



Inter-Society Color Council News

Issue 432

March—April 2008

President's Column

In this column, I want to get you caught up on all that has happened since the last issue of the newsletter. There's been a lot.

On March 26, the ISCC Board met by conference call. On the call we dealt with several organizational and governance matters. First of all, we final-

ized and approved the 2008 budget: a little late and a little tight, but balanced. Nevertheless I expect we will have to be vigilant about expenses this year.

We reviewed and approved the candidates for Board positions whose terms start this year—the President-Elect and three new Directors: their bios are in this issue, along with the ballot. Since there are as many candidates as there are positions, the ballot may seem like a needless formality, but it does provide members the opportunity to either propose other candidates or support the listed candidates.

We also agreed to approach Danny Rich, a past President and font of lore about the ISCC, to fill the remainder of Sandy Austin's term on the Board. I am happy to say he has agreed to serve; it will be good to be working with him again. (My conversation with him about this occurred at the FIRST Robotics Regional in Philadelphia, where our sons' high school teams both happened to be competing. My son's team uses red camouflage as a theme—a possible topic for a future Hue Angles blog.)

At the Board meeting we also shuffled the Interest Group Chairs some. This is worth noting since the Chairs will be the focus of the sessions at the Annual Meeting. Jim Roberts was IG1 Chair and is now IG3 Chair; Dave Wyble has moved up to take his place as IG1 Chair. Jaime Gomez remains IG2 Chair.

Finally, we reviewed and approved eight applications for new individual members of the ISCC.

The same week as the Board meeting, Romesh Kumar, our Arrangements Chair, finalized contracts with the hotel for the Annual Meeting in Baltimore. We will be meeting at the Tremont Suite Hotels, a few blocks from the Inner Harbor. Details on the hotel reservations and the call for papers for the meeting are later in this issue, so let me tell you here about Jack Ladson's site inspection.

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According to Jack, the hotel is a converted apartment building and each room has a mini kitchen. The meeting rooms are in an attached building, which was a Masonic Lodge, built in 1857. Jack described the meeting rooms as extraordinary. It appears the choice of hotel and location have become the first steps in staging what we expect will be a successful meeting in Baltimore in September.

One final word about this year's Annual Meeting. We are planning to use the "RGB's of Color" as a theme at the meeting. Originally conceived by Jim Roberts, it covers the emotional, sustainability and reproduction aspects of color—the things that make you see red or green or blue. Already encompassing color in the arts, sciences and industry, it seems fitting that the ISCC should come up with another tripartite approach to color.

Besides the Annual Meeting in Baltimore and the Special Topics Meeting on Safety Colors following it, we will have the "Black and White" Special Topics Meeting in association with the IS&T, following the Color Imaging Conference in November in Portland.

I have been in touch with Bob Hunt about the meeting, which he has expressed an interest in attending. The program is still a few months away, but Bob will be in town the day before the "Black and White" meeting for a special symposium to honor him and recognize his enormous contributions to the field of color, contributions for which he received the ISCC Godlove Award last year.

Let me close with a reminder to take a look at our redesigned website now that Dave Wyble has completed the conversion. Send him any feedback you have as well as suggestions for content or updates.

Robert Buckley,
ISCC President

The Museum of Modern Art Exhibition on Color

MOMA is presenting a special exhibition on color, "Color Chart: Reinventing Color, 1950 to Today," until May 12, 2008. The exhibition also includes "Color Lab" an interactive space for families. See www.moma.org/exhibitions/ for more information.

HUE ANGLES

(Send contributions to Michael H. Brill, mbrill@datacolor.com)

Color will return to the column next month—I promise.

It's Not Easy Being Seen

“Plagiosphere” is a term coined by Edward Tenner [1] to denote the fragile, finite volume of our creative phrases that now can be checked for plagiarism by Internet search. Tenner said poignantly, “Copernicus may have deprived us of our centrality in the cosmos, and Darwin of our uniqueness in the biosphere, but at least they left us the illusion of the originality of our words. Soon that, too, will be gone.”

On the anniversary of Margaret Walch’s article highlighting green in the fashion industry and harkening back to Kermit the Frog’s “It ain’t easy bein’ green,” I address this column to the plagiosphere, the bane of high-school term-paper writers and the planet where Kermit’s descendents and catchy titles seem to multiply without bound.

Consider this column’s title (a takeoff on Kermit’s complaint), which I found as the heading of an article in the February 2008 issue of *Discover*. The referent was a mutant frog (genetic-engineered by scientists in Hiroshima, Japan) with a transparent skin. The article explains that transparent frogs are useful in the lab because you can see their responses to stimuli in real time. There are also transparent frogs in the wild—in tropical rain forests—which don’t survive in more sun-exposed areas because of the vulnerability of internal organs to direct sunlight. Hence “It’s not easy being seen.” [By the way, the eyes of a transparent frog can’t really be transparent or there would be no retinal image.]

Another of Kermit’s descendents appeared recently under the same title, this one a new frog species that “leaped into view in Oklahoma” (Tulsa World, Jan. 12, 2008, www.tulsaworld.com/news/article.aspx?articleID=20080112_1_A2_hNewf08411). This frog seemed really new, not just invisible. It is most remarkable for its mating call, with a sound like a finger run along a metal comb, increasing slowly in pitch and adding to the other Cajun frogs’ calls to

make a deafening noise. It may not be so easy being seen, but easier to be heard.

Encouraged by these examples, I wondered how many Google hits would arise in a search of “It’s not easy being seen.” I got 25, including one on prominent economic pundits who bemoan the tendency of their gloomy predictions to become truths. And many on “coming out of the closet.”

One can scarcely coin a phrase anymore. Whole term papers may be matters of coincidence in the stifling plagiosphere. I am worried about creative works becoming matters of coincidence as we near the monkeys-on-typewriters limit. Whenever I think I’ve turned a clever phrase now, I look it up in Google before I take too much pride in it—but I don’t necessarily avoid using it. The context is worth something, and I believe we can become too prudish in our demands for originality. That especially applies to high-school curricula, whose well-worn paths are deep ruts in the plagiosphere that—I should think—would tend to entrain as well as to train students.

So as not to get trapped in the plagiosphere myself, I offer here a premise for an article under this column’s title that may be truly original. The Iranian New Year, celebrated at the Spring Equinox, is highlighted by the custom of gathering seven things whose names begin with the Iranian letter “Seen.” Success at gathering such things is a token of good luck in the coming year. [en.wikipedia.org/wiki/Norouz]. Given that premise, discuss among yourselves: “It’s not easy being Seen.”

[1] E. Tenner, The rise of the plagiosphere, *Technology Review*, June 2005, www.technologyreview.com/Infotech/14519/?a=f.

Michael H. Brill
Datacolor

ISCC 2008 Ballot

Following are biographies of the candidates for the Board of Directors and President of the ISCC. All members of the ISCC have an opportunity to vote for three directors and the office of president. Members have until May 20, 2008 to return their ballot to the ISCC Office, by email (isscoffice@cs.com), fax or mail. A ballot is enclosed with this newsletter. The fax numbers and mail address are below in the footer.

Office of Director (2008-2011)

Henri Debar

Henri Debar is the founder and President of IsoColor Inc. which offers a variety of global color management services, particularly for measuring, formulating and rendering innovative special effect materials. IsoColor Inc. has been an ISCC Sustaining Member since 2001.

Henri is originally from Reims, the capital of Champagne-Ardenne in northeast France. He attended the Jesuits school of Reims in the program for top business school examination and obtained his Bachelor of Science in International Business and Information Technology at Teesside University in the UK. He started his career in the telecommunications field with Motorola and Unisys. He then came to the US and worked first for Southwestern, a Nashville institution, where he gained a passion for technology and networking. He satisfied his desires to play an integral role in a high tech start-up and to be involved at an international level, when he was recruited by SPC Software to be their Export Director. His responsibilities included managing color technology projects for global accounts and building synergies between universities and industrialists that led SPC and IsoColor to be a key player in the color measurement and color management software industry. In June 2003, Henri became a US resident and an officer of IsoColor. In March 2007, he became an owner and was appointed President of the company. Henri has been active in the ISCC since 2002, as a presenter and attendee at meetings, and spearheading IsoColor's move to become an ISCC Sustaining Member. Henri looks forward to serve and grow with the scientific color community as a member of the Board of the ISCC.

Barbara Martinson

Barbara Martinson is an Associate Professor in the Department of Design, Housing, and Apparel at the University of Minnesota. She is currently the Buckman Professor of Design Education and Director of Graduate Studies. Martinson is both a researcher and designer. Research areas include color and perception, design education, multicultural design, and design process. Recently her research has been published in *Visible Language*, *Journal of Visual Literacy*, and *FATE in Review*. Both her graphic design and fiber work has been exhibited and published nationally. She teaches courses in Design, Planning, and Analysis; Design History, Color and Design; and Human Factors for Graphic Designers. Martinson has also curated a number of exhibitions. *Seeing Color* used objects from the Goldstein Museum of Design to tell a story about color perception and theory. Other exhibitions include *Bead Dreams—Future Visions*, *The Ages of Life and Learning*, and *Art and Action*.

David R. Wyble

David Wyble is an Associate Scientist in the Munsell Color Science Laboratory, at Rochester Institute of Technology in Rochester, New York. He has been in this position since 1997. He received his Ph.D. in Color Science from Chiba University in 2007. He received an MS degree in Color Science from RIT in 1998, and a BS in Computer Science from SUNY Brockport in 1992. At RIT he is responsible for teaching the graduate course *Color Measurement Laboratory I*; maintaining the lab's extensive color measurement instrumentation; and supporting and carrying out independent research projects in the fields of color measurement, instrumentation, and device characterization. He has several published papers, book chapters, and conference proceedings on these topics. Before joining RIT, he became interested in color science about 20 years ago while working on color printers at Xerox Corporation.

He has been a member of ISCC, CORM, and IS&T for many years, also serving in various committee and conference positions. Most recently as ISCC Webmaster and vice-chair Interest Group 1, *Basic and Applied Color Research*.

*continued from page 4***Office of President (2009-2011)****Frank O'Donnell**

Frank O'Donnell is a Division Scientist with The Sherwin-Williams Company. He has worked for The Sherwin-Williams Company for the past twenty years. Ten years in their Automotive Finishes Division and ten in their Paint and Coatings Division. In both divisions his work has concentrated on color test methods and computer color matching. Prior to working at Sherwin-Williams he worked at Diconix Inc. where he developed ink-jet inks and worked on digital imaging.

Frank graduated from Manchester University U.K. with a Bachelor's degree in Chemistry in 1973. He obtained his Masters degree in education in 1974 and taught high school for five years. In 1979 he emigrated to the United States. He studied Color Science at Rensselaer Polytechnic Institute where his research advisor was Dr. Fred Billmeyer Jr. He obtained a master's degree in 1983 and his doctorate in 1984.

He has been a member of ISCC for more than twenty years and was Vice Chair of Interest Group I from 1998 to 1999 and Chair from 1999 to 2000. He also served on the ISCC board of directors from 2004 to 2007.

Frank has published and presented papers on color, color appearance and print quality.

ISCC Welcomes New Members**Ms. Nancy Elizabeth Allen**

Milliken Chemical
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Mr. Paul Beymore

PPG
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Mr. John Conant

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Ms. Jay Young Gerard

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Ms. Trish Odenthal

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Dr. Mang Ou-Yang

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Department of Optics and Photonics
oym@cc.ncu.edu.tw

ISCC/IS&T 2008 Special Topics Meeting, "Black and White" Saturday, November 15th

Choosing "Black and White" as the special topic for the meeting recognizes them as two of the most important properties of any colored image or object. Recently there has been renewed interest in these concepts, witness the IDEAlliance (International Digital Enterprise Alliance) Print Properties subcommittee on paper characterization, the SIS Workshop on Paper on optical properties of paper, CIE Publication 163 on the Effect of Fluorescence in the Characterization of Imaging Media, and papers at the Color Imaging Conference.

Key topics at the meeting will include the measurement of white papers, three-color overprints versus true black, the impact of novel light sources on the rendition of colored images, very black materials, and strategies for assessing black and white objects.

The meeting is scheduled for Saturday, November 15, following the Color Imaging Conference 16 in Portland, Oregon. Please submit abstracts to Ann Laidlaw at ALaidlaw@XRite.com.

Member News

Send Contributions to Cynthia Sturke (isccoffice@cs.com)

Nick Hale Awarded French Legion of Honor

While my wife, Norma Jean, and Lynn Connelly, and I, were visiting Nick and Denise in Naples, FL, we learned that Nick was recently awarded the French Legion of Honor. This is a significant honor bestowed upon a few for their service, and I wanted everyone to know.

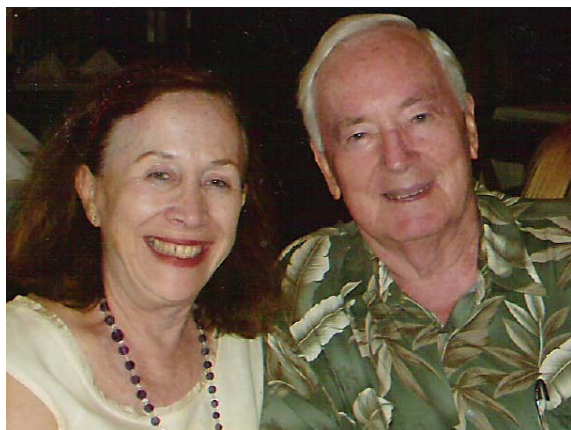
On June 6, 2007, the 63rd anniversary of D-Day in Normandy, the Republic of France awarded the French Legion of Honor (Legion d'Honneur) to 32 veterans who served in World War II in France. One of these 32 was ISCC-member Nick Hale. The ceremony was at the Hilton Hotel in Naples, FL and was attended by 350 friends and relatives of the honorees, as well as local dignitaries.

The awards were made by the French Consul-General in Miami and the general commanding the French delegation to the US Central Command at McDill Air Force Base in Tampa. The Legion of Honor is the highest award available from France and has four levels. The level awarded at this time was the Chevalier (Knight) level.

Nick served in the Army's First Infantry Division in France, Belgium, Luxemburg, Germany, and Czechoslovakia; and landed on D-Day in Normandy.

We are grateful to all those who served protecting our country and preserving our freedom, especially our Nick. Thank you Nick – it is our pleasure to know you and congratulations.

Jack A. Ladson



Denise and Nick Hale

Danny Rich to Fill Austin ISCC BOD Term

Danny Rich of Sun Chemical was appointed by ISCC president, Robert Buckley, and the appointment was confirmed by the ISCC Board of Directors to fill the remainder of Sandy Austin's term on the Board of Directors. The term continues through 2009. Sandy, who was elected a Director in 2006, passed away in December of 2007.

Danny has bachelors and masters degrees in optical physics and a doctorate in color science from the Rensselaer Color Measurement Laboratory under the direction of the late Fred W. Billmeyer, Jr. His publication list includes papers on many aspects of color science and technology and he is active in many color-measurement groups, including ASTM E12 on Color & Appearance, ISO TC130 on Graphic Arts and in CIE Division 2 on Measurement of Optical Radiations.

Danny is a past President of ISCC, a past board member of ISCC and frequently chairs ISCC meetings or symposia. For example, he is a co-chair of the upcoming ISCC/IS&T 2008 Special Topics Meeting on Black and White that will take place following the IS&T November meeting in Portland, Oregon.

Ralph Stanziola's Daughter Member of Team in Training

Andrea (Stanziola) Sunderland, through a colleague of her father, learned about the Leukemia and Lymphoma Society's Team in Training and felt the need to give it a try. She is entered in a 100 mile bike ride event that she says is well out of her comfort zone but she is committed to giving it her best shot. To learn more about this organization and to help her reach her fund raising goal, see www.active.com/donate/tntepa/tntepaASunder.

Frontiers in Digital Imaging

The latest developments in future directions and challenges for digital imaging technology will be discussed at the The Frontiers in Digital Imaging conference to be held May 31, 2008 in Stadthotel, Münster, Germany. See www.imaging.org/conferences/frontiers-munster/ for program and registration information.

Inter-Society Color Council
2008 Annual Meeting and Special Topic Symposium
September 14 – 16, 2008
Baltimore, Maryland

The Inter-Society Color Council (ISCC) will hold its 2008 Annual Meeting in Baltimore, Maryland from Sunday, September 14 through Tuesday, September 16, 2008. Baltimore is a historic city known for its Inner Harbor, National Aquarium, and the resting place of Edgar Allen Poe.

The RGBs of Color -- Annual Meeting Theme

The theme of the one and a half day 2008 Annual Meeting is, "The RGBs of Color." The program will consist of the following three components:

- Are You Seeing Red? The Tying of Emotion to Color
- How Green is My Color? The Influences of Sustainability on Color
- Is That the Blue You Wanted? Influences of Light and Media on the Color we see

The three components directly tie to the Interest Groups, Basic and Applied Color Research, Industrial Applications of Color, and Art, Design, and Psychology. The presentations will start Sunday around noon and conclude on Monday late afternoon.

Safety Color Expert Symposium

On Tuesday September 16, ISCC will hold a "Safety Color Expert Symposium." This one day event will cover all facets of Safety Colors including the perception, measurement, and standardization of regular, fluorescent and photoluminescent materials, and safety light signaling. The General Chairs for the Annual Meeting and Symposium are Carl Andersen with the Federal Highway Administration and Cameron Miller with the National Institute of Standard and Technology.

Submit Abstracts

Authors are invited to submit abstracts to either the Interest Group Chairs or the General Chairs for the Annual Meeting or the one day Symposium. Submissions are due by May 31, 2008. Paper sub-

mission procedures along with author instructions, contact information for the Interest Group Chairs, registration forms, and instructions for exhibitors are available on the 2008 Annual Meeting page of the ISCC website at www.iscc.org.

Poster Session

A poster session will be held covering general Interest Group topics and state-of-the-art safety color research. The poster session provides an excellent opportunity to meet and discuss innovative safety color work with other colleagues attending. During the poster session exhibitor space will be provided for product and instrument manufacturers on a first come, first served basis. Manufacturers will have the opportunity to have table top exhibits during the Symposium. Exhibitor instructions are available on the ISCC website at www.iscc.org. For details and reservations contact Cameron Miller, c.miller@nist.gov or 301-975-4713.

Travel Grants

The ISCC Education Committee is providing a limited number of Student Travel Grants to assist students traveling to the ISCC 2008 Annual Meeting. Students should contact the ISCC office for information at isccoffice@cs.com or 703-318-0263.

Accommodations

The accommodations are through Baltimore's Tremont Plaza Hotel, 222 St. Paul Place, Baltimore, MD 21202. (www.tremontsuitehotels.com). A block of rooms have been reserved at \$125 per night plus taxes for a single room. Reservations for the meeting should be made by calling 1-800-873-6668 and requesting the ISCC group rate. Please monitor the ISCC web site for the latest information with regard to the 2008 annual meeting. The site will be updated as soon as new information becomes available.

If you have questions, please contact Cynthia Sturke at the ISCC Office, 11491 Sunset Hills Road, Reston, VA 20190, 703-318-0263; fax 703-318-0514; email: isccoffice@cs.com.

COLOR RESEARCH AND APPLICATION

In This Issue, April 2008

Sadly we open this issue with another obituary. Tarow Indow, who served on the editorial board of this journal since its inception, died last fall. Just a week before his death I had sent him the acceptance for a manuscript, which he had been working on. While I am afraid that he never read the letter since he was in the hospital, his friend and co-author has agreed to see the article through publication. It will appear in a future issue this year. For now, please see the tribute in this issue that was written by A. Kimball Romney.

Our first two articles come from the National Institute of Standards and Technology (NIST) in the United States. In "NIST 0:45 Reflectometer," Maria Nadal, Edward Early, William Weber and Robert Bousquet describe the design of a new instrument. The primary purpose of the 0:45 reflectometer is to enhance the capability of NIST to provide standards to the color and appearance user community. This automated instrument can measure up to 20 specimens at a time. Edward Early and Maria Nadal present the "Uncertainty Analysis for the NIST 0:45 Reflectometer" in the second article.

Colorimetry as we know it is based on the CIE system proposed in 1931 and has worked well for many applications since its inception. However, over the years there have been numerous articles, most notably those by William Thornton, pointing out that the system breaks down in certain cases. Our next article reports that CIE colorimetry breaks down when lights produced by narrow band RGB-LEDs are matched with broad-band lights. Péter Csuti and János Schanda performed a color-matching experiment where matches in a various of parts of the chromaticity diagram were made then examined to determine the magnitude of the discrepancy between what was observed and calculated. In "Colour matching experiments with RGB-LEDs" they report that differences between visual and instrumental matches increase as one moves in the chromaticity diagram from yellowish white lights towards greenish and bluish lights. They also report that if the CIE color matching functions are replaced by color matching functions based on the newly defined cone

fundamentals from the report CIE TC 1-36, a much better prediction of the matches is made. When a transformation of these fundamentals to a space similar to the CIE XYZ space is applied, the difference between the visual match and its instrumental prediction decreases by a factor of two or even more. Therefore they recommend the use of a cone fundamental-based colorimetric system for LED colorimetry.

Our next article comes to us from Russia. Professor Douglas Bowden, M. D., of the Department of Psychiatry and Behavioral Science at the University of Washington Medical School in Seattle, Washington provided the translation, "The Representation of Colors in Spherical Space." In the article the authors Yurii Leonov and Evgenii Sokolov describe a formal mathematical model of color space, in which color differences are equal to the chord distance between points on the surface in spherical space. Unlike other models, this one model unites brightness, saturation and hue as expressed in the empirical Munsell and Natural Color systems; complementary colors; large color differences; and contrast effects.

Last year in this journal Yoshinobu Nayatani and Hideki Sakai made proposed a new concept for color-appearance modeling, where all the attributes are mutually independent. They called the group of models "In-CAM" for Integrated Color Appearance models, because the fields of applications in both colorimetric engineering and artistic color design can be integrated. Now in this issue the same authors are presenting "An Integrated Color-Appearance Model using CIELUV and Its Applications" as a simple example of how such In-CAM models work. They expect other better In-CAM models to be developed in the future.

In color reproduction, scanners and digital cameras are becoming widely used in areas where accurate reproduction of color is important. In order to obtain a faithful color reproduction, the imaging device needs to be characterized. Colorimetric characterization transforms the device responses (usually red, green, and blue) into colorimetric tristimulus values, while spectral characterization converts them into spectral reflectance. Compared with spectral characterization, the main disadvantage of colorimetric characterization is that it can only obtain tristimulus values under a certain illuminant. As the responses

of the imaging device are generally nonlinear to scene radiance, the optoelectronic conversion functions (OECFs) should be obtained or recovered before color characterization. Traditionally the OECFs are obtained from standard gray samples. However, gray samples are sometimes unavailable when conducting color characterization. Therefore in our next article, "Estimation of Optoelectronic Conversion Functions (OECFs) of Imaging Devices," Hui-Liang Shen, John H. Xin, Dong-Xiao Yang Dong-Wu Lou propose an efficient method for recovering OECFs by using non-gray samples, based on the finite-dimensional modeling of spectral reflectance and the 2nd order polynomial fitting of OECFs. Their proposed method should be particularly useful in colorimetric and spectral characterization of imaging devices by using custom-made color samples in textile or other industries, when standard gray samples are not available and not easily made.

Generally as people age their color perception changes, in particular as cataracts develop. The changes are in terms of three factors: color, brightness, and haze. The color change, due to the changes of the transmittance of the crystalline lens in particular in the blue region, and brightness changes, due to the an overall decrease in transmittance, have been studied widely. But generally the changes resulting from haze have not been explored in such depth. Mitsuo Ikeda and Tomoko Obama report on a study of the effects of haze on the color perception in "Desaturation of Color by Environmental Light in Cataract Eyes." As the title suggests, they confirmed that environmental light which is generally white, gets scattered through the lens of cataract eyes, (or when wearing goggles to simulate cataracts) producing a white haze that generally makes colors appear less saturated as compared with the perception of normal younger observers. This was confirmed by both young observers wearing special goggles, and by comparisons of vision with an elderly observer before and after cataract surgery. Thus the effects of environmental light should not be overlooked when studying the vision of those people with cataracts.

For our final article in this issue we move to the field of textiles. Obviously the first textile coloration was using natural dyes, but then as synthetic dyes were developed stronger brighter colors became available. Now there is a renewed interest in natural dyes, which are considered fashionable for

the environmentally conscious user. In the "Color Analysis of Natural Colorant-Dyed Fabrics" Ju-Yeon Yi and Eunjou Cho report on a study to investigate color characteristics for a given large set of natural colorants-dyed fabrics based on the Munsell color notations. They analyzed the tones of dyed fabric in terms of Munsell notation of hue, value, and chroma and identified the effects of mordants on the colorimetric properties of the fabrics for 350 dyed fabrics. In this way they hope to provide a systematic description of natural-dye fabric colors for general use and to use as a guide for the development of future colors.

We close this issue with notices about several CIE publications: CIE S009:2006 Photobiological Safety of Lamps and Lamp Systems; CIE S014-4:2007 CIE 1976 L*, a*, b* Colour Spaces; CIE S019:2007 Photocarcinogenesis Action Spectra; and CIE 180:2007 or Developing Countries ISBN 978 3 901 906 61 9. Also, we have a report on the AIC Midterm Meeting in Hangzhou, China in July 2007, and an announcement about the forth coming CIE Expert Symposium on Advances in Photometry and Colorimetry. Finally there is a significant Erratum including all the figures for the article "New Method for Measuring an Optical Property of a Printed Sample on FWA-Treated Paper" by Kenji Imura.

Ellen Carter
Editor, *Color Research and Application*

Call for Papers

Balkancolor.2

Color in all directions

The Color Group Bulgaria is requesting papers for the Second International Color Conference, "Color in all Directions" to be held September 24-27, 2008, at the International Home of Scientists "Frédéric Joliot-Curie" Resort "St. St. Constantine and Elena," Varna, Bulgaria. The conference is open to most topics in color. There will be a plenary session and poster papers. In addition there will also be exhibitions, a competition for students, and cultural programs.

The deadline for applications and abstracts submission is May 31, 2008. The deadline for papers submission is June 30, 2008. Papers submitted after the deadline will be considered as posters.

For more information, email colorgroup@abv.bg.

CALENDAR

Please send any information on Member-Body and other organization meetings involving color and appearance functions to:

Ms. Cynthia Sturke
ISCC Office
11491 Sunset Hills Road, Reston, VA 20190
703-318-0263 tel 703-318-0514 fax
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2008

- Apr 17** **Designing Sustainability as the New Cultural Paradigm**, The Great Hall at the Fashion Institute of Technology, New York City, New York, Georgia Kalivas, 212-217-7143, georgia_kalivas@fitnyc.edu, www3.fitnyc.edu/sustainabilityatfit/fit_2008_conference.htm
- Apr 27-May 2** **2008 ASPRS Annual Conference**, The Imaging and Geospatial Information Society, Oregon Convention Center, Doubletree Hotel Lloyd Center, Portland, Oregon, 301-493-0290, www.asprs.org/
- May 4-6** **SPE ANTEC 2008**, Society of Plastic Engineers, Color and Appearance Division, Milwaukee, WI, www.4spe.org/conf/antec08/
- May 12-15** **CPMA's 2008 International Color Pigments Conference**, Lincolnshire Marriott Resort, Lincolnshire, IL, www.pigments.org/
- May 18-23** **SID 2008**, Los Angeles, CA, www.sid.org/conf/sid2008/sid2008.html
- May 31** **Frontiers in Digital Imaging: MÜNSTER**, Society for Imaging Science and Technology European Chapter and the IS&T in conjunction with DRUPA, Stadthotel, Münster, Germany, www.imaging.org/conferences/frontiers-munster/
- Jun 9-Jun 13** **CGIV 2008: IS&T's Fourth European Conference on Color in Graphics, Imaging and Vision**, Terassa, Spain, 703-642-9090, www.imaging.org/conferences/
- Jun 10-13** **CGIV 2008: IS&T's Fourth European Conference on Color in Graphics, Imaging and Vision** Terassa, Spain, 703-642-9090, www.imaging.org/conferences
- Jun 14-15** **CIE Division 1**, Scandinavian Colour Institute AB, Igeldammgaten 30, Kungsholmen, Stockholm, Sweden, www.bio.im.hiroshima-cu.ac.jp/~cie1/
- Jun 15-18** **AIC Interim Meeting, Colour – Effects and Affect**, in Stockholm, Sweden, Swedish Colour Centre Foundation, Contact: Berit Bergström, berit.bergstrom@ncscolor.com, www.aic2008.org
- Jun 17-19** **ASTM E12 Color and Appearance Meeting**, ASTM International Headquarters in West Conshohocken, PA, www.astm.org
- Jun 24-27** **Archiving 2008**, Society for Imaging Science and Technology, Bern, Switzerland, 703-642-9090, www.imaging.org/conferences/
- Jul 7-11** **Division 2, CIE Symposium (Advances in Photometry and Colorimetry) and Division 2 Meetings**, INRIM, Torino, Italy, cie2.nist.gov/
- Sep 14-15** **Inter-Society Color Council (ISCC) 2008 Annual Meeting**, Baltimore, Maryland, 703-318-0263, www.iscc.org
- Sep 16** **ISCC Special Topics Symposium "Perception and Measurement of Safety Colors,"** Baltimore, Maryland, 703-318-0263, www.iscc.org

2008, Cont

- Oct 15-17** **International Coatings Expo, ICE 2008**, Federation of Societies for Coatings Technology, Lakeside Center, McCormick Place, Chicago, IL, 610-940-0777, www.coatingstech.org/Programs/index.cfm?event=ICEAttendeeInfo
- Nov 10-14** **Sixteenth Color Imaging Conference**, Society for Imaging Science and Technology, and Society for Information Display, The Benson Hotel, Portland, Oregon, www.imaging.org
- Nov 15** **ISCC/IS&T Special Topics Meeting**, Inter-Society Color Council and Society for Imaging Science and Technology, The Benson Hotel, Portland, Oregon, 703-318-0263, isccoffice@cs.com

2009

- Sept 27-Oct 2** **AIC 11th Congress**, Sydney, Australia, Organizer: Colour Society of Australia, Contact: Nick Harkness, www.aic2009.org
- Jun 23-25** **ASTM E12, Color and Appearance**, American Society for Testing and Materials, National Institute of Standards and Technology, Gaithersburg, MD, www.astm.org

Publications Available from ISCC Office

NEW PUBLICATION AVAILABLE:
ISCC 76th Annual Meeting Program and Abstracts, ISBN 978-1-4243-4273-0 \$25.00*

Color and Light by Fred W. Billmeyer Jr. & Harry K. Hammond, III. Authorized reprint from: ASTM Manual 17, Copyright 1996, ASTM International, 100 Bar Harbor Dr., W. Conshohocken, PA 19428.

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Issue # 432

Mar/Apr 2008

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All submissions must be in English. Please submit materials by the 15th of each even numbered month. Materials submitted later may be printed in the following issue.

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INTER-SOCIETY COLOR COUNCIL

2008 ISCC BALLOT

**Election of Board of Directors
2008-2010 Term**

Please vote for three candidates.

Henri Debar

Barbara Martinson

David R. Wyble

**Election of ISCC President
2009-2011 Term**

Frank O'Donnell

**Return of Ballot: Please return the completed ballot to the
Inter-Society Color Council Office by May 20, 2008.**

**Please respond by fax: 703-318-0514, email:
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Please remember to sign your ballot. Thank you.