE AND EXHIBITION, Oct. 8-11
American Association of Textile Chemists and Colorists,
Hyatt Regency, Atlanta, Georgia. Information: AATCC,
(919) 549-8141.

CIE 23rd QUADRENNIAL MEETING, Nov. 1-3
Division Meetings, Nov. 6-8
International Commission on Illumination (CIE), Vigyan
Bhavan Conference Complex, New Delhi, India. Information:
Jonathin Hardis, Secretary USNC/CIE, (301) 975-2373, Fax
(301) 840-8551, E-mail "hardis@onyx.nist.gov"

CMG - CONFERENCE, Nov. 5-7
Color Marketing Group International Color Directions
Conference, Phoenix, Arizona. Information: Katie Register
(703) 329-8500, Fax (703) 329-0155.

1996

ISCC ANNUAL MEETING, Apr. 21-23

TAGA ANNUAL CONFERENCE, Apr 28-May 1
Technical Association of the Graphic Arts Annual Technical
Conference, Dallas, Texas. Information: Karen Lawrence,
(716) 475-7470.

AATCC - CONFERENCE AND EXHIBITION, Oct. 8-11
American Association of Textile Chemists and Colorists,
Oprtkabd Hotel, Nashville, Tennessee. Information: AATCC,
(919) 549-8141.

1997

TAGA ANNUAL CONFERENCE, May 4-7
Technical Association of the Graphic Arts Annual Technical
Conference, Montreal or Quebec City, Canada. Information:
Karen Lawrence, (716) 475-7470.

**AATCC - CONFERENCE AND EXHIBITION, Sep. 28-
Oct. 1**
American Association of Textile Chemists and Colorists,
Marriot Marquis, Atlanta, Georgia. Information: AATCC,
(919) 549-8141.

1998

TAGA ANNUAL CONFERENCE, May 3-6
Technical Association of the Graphic Arts Annual Technical
Conference, Chicago, Illinois. Information: Karen Lawrence,
(716) 475-7470.

AATCC - CONFERENCE AND EXHIBITION, Oct. 4-7
American Association of Textile Chemists and Colorists,
Philadelphia, Pennsylvania. Information: AATCC, (919) 549-
8141.

1999

TAGA ANNUAL CONFERENCE, May 2-5
Technical Association of the Graphic Arts Annual Technical
Conference, Philadelphia, Pennsylvania. Information: Karen
Lawrence, (716) 475-7470

AATCC - CONFERENCE AND EXHIBITION, Oct. 12-15
American Association of Textile Chemists and Colorists,
Convention Center, Charlotte, North Carolina. Information:
AATCC, (919) 549-8141.

Coming Up: ISCC Annual Meeting

**April 24-26, 1994
Detroit, Michigan**

INTEREST GROUP I

**Fundamental and Applied Color Research
Paper and Discussion Session**

INTEREST GROUP II

**Industrial Application of Color
Paper and Discussion Session**

INTEREST GROUP III

Art, Design, and Psychology

POSTER PAPERS SESSION

NEWSLETTER EDITOR Michael A. Hammel
ASSOCIATE EDITOR Karen M. Braun

Send photo material (black and white if possible) to:

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Please send all other materials:

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by E-Mail transmission send information to "MCSL@ritvax.isc.rit.edu"

If necessary, fax material to (716) 425-2411.

Please note: the deadline for submission of material is the 1st of each even numbered month.

Material not received by the 1st will not be printed until the following issue.



meeting reports



photos



contributions from members

OFFICERS 1992-1994

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1992-1995

Dr. Michael H. Brill	Science Applications, Int'l Corp., 1710 Goodridge Dr., MS-1-11-1, McLean, VA 22102	(703) 734-4027	(703) 821-3576
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Dr. Joel Pokorny	939 East 57th Street, Chicago, IL 60637	(312) 702-1983	

1993-1996

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Dr. Robert T. Marcus	Pantone Inc., 590 Commerce Blvd., Carlstadt, NJ 07072	(201) 935-5500	(201) 896-0242

ISCC MEMBER-BODIES

American Association of Textile Chemists and Colorists (AATCC)	Graphic Arts Technical Foundation (GATF)
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American College of Prosthodontists (ACP)	Illuminating Engineering Society of North America (IESNA)
American Society for Testing and Materials (ASTM)	National Artists Equity Association (NAEA)
American Society of Interior Designers (ASID)	National Association of Printing Ink Manufacturers (NAPIM)
American Society for Photogrammetry and Remote Sensing (ASPRS)	Optical Society of America (OSA)
The Color Association of the United States, Inc. (CAUS)	Society for Information Display (SID)
Color Marketing Group (CMG)	Society of Plastics Engineers, Color & Appearance Division
Color Pigments Manufacturers Association (CPMA)	Society for Imaging Science and Technology (IS&T)
Detroit Colour Council (DCC)	Technical Association of the Graphic Arts (TAGA)
Federation of Societies for Coatings Technology (FSCT)	Technical Association of the Pulp and Paper Industry (TAPPI)
Gemological Institute of America (GIA)	

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Mr. Donald R. Hall, Color and Appearance Technology

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