



Inter-Society Color Council News

Special Issue

Commemorative AIC Color 01 Highlights

Combined Issues

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President's Report

What a great time we had at AIC 2001! You'll see a lot about the meeting in this issue of the *ISCC News*, and I hope the summaries and photos bring back good memories. Paula Alessi and the Organizing Committee did an excellent job of pulling it all together and there were kudos from several people who said that holding the activities in the Rochester Convention Center provided a perfect interactive environment. Many discussions began what may be the next generation of color research.

Some of our usual ISCC activities proceeded on a fast track to accommodate the AIC meeting, so we got a lot done in a little time. Our Board of Directors meeting on June 23 took a record *half-day*, after which the Board helped prepare registration packages for the AIC meeting. On the morning of June 24, we held project-committee meetings: PC 52 Comparative List of Color Terms II; PC53 Annotated Webliography of Color; and PC54 Colors of Maximum Contrast. This was followed by our Business and Awards lunch, at which several people took on new positions and responsibilities. I would like to welcome to the Board of Directors Eileen Korenic, James G. King, and Margaret A. (Meg) Miele. Meg also became the new Chair of Interest Group 3 (Art, Design, and Psychology). Also, I welcome John McCann as the new Secretary of the ISCC; John gave an outstanding report at the luncheon after only 24 hours of service. Finally, Dick Fisch be-

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came our new Interest Group and Project Committee Coordinator; Dick already had kept us on schedule during the morning's Project Committee meetings.

At the luncheon, several people received awards, and the speeches were all short and inspiring. First, **Hugh Davidson** was inducted as an honorary member, and gave (extemporaneously) a humorous reminiscence. Then, **Ellen Carter** introduced **Paula Alessi** as the recipient of the Nickerson Service Award, and Paula gave very emotional thanks—especially to her family for their support. Finally, Max Saltzman received the Godlove Award posthumously. Max's wife, Barbara attended the award presentation. Following introductory remarks by Roy Berns, we heard an acceptance speech by **Mark Saltzman** (Max's son). Anecdotes ran thick and fast (see Roy's obituary for Max in the March/April issue of the ISCC News).

Between the last Annual Meeting and the latest Board meeting, three more Sustaining Members joined the ISCC: **Pantone, Flex Products, and Gretag Macbeth**. At AIC, a fourth company, **SPC Software** (France), joined as our first internationally based Sustaining Member.

One should never rest on one's laurels. Though AIC 2001 was a fantastic experience, we have to look to the future. Our next event (to be chaired by **Jim Keiser, Paul Tannenbaum**, and myself) is the Detroit Annual Meeting on April 21-22, 2002, immediately followed by a joint Symposium on Appearance with the Detroit Colour Council. See the Call for Papers in this issue. The Interest Groups will return in their traditional roles, and we may be reflecting on automobile paint (or it will be reflecting on us). I would be delighted to get suggestions for this meeting.

And, as always, I hope you *become involved, make a difference, and have the time of your lives*.

Jack A. Ladson
ISCC President

Request For Macbeth Award Nominations

The Inter-Society Color Council's Macbeth Award was established to honor the memory of Norman Macbeth and is presented biennially in recognition for one or more recent, outstanding contributions to the field of color. Those contributions shall have advanced the field of color, interpreted broadly as in the objectives of the ISCC. A candidate's merit shall be judged by his or her contributions to any of the fields of interest related to color whether or not it is represented by a Member-Body of the ISCC. While a nominee for the Macbeth Award need not have been active in the affairs of the ISCC, he or she must be a member or former member of the ISCC. If you would like to nominate a person for this award, please send a letter or e-mail detailing the candidates contributions to Dr. Danny C. Rich, Sun Chemical Ink (GPI), Daniel J. Carlick Technical Center, Color Research Laboratory, 631 Central Avenue, Carlstadt, NJ 07072, USA, 201-933-4500, ext. 1144, 201-933-5658, (fax), RichD@sunchem.com. Please include the nominee's name, address, professional affiliation (company or institution, if any), title and any other information that will help judge the candidate's merit. **Nominations must be received by December 31, 2001.**

Request for Nominations Nickerson Service Award

The Inter-Society Color Council's Nickerson Service Award was established in 1980 to recognize outstanding long-term contributions toward the advancement of the Council and its aims and purposes.

The contributions may be in the form of organizational, clerical, technical, or other services that benefit the Council and its members. Candidates for the award must be members of the Council and must have been active in the affairs of the Council.

If you would like to nominate a person for this award please contact:

Robert Marcus
Datacolor International
5 Princess Road, Lawrenceville, NJ 08648
609-924-2189 ext 7323
609-895-7438 (fax)
rmarcus@datacolor.com.

All Nickerson Service award nominations must be received before December 15, 2001.

ISCC Announces Joint Meeting with Detroit Colour Council Pontiac, Michigan April 21-23, 2002

Mark Your Calendars! The ISCC, once again, will be holding a joint meeting with the **Detroit Colour Council** in Pontiac, Michigan on April 21-23, 2002. The main theme will be on Appearance. The DCC portion of the symposium, **DesignTech II**, will cover exciting Design topics around Appearance & Color in the morning session, and technical issues in the afternoon, such as the update of J1545 and a computer graphic system for rendering gonio-apparent surfaces.

One of our featured speakers for the Art, Design & Psychology session will be noted artist Peter Maier. His life-size paintings defy realism. He'll review some of the techniques utilized to produce these great works of fine art.

For information contact:

James Keiser (248) 583-8345 or
Jack Ladson (215)-369-5005 or
Paul Tannenbaum (302) 695-405_ or

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SPC SOFTWARE Joins the ISCC as a New Sustaining Member

SPC SOFTWARE is pleased to become the newest Sustaining Member of the ISCC and the only one headquartered outside the United States.

The mission of SPC SOFTWARE is color management and communication. The language of colors is not an exact science, but colors act significantly on our emotions and sensations. We all speak about color with words specific to our education, culture, religion... But we don't all see a color the same way, and its message can evolve in time. Orange is a good example: in the 1970's and 80's orange connoted "inexpensive" but it now has come to mean "gain of money" (bank-loan ads use it), and has become a color "tendency" (e.g., the orange telecom that wishes to be THE telecom of tomorrow).

The language of colors is significant in our consumer society. Consumers, with more product choices in supermarkets, associate trademarks and products with color. The marketing people understand it well! Color language is not always a science but is a necessity, a technique of sale, an indicator of choice.

Despite divergences of language, colorimetry provides the reference in the industrial world: all colorists use the same terms to quantify their standards and to control their raw materials. Now, owing to competition, colorists ask for tighter tolerances of acceptance, for a wider range of pigments/colorants, for respect of all process constraints, and for adherence to customer-validated standards. Colorimetry is an essential tool of industry.

This is why SPC SOFTWARE exists: we develop and sell standard and/or specific colorimetric software. We promote a global solution for managing color in your company and in your subsidiaries. We make a software suite called IsoMatch-IsoControl-IsoColor that runs on Windows. Its Access™ format database can be shared on a network in real time. Our software tools are open systems: you can export data to other software (e.g., Excel™, text files, ASCII files, internal software...) interface with more than 49 spectrophotometers, and import data from different competitive software.

SPC SOFTWARE is located near Paris, and has 18 people including 4 technical assistants, 5 developers and 4 sales representatives. We have a new subsidiary in New Jersey (Carlstadt): IsoColor Inc.

We at SPC SOFTWARE look forward to exploring new avenues of color communication with the ISCC.

To contact us: spc@spc-software.com

Jacques GOMBERT CEO & Sales Manager

(jgombert@spc-software.com) &

Christian VOIGNIER Technical Manager (cvoignierSPC@aol.com).

Welcome!

Nickerson Citation

It gives me special pleasure to introduce this year's Nickerson award honoree ... Paula Alessi. We are part of the same color family, Fred Billmeyer's students. Years ago, before I had met Paula, I felt that I knew her. Dr. Billmeyer wrote a newsletter for the Friends and Alumni of the Rensselaer Color Laboratory. In this way we heard, among other things, about his new students and their exciting research projects. Paula, working on her Masters Degree, was one of them. So I got to know her then. She has been a member of the ISCC for over 20 years.

The Nickerson Service Award is truly special. It represents the recognition of the lifeblood of the Inter-Society Color Council ... like Dorothy Nickerson, those people who contribute so much of themselves to the workings and development of the Society.

Speaking as a Past-President, I can say that there is a certain amount of anxiety that comes with the territory. You know you can't do it all yourself, and you wonder and hope someone will step forward and volunteer when a job needs to be done. I've made a list of some typical things that come up.

- 1) Who will chair a project committee?...Paula chaired Project 32 on Image Technology for 10 years.
- 2) When we had a planning retreat and decided to change our focus by redirecting a portion of our annual meetings to sessions emphasizing various Interest Groups. The question arose who would be the first chair of each Interest Group? ... Paula was co-chair of Interest Group 2 on Appearance, Vision, and Modeling from its inception until 1992. She took this step into new territory!
- 3) Would someone please organize next year's annual meeting? Paula organized the ISCC Annual Meeting in Toronto which was one of our first international ones - joint with the Canadian Society for Color. Another groundbreaking opportunity.
- 4) How about serving on the board of directors? Paula said okay and was elected to serve on the Board from 1986 to 1989.
- 5) We really need a President who can lead us – Again Paula agreed and was elected in to the position of President-Elect in 1990 to begin the 6-year presidential cycle. (That takes us to 1996 if anyone's counting.)
- 6) In 1997, the AIC has accepted our invitation...we'll be hosting the AIC Quadrennial meeting in 2001. Who will chair the local organizing committee, (a 4+ year commitment)? Again Paula stepped forward.

Add this all up and you'll have to agree Paula Alessi is one of a kind. The ISCC could use about 150 more volunteers just like her.

Paula, will you please join our President, Jack Ladson, at the podium to receive the Nickerson Service Award.

Given by Ellen C. Carter
June 24, 2001
ISCC Awards Luncheon
Rochester, NY

Paula Alessi Accepts 2001 Nickerson Service Award

Wow, I am still in shock at the news that I am this year's recipient of the ISCC Nickerson Service Award. Dorothy Nickerson was a very special lady with unending dedication to ISCC. I don't picture myself or my contributions to ISCC in the same league as Dorothy. But obviously some of my ISCC colleagues don't feel the same way as I do. And to those people, I extend my heartfelt thanks. I am honored and humbled to be receiving this coveted award.



How many people remember this scarf? It is what I wore at AIC Color '77 to distinguish myself as one of the helpers for the meeting. Since ISCC was the host national organization, this was my first exposure to ISCC. Ever since then I have always believed in this organization and have wanted to do everything I possibly could to make it achieve its goals and promote its growth. Believe it or not, my fondest memory of my 24 years involvement with ISCC was the 1989 Color Appearance Symposium that Mark Fairchild and I put together. It was the first ISCC Annual meeting that featured so many color experts from around the world and attendance was higher than expected. This launched my career interest in color appearance.

Now it is time for my thank yous. First I would like to say thank you to Dr. Billmeyer. (I still can't bring myself to call him Fred.) for encouraging me to listen in on one of his color science lectures before I decided whether I wanted to be a polymer scientist or a color scientist. That one lecture changed my life forever. I would also like to thank Eastman Kodak Company for always supporting my involvement in ISCC recognizing it as the best way to keep abreast of state-of-the-art color science. Thank you to those of you who encouraged me to assume the ISCC Presidency at a time when my life was changing significantly with a new husband and later a new baby. Thank you to those Board of Directors who were patient with me when I conducted a Board meeting as a nursing mother. Thank you to those ISCC members who always respected my viewpoint even if my opinion differed from the status quo. This was especially true as we transitioned from the Project Committee Structure to the Interest Group structure.

Now some special thank yous. Thank you to Hugh Fairman for always being there as my mentor when I assumed the ISCC Presidency. Thank you to Allan Rodrigues for also being my mentor regarding ISCC leadership and for encouraging me to assume a position on the AIC Executive Committee when the opportunity was presented to me. Most importantly, my heartfelt thanks goes out to Allan for being my right-hand man as Technical Program Committee Chair for the 9th AIC Congress. Thank you to Danny Rich for being my mentor in graduate school and my friend and ISCC supporter as we both went our separate ways in industry. Thank you to Roy Berns for being my friend all along the way and for leading important changes in ISCC. You will recall that it was Roy's idea to go from a Project Committee Structure to an Interest Group structure. Thank you to Cynthia Sturke, who has been the most important asset to ISCC since she assumed the Office Manager position. As AIC 9th Congress Secretariat, Cynthia, who always seemed to think of every last detail with care, made our job planning of the Congress so much easier. Thank you to Ellen Carter for always being there as my colleague, traveling companion and dear friend. Ellen, thank you for that wonderful citation.

Finally, I would be remiss if I didn't thank the most important people in my family life.

First I want to thank my in-laws, Mary and Dugan Einhaus for bringing my husband into this world. I also want them to know that Gary and I love their frequent visits to our home and the tremendous amount of help they give us around the house. Next, I want to thank my husband, Gary. His constant love and support in my color science career and in all aspects of our life together has been my salvation. I love you. Thank you to our dearest son, Jeffrey, for being patient when Mommy has to accept work-related phone calls at home. Thank you to my mother and father, who is now up in heaven, for teaching me to be the best I know how to be & to always pursue my dreams no matter what they may involve. Finally, thank you God for bringing color and the ISCC into my life!

Paula Alessi

News from Member-bodies.....

**Optical Society of America and
University of California Irvine**

**AATCC Workshop on
Color Measurement**

AATCC is conducting its annual Color Measurement Principles and The Textile Industry Workshop on September 19-20 at their Technical Center in Research Triangle Park, NC. The program, aimed at operator level personnel, will cover basic color theory, visual and instrumental color measurement and practical applications. Registrants will be involved in hands-on participation in sample preparation, strength calculations, reflectance and transmittance measurements, shade sorting, shade formulation, and color difference determinations.

The registration fee for the program is \$895 (\$600 for individual and corporate AATCC members) and includes luncheons, breaks, a book of papers and a copy of Color Technology in the Textile Industry, 2nd. Ed. Registrants should bring a note pad and a calculator. Early registration is advised since the program fills quickly. Refunds are made if cancellations are received on or before Sept. 5.

Overnight accommodations are available at the

Radisson Governors Inn
P.O.Box 12168
Research Triangle Park, NC, 27709
Tel: 919-549-8631.

Reservations should be made directly with the hotel and attendance at the AATCC workshop should be specified to receive the group rate of \$110 for single/double occupancy.

For additional information on the program please contact:

Patty S. Whitaker
Research Triangle Park, NC 27709-2215
tel: 919-549-3546

Vision and Color Meeting

October 13th - October 15th, 2001

The Vision and Color Division of the OSA will be holding a high-quality, low-cost, 3-day satellite meeting at the University of California Irvine immediately before the OSA Annual meeting in Long Beach. Our goal is to reinvigorate our Division, which has suffered from declining attendance over the recent years, and to encourage local participation. There are several open slots. Once those slots are filled, we will schedule poster sessions.

The meeting in Irvine will consist of sessions on Color and sessions on Vision. Sessions on Applications of Vision Science will be scheduled during the OSA Annual meeting in Long Beach on Tuesday, October 16th, 2001. Attendance at the satellite meeting will be FREE; there will be no formal registration fee. To attend the Applied Vision and Optics sessions, you must pay the one-day OSA registration fee. A new biennial invited talk named in honor of Robert M. Boynton will be presented on Sunday evening. The first speaker, Rhea Eskew, was chosen by Bob for his contributions to OSA and vision science. Please contact any of the organizers or committee members for further information.

Andrew Stockman
astockman@ucsd.edu

Vision Sessions - Oct. 13th

The Vision Sessions at UC Irvine will be made up of a series of symposia and workshops.

Color Vision Workshop - Oct. 14th-15th,

The 2-day Color Workshop at UC Irvine will consist of a series of invited talks and submitted talks. An edited book is proposed based primarily on the invited talks.

For further announcements and updates, please revisit this site: <http://www-cvrl.ucsd.edu/osa>

CAUS News Color Psychology In The 21st Century

Margaret A Miele, Assistant Professor of Psychology and Assistant Chair of the Social Science Department of the Fashion Institute, gave a workshop on color psychology in the 21st century.

Prof. Miele's specialty is color. "I love crayons" she said as she led the attendees of the workshop through a series of color exercises, including the Luscher Color Test, a psychological and physiological test devised in 1947 that has proven amazingly accurate in determining within minutes a subject's personality traits and psychic stresses.

Prof. Miele emphasized the importance of the use of more color as the population ages. "We want a total color environment. People need variety. Any one color or neutral, including white, will become agitating, but snippets of colors are great." She underscored the importance of a balance between over stimulation and under stimulation through color.

Citing the fact that the more we know of folk knowledge the more science is giving credence to it. Prof. Miele described how George Washington used tones of verdigris green in his home in Mount Vernon, VA. to bring a sense of the outdoors inside and maximize natural light.

Meg Miele also pointed out how color alters people's perception of time. Under red light, people generally will overestimate how much has passed (hence fast food red and orange); in blue and green environments, time is underestimated. Students, for some reason, carry a biological clock and are extremely accurate in sensing, no matter what the color tinting of the space.

Color also influences a person's perception of the temperature of a space. In a room that is colored in warm hues, a person will likely feel a 7% increase in the temperature felt over the actual temperature of the room.

In a test on the reading of historical material, comprehension was 14% or 18% higher for students who read on a pink or yellow background. Those reading the same materials against a blue background got the worst scores in comprehension.

Stating that human beings can perceive some 350,000 colors, Prof. Miele said two elements affecting color psychology today are the general population's growing color savvy, which is especially true of children, and the aging of the population. We are learning more about color in the 21st century.

From CAUS NEWS, June 2001

The Detroit Colour Council Will It Last?

"Speed to Market" versus "Risk-Free Product Introduction!"

As companies try to speed up the introduction of new products to market some risks are involved. Speakers will discuss the various aspects around weathering and durability of colored products. A panel discussion then invites input from all attendees. This is the 23rd in a series of annual panel conferences presented by the DCC. The date is September 11, 2001.

For information, contact Jim Keiser at 248-583-8345 or james.r.keiser@usa.dupont.com.

AATCC

**International Conference and Exhibition
Oct 21-24**

Technical Innovations for Global Challenges

Richard Aspland is the moderator for the Color Science Session. Roland L. Connelly Sr. will speak on World-Class Color Communication. Hyatt Regency, Greenville, SC

Contact: Shirley Clifton: 919-549-8141
919-549-8933 fax

The Society For Imaging Science And Technology

April 7-10, 2002

Please join IS&T's PICS, an international technical conference on digital imaging to be held in **Portland, Oregon, USA**. This meeting is the continuing forum for the presentation of advances in image captures, quality, processing and systems development. This year's conference included successful new sessions on Museum and Library Imaging, and Adaptive Optics, in addition to continuing series on Vision, Image Quality, Digital Photography, Image Processing, and Digital Image Capture. For 2002 an extensive program is planned for the examination of the full range of technical challenges in both consumer and scientific/industrial applications. Since every picture tells a story, please consider attending in Portland to share yours.

IS&T's PIC2002 will include plenary talks, over 100 oral and poster presentations, and a day of tutorial classes.

Proposed Program Topics

Emphasis will be on all technical areas related to digital image capture, associated applications of digital imaging, and image quality. This includes, but not limited to: Image Quality, Vision, Image Processing, Image Capture, Digital Photography Systems.

Call for Papers & Instructions for Authors

Prospective authors are invited to submit original papers for presentation in any technical areas listed in the proposed program topics section. All submitted papers will be refereed by the technical committee in order to ensure that the conference continues to provide significant and timely information to its participants. Papers should be authoritative and complete in regard to advancing the state of knowledge in the subject matter. The conference language will be English. Authors may choose either a 20 minute oral presentation or a poster presentation with display boards. Oral and poster presentations are con-

sidered of equal importance and merit, and the author's preference for one or the other will be honored whenever possible.

If you wish to submit a paper, please use the web-based form and process described on the IS&T website at the following address:

<http://www.imaging.org/conferences/pics2002/authors.cfm>

Use of the web based submission process is strongly preferred, however submission may also be made via e-mail to pics@imaging.org. Reference subject line: PICS2002Submission. Please include: 250 word abstract. Clearly identify the technical content of the paper and (if necessary) what is new compared to previously presented or published material on the same topic. 50 word biographical sketch of the primary author, mailing address, phone, fax, e-mail for the primary author, preferred format ; oral or poster or either preferred session assignment.

The deadline for submission is September 10, 2001.

Upon notice of acceptance, authors will be sent detailed instructions kits for submitting the full text of the paper. A copyright transfer form must also be completed prior to publication.

Note that each author is responsible for obtaining appropriate clearances as necessary for presentation and publication of the work. Papers will be due by December 15, 2001 for the publication in the proceedings book that will be distributed to each attendee at the meeting.

Tutorials

A full program of tutorials is scheduled for Sunday, April 7th. Proposals for tutorial classes are invited. For submission instructions please contact:

PICS 2002.
Tutorials Chair, Bob Cookingham,
robert.cookingham@Kodak.com

Society for Information Display (SID)

May 19-24, 2002

Boston, MA

The Society plans to expand its coverage of **Organic Light- Emitting Diodes (OLEDs)**. SID2002 encourages the submission of original papers of all aspects of research, engineering, application, evaluation, and utilization of displays.

Papers are solicited in all aspects of **OLEDs** including positive- and active-matrix circuits and systems, device structures, operation, and performance, and materials and processing techniques.

For further information contact:

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Are You an ISCC Member-Body?

If you are an ISCC Member-body, we encourage you to send us your news and your upcoming events to be published in the ISCC News.

Information may be emailed to our ISCC News Editor, Gultekin (Tek) Celikiz at celikiz@aol.com and to the ISCC office at iscc@compuserve.com.

Gemological Institute of America (GIA)

The Gemological Institute of America (GIA) reported record attendance at its Career Fair, July 27, 2001. More than 1,100 people attended this 11th Annual Fair. Aspiring jewelry industry individuals consisted of students, current employees, and career changers.

Experienced industry executives offered advice on how to enter and succeed in the world of diamonds, gem stones, and fine jewelry. GIA President Bill Boyajian, told attendees, "We want to motivate you, encourage you, and challenge you to be the best you can be."

For more information: visit: www.gia.edu
careerfair@gia.edu
1-800-421-7250 ext. 4100

(abstracted from GIA Press Release of August 17, 2001 by Harry K. Hammond III.)

TAGA Stockholm 2001

October 21-24

**Scandic Hotel Slussen
Stockholm, Sweden**

TAGA Stockholm 2001 will focus solely on the future of information and printing technologies. this three-day program will begin with two intense days of technical paper presentations and discussion, followed on the third day with a tour of Ericsson and Nokia research institutes - where the wireless future of systems connectivity and content delivery is being developed today. The Swedish Association of Pulp and Paper Engineers and The Swedish Newspaper Publishers' Association are co-sponsors. An extensive spouse/guest program is planned.

Hotel reservations must be made by October 20, 2001 to receive the TAGA rate of approximately \$157 USD/night. For the Early Bird Brochure (PDF) including registration form and more program detail, please visit TAGA at www.taga.org.

Message from the President of the AIC to the Inter-Society Color Council Mitsuo Ikeda

Department of Photonics, Ritsumeikan University
Nojihigashi, Kusatsu-shi 525-8577 Japan

On behalf of the Executive Committee of the AIC, I would like to congratulate and thank the AIC Color 01 Organizing Committee and the Inter-Society Color Council of the United States for the success of the 9th Congress of the AIC that took place at Rochester, NY, USA for the period 24 through 29 June, 2001.



It was 15 June, 1996 in Goteborg, Sweden when the AIC Executive Committee asked Ms. Paula Alessi if the US could invite the 9th AIC Congress for the year 2001. She agreed to take the proposal back to the US National Committee, the Inter-Society Color Council and answer later. She was an executive committee member and I was the vice-president of the AIC at that time. Professor L. R. Ronchi from Italy was the president. I waited for Paula's letter with impatience and the letter came to me at the beginning of September, 1996. The letter said I have good news for you. The US National Committee, Inter-Society Color Council, is prepared to make a formal invitation to host the 2001 AIC Congress in the United States. Specifically, we hope to host it in Rochester, New York. We will present the formal invitation to the AIC Executive Committee meeting in Kyoto. Indeed

this was good news and I really felt relaxed myself. The ISCC is a strong organization and I believed that they could organize the congress by themselves to lead it to success.

The ISCC showed at Rochester this year that my belief was indeed correct. It does not necessarily go that way all the time in AIC meetings. I needed to communicate very often with a person in charge of an AIC Midterm meeting to make sure that the meeting would be really organized as the national organization for the AIC was not strong yet at that time in the country. As the president of the AIC I had to visit that country a year before the meeting to confirm with my own eyes the preparation state for the meeting. It was well prepared and in fact my fears were needless. In another case, the national organization was too young to know how to organize an AIC meeting although they were very active in domestic events. Again I had to communicate with them often and also, as in the above case, I visited the country two times before the AIC Interim meeting to make sure that the meeting would be organized. I think it is the responsibility of the president to follow up the decisions made by the AIC EC about the future meetings and I don't mind doing the job at all. Nevertheless it would be best if the member country could organize an AIC meeting by themselves while the president is relaxing. It was so in the case of the US and all I had to do was just to wait until the 9th Congress was opened on 24 June, 2001.

The technical program was well organized in the congress. There were eleven prepared symposia starting with "What is color?" and ending with "The future of color." We often say that color is used everywhere and the AIC can contribute to many fields. By looking at the titles of the symposia people can understand what the AIC claims. I appreciate the technical program committee for creating these titles for the symposia.

The AIC and the CIE have been good partners for many years. It is my understanding that the AIC is to

present international forum for scientists, engineers, designers and artists to exchange their professional opinions so that they can promote their own works in their respective rounds, while the CIE is to present them technical standards and methods for using and treating color that can be used globally. In other words the former is to find seeds and the latter, needs and the two can cooperate nicely. I believed that the two international organizations can continue a good relationship for the future by seeing one of the symposia "How is CIE helping us make color work?."

It was very convenient for the attendants to stay at hotels almost connected to the congress venue. I often utilized the advantage. I left some of my personal items in the room such as a heavy camera and a jacket to lighten myself so that I could enjoy listening to paper presentations. I could go back to the room at any time when I needed. I could not believe first that the breakfast was to be served every morning. For the first morning I saw breads and other foods prepared on the tables in the lobby of the convention hall but thought they were for some one else and not for me. My students were brave, however, and they enjoyed the foods from the beginning. Of course my wife and I enjoyed the breakfast the next morning. For foreigners it is always a serious matter where to eat and we did not have to worry about it this time. The lunch was also served in the same place for everybody. It was convenient for us and it offered us more. I saw people from various countries surrounding tables together for lunch. The lunch tables were international forums themselves. I am sure that all the attendants enjoyed the lunch time. I can easily guess from my experience of the 8th AIC Congress at Kyoto that the AIC Color 01 Organizing Committee worked hard to raise the money from the financial supporters to provide attendants with these nice breakfasts and lunches, although attendees might have been too busy to enjoy the foods to appreciate the committee's efforts. The banquet was also splendid with delicious food and wine. Camera flashes used by attendees moving around tables made a good decoration in the banquet hall, although my wife and I did not use the presents at that time as we thought they would make good gifts to our grandsons.

Nick and the Nice Guys appeared very American to me with the loudest sound all over the hall. Although it was interesting to hear them make music, I would have preferred a quieter dance by Maiko-girls of Kyoto with Koto and Shamisen music instruments. Probably I am too old to enjoy the sound. Yes, it has been forty years since I was a graduate student at the University of Rochester. In any case, I was personally very happy to go back to Rochester as the President of the AIC after these many years.

As I returned to Japan, taking that long flight of more than 14 hours, I said to myself, "Now I can pass this presidency on to Ms. Paula Alessi, who showed her ability through the 9th AIC Congress to lead the AIC to a further prosperity" .



AIC Opening Welcome Speech by Paula Alessi

Here is the largest welcome embrace I can offer to you, the participants of the AIC Color 01 9th Congress. On behalf of the Inter-Society Color Council and the AIC Color 01 Organizing Committee, it is my distinct pleasure to welcome you to Rochester, New York, the World's Image Center. Please allow me to introduce myself. I am Paula Alessi, Chair of the AIC Color 01 Organizing Committee.

Here is the largest welcome embrace I can offer to you, the participants of the AIC Color 01 9th Congress. On behalf of the Organizing Committee, it is my distinct pleasure to welcome you to Rochester, New York, the World's Image Center. Please allow me to introduce myself. I am Paula Alessi, Chair of the AIC Color 01 Organizing Committee.

Four years ago at AIC Color 97, the 8th Congress in Kyoto, Japan this 9th Congress in Rochester was just a dream. Roy Berns, Mark Fairchild, Geoff Woolfe and myself were sitting in the audience knowing that we were going to be intimately involved in the planning this 9th Congress. We sat back in awe at the spectacular job the Color Science Association of Japan did planning the very successful 8th Congress. Little did we know how big our task would be in planning AIC Color 01 in Rochester. Our Japanese friends started us off on the right foot by offering advice based on what they had learned in putting together a very successful Congress. So we started working four years ago, while it was still fresh in our minds and here we are four years older, four years wiser and ready to see our dream unfold.

This has truly been a group effort by committee and it is my pleasure to introduce them to you now. As I announce the members of the AIC Color 01 Organizing Committee, please stand to be recognized and remain standing until everyone has been called.

Technical Program Committee Chair: Allan Rodrigues, DuPont Performance Coatings, USA

Secretariat: Cynthia Sturke, ISCC Office Manager

Audio/Visual and Poster Papers Chair: Michael Sanchez, Xerox

Exhibitions Chair: Kevin McGuire, Tailored Lighting

Finance Chair: Geoff Woolfe, Kodak

Fundraising Chair: Roy Berns, Rochester Institute of Technology

ISCC Liaison: Robert Buckley, Xerox

Logo/Poster Design and Student Awards Chair: Karen Braun, Xerox

Publications Chair: Robert Chung, Rochester Institute of Technology

Publicity Chair: David Wyble, Rochester Institute of Technology

Social Program Chair: Cathy Cerosaletti, Kodak

Susan Stanger, Possible Dreams

Administrative/Design Support: Colleen Desimone, Rochester Institute of Technology

Valerie Hemink, Rochester Institute of Technology

Two important names not on this list are Mark Fairchild and Raja Bala, both of whom served on the Technical Program Committee and the Rochester-based Organizing Committee.

**“The color
within us
can color
the world
around us.”**

My heartfelt thanks goes out to each and every one of you. **I hope that all AIC participants will recognize that everything they see unfold before their eyes this week has been accomplished due to the hard-working volunteer efforts of all these Organizing Committee members over the past four years.** Please take note that all the members of the AIC Color 01 Organizing Committee are wearing a yellow name badge. If you have a question about anything, please do not hesitate to ask anyone wearing a yellow badge. If they don't know the answer to your question, they can certainly point you to someone who does. Now let's discuss some important information that will be very useful to you throughout the week. We have over 260 invited, oral, and poster papers filling our daily schedule from 8:30AM to 6PM everyday. In fact on Monday and Wednesday evenings we have two very important author-present poster sessions. We welcome you to enjoy breakfast at 7:45AM, coffee breaks and lunch from 12 to 1PM right here at the Convention Center. This convenience is offered to you so that we may adhere to our very tight daily time schedule.

Please take notice of the signs placed throughout the Convention Center indicating that **each of our coffee breaks and lunches have been sponsored by the many individuals and corporations listed in your Program Book on page 4.** The AIC Color 01 Organizing Committee wishes to thank each and every one of our event patrons and sponsors. You will also notice that page 4 lists our Congress Patrons who have given at least \$5,000 to support our cause. These patrons are Eastman Kodak Company, RIT Chester F. Carlson Center for Imaging Science, Sun Chemical and Xerox Corporation. Some of these Congress Patrons provided seed money as long as three years ago to get our planning efforts started. Without these Congress Patrons, we would not have been able to do such things as produce our first and final circulars. We owe each of them a debt of gratitude and as our way of showing our thanks and appreciation, we are honoring them with the signs containing their logos that you will see placed throughout this floor in the Convention Center.

This Congress will also feature an Exhibition on Monday and Tuesday from 9AM to 5PM in Highland Rooms AKBJCH. You have a listing of all the Exhibitors and their booths in your tote bags. Please find the time to visit these booths on Monday and Tuesday.

Now it is time to call your attention to the Social Program on page 3 in your Program Book. **We have activities planned for companions during the day and for all participants during the evenings.** I would especially like to encourage you to attend the Wednesday excursion to the Genesee Country Village and Museum to visit 57 buildings restored to their original condition. Also please don't miss the AIC Judd Award banquet on Thursday evening. This promises to be a special evening with delicious food, wonderful entertainment for your dancing pleasure and an open bar. I must also call your attention to a new tour we are offering on Wednesday evening. It is our Horses on Parade tour, which is a community art project sponsored by the Empire Brewing Company. Chicago had its cows, Toronto its moose, Cincinnati its pigs and now Rochester now has its horses. They just arrived in May and they will be sold & auctioned off in September so timing could not have been more perfect. This tour will allow you to see approximately 40 of the 159 horses on parade in the Rochester area. This is a very special art project that promises to be a very colorful experience. This tour will also include dinner.

I hope all of you have had a chance to see our poster. It was beautifully designed by a group of artists, Lorraine Wright, Jenni Day, Jeong-Jae Kim and Kathleen Schaefer as part of a design class project at RIT. We would like each of you to go home with your own poster.

Now I would like to get into the Technical part of our program. It features two key elements which are unprecedented in AIC Congress history. The first is student awards for the best oral paper and the best poster paper. This will become an AIC Congress tradition. It was inspired by AIC President Professor

Ikeda, who wanted to honor students for their excellence in color. The second is **12 symposia featuring over 30 invited speakers as well as many contributed paper authors with presentations pertinent to the symposia topics.** This is the largest number of organized symposia topics ever to be featured at an AIC Congress. In a moment I will turn the podium over to Dr. Allan Rodrigues to tell you more about our Technical Program.

First I want to close my opening remarks with a quote from Thomas Kinkade. "The color within us can color the world around us." If our Organizing Committee has been successful this week, you will all leave Rochester feeling that we have colored your world with new knowledge and memorable experiences that you will treasure forever. Now it is my pleasure to introduce you to Dr. Allan Rodrigues, our Technical Program Committee Chair. He will provide you with more insight into what the week has in store for you regarding the technical portion of this 9th AIC Congress.

Ripomonti and Tillberg Presented with Best Student Paper Awards

This year, for the first time in the history of the Congress, awards were presented to the best student presentation in Science and Technology and in Art and Design. Eligible presenters were either full-time undergraduate or graduate students or recent graduates presenting research performed as part of their degree. The selection committee, comprising experts in many aspects of color, assessed the technical or creative quality of student presentations and posters; the quality, clarity, aesthetics of the physical presentation; and the competence, clarity, and enthusiasm with which the student author presented the work.

The Science and Technology award was presented to Caterina Ripomonti for her presentation on "Perceptual Transparency," (co-authored by Stephen Westland). Ripomonti, a Ph.D. candidate at the Colour & Imaging Institute, University of Derby, UK, discussed the ability of the visual system to account for and correctly recognize filtered surfaces as the same surfaces seen in plain view (perceptual transparency). She suggested a simple computational model based on the invariance of cone-excitation ratios to explain this effect.

Margareta Tillberg received the Best Student Paper Award in Art/Design. Her presentation, entitled "The Russian Avant-Garde and Colour as Worldview," detailed the evolution and importance of the Colour Handbook by Matiushev, one of the last manifestos from the Russian avant-garde. Tillberg has spent years in Russian archives and libraries studying the original sources of this important text and understanding the author's color theory. She is a Ph.D. candidate in the Department of Art History, University of Stockholm, Sweden. She has given a number of seminars on the history and theory of art and color at the Bauhaus-University in Weimar, Germany, and studied at the State University in Moscow as well as the University in St. Petersburg (former Leningrad, Russia).

*Karen Braun
Xerox Corporation
AIC Color 01 Organizing Committee*

Citation for Roberto Daniel Lozano as Recipient of the 2001 Deane B. Judd - AIC Award

Since 1973, when Betty Judd proposed to establish an AIC award in memory of her husband, Deane B. Judd, to recognize outstanding work in the field of color science and technology, the International Color Association has been carrying out the process of selection of the recipients for this award every two years. And now, it is a great pleasure to me to announce Roberto Daniel Lozano as the recipient of the 2001 Judd Award, at this AIC 9th Congress in Rochester, USA. The contributions of Lozano to the measurement of color and appearance in a great variety of industrial applications, as well as the huge efforts he has made to spread the understanding of the fascinating problems related to color in Latin-American countries, make him wholly deserving of the highest honor bestowed by the AIC.

Lozano was founder and president of the Argentine Color Group, where he is now an honorary member. He has also been chairman of the Argentine Association on Illumination, president and vice-president of its Buenos Aires branch, and chairman of its Committee on Colorimetry. Also, chairman of the Committee on Colorimetry of the Argentine Institute for Standardization, and member of the Board of Directors of the Argentine National Committee on Illumination. With regard to the organization of meetings, he was chairman of the Organizing Committees of Color 89, the 6th Congress of the AIC, the 3rd Meeting of the Argentine Association on Illumination, and the 1st National Symposium on Color in Food.

With regard to international activities, Lozano served as expert of the United Nations, invited member of the Consulting Committee on Radiometry and Photometry of the International Office of Weights and Measures, member of the Editorial Board of the journals *Color Research and Application* and *Optica Pura y Aplicada*, invited lecturer in Venezuela and Mexico. At the AIC, in addition to having organized the 6th Congress, he was a member of the Executive Committee, and member of the Advisory Committee of the 8th Congress, Kyoto 1997. At the CIE, Lozano has been chairman of the Technical Committee on Visual Gloss, Argentine delegate in the Technical Committees on Photometry and Radiometry, Colorimetry, Vision, and Visual Signaling, consultant of the Technical Committees on Detectors and Materials, and Argentine delegate in the Division on Physical Measurement of Light and Radiation.

Since 1967, Lozano has been teaching several courses on optics, color measurement and color technology in different companies and institutions in Argentina, Brazil, and Uruguay.

Lozano has worked in close relation to the industry. For three years he was in charge of the laboratory for measurement of cosmic rays at the Ellsworth Scientific Station in Antarctica. Until his retirement, he worked at the National Institute of Industrial Technology, as head of the Optical Division of the Physics Department and head of the Industrial Physics Sector. Since 2000 he is a consultant in his new company, Tecnología del Color SA.

by José Luis Caivano

Buenos Aires University and National Council for Research

Lic. Robert Daniel Lozano's Acceptance of the Judd Award

Abstract: Color Souvenirs

This is the story of a common man who walked along life trying to understand simple things, and employed this knowledge to help others which had to use or control these things in many different cases.

It tells what color means when someone needs to use, control or measure it, or seeks the reason why it is as it looks, or looks different than it is; while very few people, if any, can explain what really happens. The study and measurement of the color of apples, beef, butter, butterflies, carpets, ceramics, flowers, forest, honey, leather, paints, parrots, pearls, signals, teeth, textiles, tomatoes and many other cases, paved the way to help others solve their problems while pushing himself to try to understand what was going on and why these things look as they do.

In a modern world, where anyone can get a PC connected to the Internet and search for information of almost anything, the knowledge about color and appearance is huge, but the real problem is that every human being, to be restricted, is the judge of what he sees. This fact opens the possibility for anyone to know what we are talking about. At the same time, everybody can discuss a complicated matter that is very difficult to understand. Probably, even if he is an expert in some aspect of the problem, he will not have all the necessary knowledge to explain completely the phenomena.

Working for more than 35 years in a governmental institute dedicated to help industry in technology problems, this man has been surrounded by all kinds of technicians, physicists, chemists, engineers, etc., working on many branches of industry and has provided the support to handle different approaches of the same problem; color and appearance. Within this span of time, the last 20 years gave place to the creation and development of the Argentine Color Group which tried to find out a common language for all people related to these interests.



Lozano and his lovely wife

Finally, it is acknowledged that without the love, understanding, support and companion of his beloved wife, this would not be true. He is deeply indebted to her. He also wishes to thank his children, which have helped him with love, tolerance and many other ways.

This is what the story of this talk will be about.

Lic. Robert Daniel Lozano

Reflections on AIC Color

A Few Impressions of AIC

from USA.....

The Inter-Society Color Council hosted the 9th Congress of the International Colour Association at the World's Image Centre in Rochester, New York, June 24-29, 2001. Scientists, engineers, designers, artists and educators gathered to explore all aspects of color.

At the ISCC Awards Luncheon, guests from around the world honored Max Saltzman's legacy, Hugh Davidson's great contributions, Paula Alessi's dedicated service over the years and Cynthia Sturke's tireless efforts on our behalf. Later we traveled to The Rochester Institute of Technology where the Center for Imaging Science and Munsell Color Science Laboratory hosted a Welcome Reception and tour of the laboratories.

The conference was brimming over with information and lively discussions about the papers, exhibits and posters. We departed with a tremendous appreciation for all the good work being done throughout the world and for the people who are doing it. As we move forward, our perspective of the state-of-the-art has been greatly expanded and our circle of friends in the color community has grown. Here are summaries of some of the papers that focused on industrial applications – a topic of special interest to me.

Imaging Differences in profiles between spectrophotometers, monitors, cameras and printers make it difficult to interpret the same color between devices. There were over 40 papers, posters and lectures on this topic. A virtual army of scientists and mathematicians are hard at work attempting to bring accurate color to the marketplace.

Textile Printing Dr. Patrick Chong of Quality Engineering Associates presented "The Role of Digital Printing and Color Technology in the Digital Revolution for the Textile World". The technical challenges he discussed included: fabric handling, system design, speed, print width, colorfastness, colorimetric issues, and user knowledge.

Led Spectrophotometers J. Schanda made a presentation on the work that has been done by the University Veszprem, Laboratory for Colorimetry and Multimedia, Hungary and the Institute for Photometry and Radiometry, CA-USA to investigate the spectral power distribution of different types of real Light Emitting Diodes. The paper compares measurements made by specially developed tristimulus colorimeters to spectroradiometric measurements.

Measuring Fluorescent Samples With Xenon And Tungsten Light Sources Klaus Witt of the Bundesanstalt für Materialforschung und –prüfung (BAM) Berlin, Germany presented this paper. He recommended that if no measuring instrument equipped with an artificial D65 light source is available, a spectral curve for a fluorescent sample can be calculated from the mean of two measurements: an instrument with a tungsten halogen light source and a second with an (unfiltered) Xenon light source.

Determination Of Industrial Colour Tolerance Limits - Case Studies In The Textile Industry Jennifer Gay and Dr. Robert Hirschler, SENAI/CETIQT, Rio de Janeiro, Brazil reported the results of approximately 50,000 visual assessments collected over the years in 12 factories. In each factory a visual panel of 6 to 14 professionals evaluated several hundred standard/sample pairs. The color difference formula and tolerance limit that gave the maximum ratio of "good decisions" was established. In all cases CMC (2:1) agreed the best with the visual panel. The tolerance limits ranged from about 0.5 to 2.5 CMC units, depending on the product and the market level.

Marge Stanish, Penn Color

from Australia.....

The much-anticipated 9th Congress of the International Colour Association, AIC Color 01, was held in Rochester NY in June hosted by the AIC and the ISCC. This was the first to be held in the United States for over 20 years. The organising and program committees deserve congratulations for a event that has given great strength to the international character of the AIC. The siting of the Congress at Rochester reflects the importance of this city to the world of imaging as major companies and a leading research and teaching institute are based there. There were about 400 delegates, half of whom came from North America, approximately equal numbers from Europe and Asia and a dozen each from South America and Australia. Almost all of the 24 AIC member countries were represented.

The international Program Committee lead by Allan Rodrigues invited the authors to address five basic themes: what is color, what is color for, how does color work, how do we control color and how do we teach color? Within each theme there were a number of subjects. For example How does colour work? Included light sources, vision defects, machine vision, image processing and so on. This provided a basis for classifying both papers and posters and very wide net to be cast. Within this framework, most authors were able to follow their specialist interests. With 265 papers presented, it would appear that a high percentage of submitted papers were accepted for presentation.

The large number of papers restricted the presentation time to 20 minutes and forced the program into two and sometimes three, parallel sessions with the usual dilemma of divided interests for the audience. The 20 minute presentation time requires careful distilling of sometimes years of work into a simple presentation but many speakers have yet to master this skill and information overload becomes a problem for the audience.

Equally difficult to manage in an international conference situation is the language problem. More than half of the papers presented came from non-English speaking countries and the presenters' language skills varied from excellent to less so. Clearly, the Program Committee decided to opt for maximum participation and allowed the audience to make their choices. On balance, I think they got it right. I look forward to reading the complete proceedings and catch up on the details on those papers I missed.

A feature of the Congress was the introduction of the 12 symposia, each well focussed on the basic conference themes. The breadth and influence of the Program Committee was evident here as the invited and contributed papers came from the best in their field. I particularly enjoyed "How is CIE helping us make color work" and "Imaging techniques of Spectral estimation".

The poster presentations numbered nearly 100. The 6 display hours were carefully positioned between other scheduled events to maximise our opportunity to view them. Despite my efforts I found it impossible to give sufficient time to investigate them to my satisfaction. These sessions can contain gems in your area of interest but it can take some exploration to find them.

The conference presents a unique opportunity to renew and create contacts and friendships with those who share a common interest in color. There were many opportunities in the social program and the venue had an area set aside for relaxed discussion which was well used.

As is often the case with such major conferences, other groups take the opportunity to assemble the troops for pre-conference meetings. On this occasion the CIE Division 1 "Vision and Colour" met for two days

prior to the conference and the ASTM E-12 "Color and Appearance" Committee met for three days prior to the CIE. This allowed many to wear three hats in succession for a 12 day marathon of meetings.

Some enduring personal memories include: Jack Ladson, Cynthia Sturke and their team ever helpful at the Conference Desk, the 'discomfort glare' of the bright sunshine on the balcony, the fireworks and AV display at the High Falls, the relaxing day at the Genesee Village, Maud Harleman and Greta Smedal maximising their experience by not wearing their raincoats on the Maid of the Mist and, with some sadness, the absence of a long-term AIC supporter, Heinz Testiege

Whilst this conference was clearly the result of the efforts of many people, it was also Paula Alessi's Conference. The conference was preceded by the presentation of the ISCC Nickerson Service Award to Paula. As Chair of the Organising Committee and Vice-President of the AIC, Paula warmly welcomed the delegates and opened the Congress on Monday in her home town. Her research work at Kodak on OLED's was presented to the conference in paper and poster form. It is also a time of transition for her with the completion of her report after ten years work with CIE TC 1-27 and her move to the AIC Presidency in January 2002. Throughout the conference she was the ever-gracious host and in my memory will always be associated with the highly successful AIC 01.

*Peter McGinley
Dulux Australia*

from Germany.....

The Rochester AIC 2001 was very effective. The organization was very professional, the papers covered a wide variety of subjects and were very interesting, the breakfast and lunch in the conference center gave excellent possibilities for communications (one of the reasons to go to meetings like this), so the whole conference was very efficient.

There is only one conclusion for me and many colleagues: The meeting was a full success. Many thanks to all contributors for the hard work in the background which made this meeting such a positive, memorable, "colorful" event for all participants.

*Gerhard Roesler
Gretag Macbeth*

from Argentina.....

The congress was really a great experience. It allowed me to meet an enthusiastic youth engaged with the construction of knowledge. From the human perspective, the warmth and kindness of all hosts was most remarkable just as the organization. This all made this meeting something unforgettable. Last, but not least, the growing environmental colour study group deserves an important place in next congress.

*Arqta. Maria Mercedes Avila
Universidad Nacional de Cordoba*

from Spain.....

Congratulations on the AIC 2001 Meeting. All of you have done a very good job. You have to be proud of yourselves.

*Javier Hernandez-Andres
Universidad de Granada*



Dr. Brian Rigg and Roland Connelly



Anders Nilsson and Berit Bergstrom



© Jill Morton



AIC Color 01 Rochester

The 9th Congress of the International Colour Association



AIC Rock Stars: Roy Berns, Eileen Korenic, Lynn Connelly, Meg Miele



Mark Saltzman, Barbara Saltzman, Jack Ladson



Mabel and Cal McCamy and an equine friend



Margareta Tillberg
and
Peter Fornaro



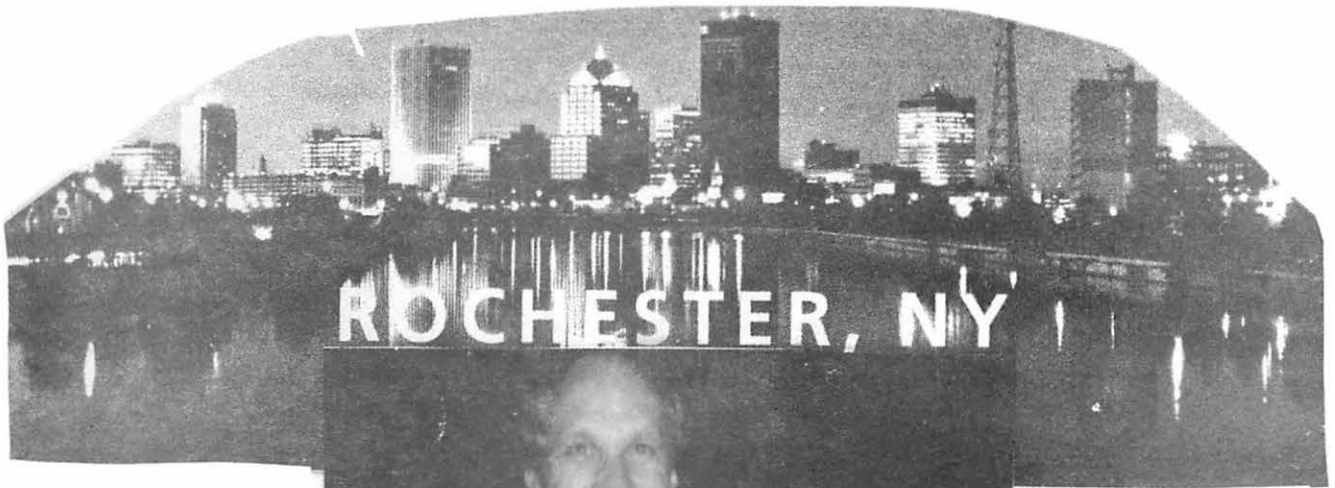
Roy Berns and wife Sue



Francisco Imai provides impromptu
classical entertainment



Mike Brill and Karen



AIC Congress Chair

Paula Alessi and husband Gary



Cathy Daniels Cerosaletti
and husband Glenn



Ikeda presents award to Lozano



Daniel Lozano, Mitsuo Ikeda, and José Caivano



Peter Travis and Lynn Connelly



Cynthia Sturke, Ann Laidlaw

AIC Officers and Member Countries

Executive Committee

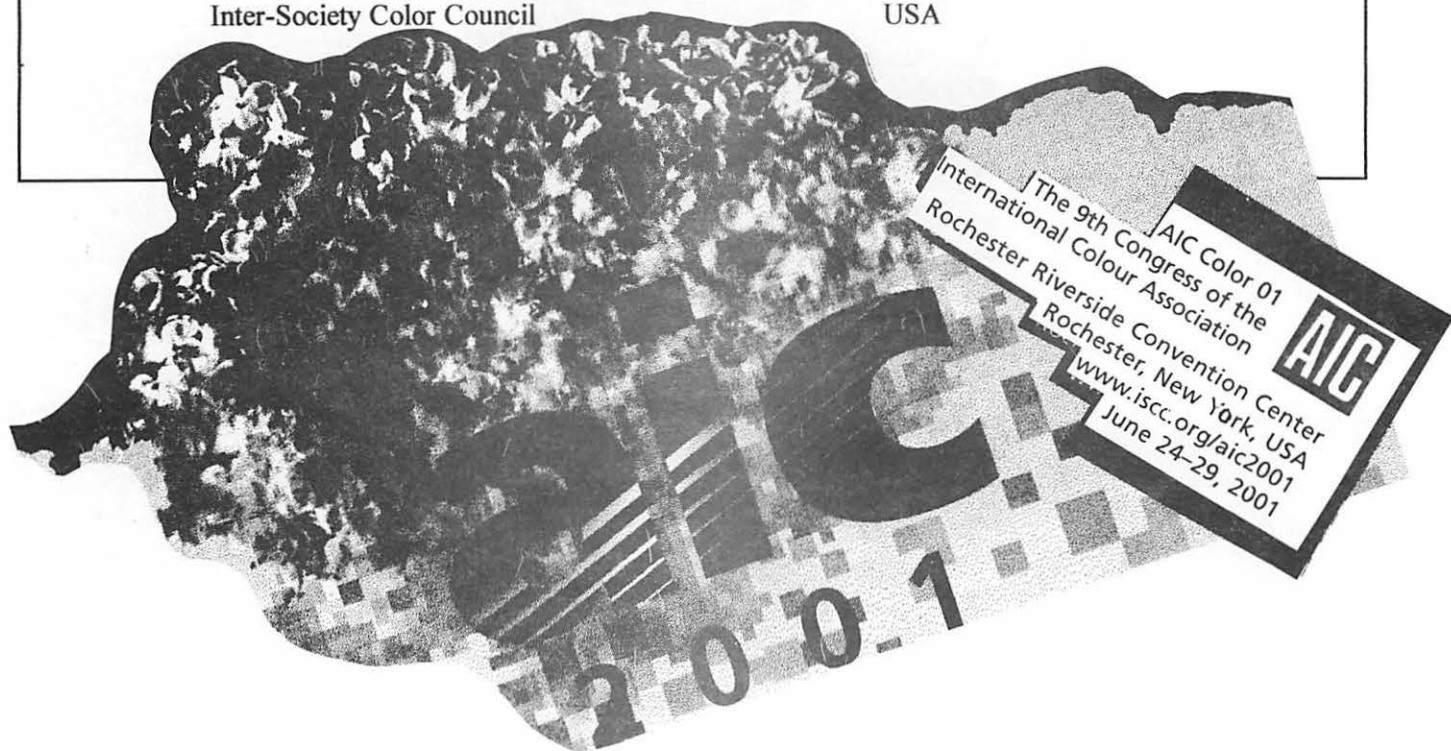
President: Mitsuo Ikeda
Vice President: Paula J. Alessi
Secretary/Treasurer: Frank Rochow

Members: Jin-Sook Lee
Javier Romero
Maks Tusak
Michel Albert-Vanel

Regular Members

Grupo Argentino del Color
Colour Society of Australia
Asociación Boliviana del Color
Associacao Brasileira da Cor
Colour Group – Bulgaria
Color Association of China
Centre Français de la Couleur
Deutscher Verband Farbe
The Colour Group (Great Britain)
Hungarian National Colour Committee
Associazione Ottica Italiana
Color Science Association of Japan
Korean Society of Color Studies
Nederlandse Ver. Voor Kleurenstudie
Norsk Farveforum
Central Office of Measures
Colour Group of the South African Optical Society
Slovenian Colourists Association
Comité de Español del Color
Stiftelsen Svenskt Färgcentrum
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The Color Group of Thailand
Inter-Society Color Council

Argentina
Australia
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China
France
Germany
Great Britain
Hungary
Italy
Japan
Korea
The Netherlands
Norway
Poland
Republic of South Africa
Slovenia
Spain
Sweden
Switzerland
Thailand
USA



from Turkey.....

My first acquaintance (in absentia) with AIC was in 1995 in Istanbul, a few months after completing my M.S. degree on *the Dimension Of Color In the Urban Space*, when accidentally I found a copy of the AIC Symposium 1988, Switzerland, *Colour in Environmental Design*. I was so excited to hear about such an organization and their meetings. Since then, I was not alone. I had a chance to share their experiences and knowledge, to find some support and encouragement for my next steps. After reading almost all of the papers, I wrote to the chair of that symposium, Prof. Werner Spillmann. I did not receive any response from him until July 1996 when I was preparing to travel to Spain for the UIA Congress, *Present and Futures, Architecture in Cities*, Barcelona. That was a great surprise for me, since I had almost lost my hope. But he had sent me a letter with his own handwriting explaining his brain attack and what he had felt during last year. He also had sent me an announcement for that year's symposium on *Color and Psychology*. I was so impressed and to be honest, I felt some how guilty that I had bothered him in such a situation, meanwhile, I felt happy to be replied so sincerely. I gave the announcement to a friend, but after coming back from Spain she told me that she had lost it. I wrote again to Prof. Spillmann. At that time, he had lost his contact, and so me too. I began to write to some of the writers of the papers in the AIC Symposium 1988. My aim was to get a chance to have some experiences with some masters in this field. One day I received a letter from Dr. Fanny Tosca from Greece, telling about the next symposium in Warsaw, Poland in June 1999. I also learned from her that I should work individually and not expect a common work with others: another happy and sad news for me, some sort of disappointment. Yet I decided to participate in that symposium. That first time of sharing a space with some other people dealing with *color* was a great one. I did not know anyone, yet I felt I was there to visit some members of my family. Then I met similar colleagues in Seoul, Korea, and later, more in Rochester, NY, USA.

The 9th Congress of the International Colour Association in Rochester, NY was a crowded one. The organization of the congress was so professional. There was a crazy tempo for parallel sessions, yet everyone seemed to enjoy it. I personally missed some lectures because of the parallel sessions, yet I want to be hopeful for the videotapes, to see the visual materials of the speakers during their lectures. Most of the names I had read their books, articles, papers, during past years, those that I had tried to imagine their faces while reading their writings, were present there. That was a great experience. You know how we feel when we read a novel and then see a movie of it. It depends on the director, the artists' performances, space arrangement, etc. But here, all were same: same hearts, same brains cooperating with their eyes, hands and fingers that had shaped the body of their works. I saw the same *Love* of color that had brought all those faces together, to have *colorful* chats, and I hope *to plan for future colorful common projects*. Although they talk in almost different color-languages, some more technical and some more philosophical or artistic, it was not difficult to see the same heart-shape halo around the main subject of the congress.

What I have been wishing to see in color meetings and congresses is some other works besides presenting papers and posters, some performances, installations, maybe workshops, and some sort of more shared activities. I have no doubt that those who were present in the banquet on the 28th of June, will never forget the memories of dancing together, how we enjoyed the music of the imaginary guitar of Peter Travis. Can you imagine how amazing it would be to do some things more together, to paint with Harold Linton, to design 3-dimentional models with Lois Swirnoff or a colorful lighting game with Yves Charnay, to have the experience of a colorful improvisation with Leonard Oberascher?

The lack of color education in today's design and architecture schools seems to be a common problem.

Therefore, such meetings and congresses may take on such a mission by organizing short or long-term cross-cultural, international projects with participation of interested students in these fields, who do not have such opportunities in their schools or more cooperation and supporting availabilities for sponsorships for student projects. Meanwhile, such activities (we can call them *pre* or *post-meetings*) may take role in reducing different color terminologies that seem as an obstacle in communication between different disciplines in color. My last wish is for more colorful proceedings, since color has a direct link with vision and visual world.

Finally, for me, one unforgettable memory of this congress was seeing the same familiar handwriting of Prof. Werner Spillmann, embracing everyone in the first slide of Leonard Oberascher's presentation in the ECD session. Thank you Prof. Spillmann! Thank you to all of the organization committee! Thank you AIC!

Susan Habib

Ph.D. Student in Architecture

from Switzerland.....

How did I find the way to the 9th AIC Congress in Rochester? In fact, it all began in Beijing, in 1999, when I attended the 20th Congress of the Union Internationale des Architectes. I was invited to have dinner with a small group of young architects. It was a Chinese professor who asked me to attend a congress in Perth, Western Australia, in the following year, which I did. After my talk there, I was introduced to Paul Green-Armytage who gave me a pamphlet of the AIC Congress to be held in 2001 in the USA. How small the world has become I thought: I wandered from Beijing over to Perth to Rochester NY to find what was essential to me: people working on the same subject I was doing research on (very lonely I thought) in Switzerland. Even more astonished was I to hear from an elderly German woman I met at the opening ceremony in Rochester NY that the AIC was founded in Lucerne, Switzerland, in 1964, and she was a member of those days. How strange. The circle was closed. Lucerne was not even one hour by car from my home town Zurich.



In Rochester, in a way, I began to understand things better in Switzerland. Now, I am a member of the Swiss group. I am in contact with the Swedish, Spanish and Argentine group. Color, all of a sudden, has become an international matter to me. Chance, however, is even more imaginative than I could think of because of what happened next. In Rochester, by accident, I met the architect I was supposed to contact a few years ago. By then, I visited the housing estate Ma Hang in Hong Kong. The color concept of the buildings impressed me very much. The Chinese architect in charge, a friend of mine from my days as a Master's student in London, told me eagerly about her collaboration with an architect from Paris. This is the person (Michel Cler) you see in the picture I am dancing with at the AIC banquet dinner.

To conclude, in my mind, the congress in Rochester was very successful. If two of the goals of a congress are to contact with people and to exchange ideas and research results, it achieved them perfectly.

Verena M. Schindler
University of Zurich

from Italy.....

Many thanks for your excellent hospitality, and for the conference pack which contained very interesting material. I am very grateful to you for giving me the opportunity to attend this conference of such a high level.

I would also like to congratulate you on the outstanding organization. All of the guests, I am sure, were happy to attend. Many thanks again for your kind collaboration.

*Silvia Rizzo
Genova, Italy*

from USA.....

Congratulations on the very successful management of the convention and many thanks for taking such good care of the varied guests of Barbara and Mark Saltzman.

Bob Feller

Many sincere thanks to the AIC 01 Conference which brought together ideas and people making this a unique color meeting.

*Lev Vozchikov
Laboratory Selenia*

AIC Color 01 Makes the News

Color Printing Group Meets

Democrat and Chronicle (A Rochester-based newspaper)

(Wednesday, June 27, 2001) - About 300 engineers, marketers, graphic artists, architects and others are meeting in Rochester this week to explore aspects of color science in printed materials and more.

The Ninth Congress of the International Colour Association began here on Sunday and will last until Friday. The congress is held once every four years as a way of promoting education and networking of various professionals who work with color in imaging.

The conference traditionally is held in the hometown of the incoming president, who this year is Eastman Kodak Co. researcher, Paula Alessi.

A Carefully Colored World

Democrat and Chronicle (A Rochester-based newspaper)

Specialists in color use share work at global conference here. *by Ben Rand, Democrat and Chronicle*

(Saturday, June 30, 2001) -- Think for a second how dull life would be if all the world was black and white. There would be no fried green tomatoes, no blazing orange sunsets, no powder blue tuxedos, no red fire engines -- and only two crayons for children.

And on top of all that, people such as Peter Travis, John Hutchings and Jose Caivano would have to choose new careers. The three men have devoted large parts of their working lives to studying and using color to enhance their respective professions -- interior design, food-making and architecture.

Travis, the designer, uses color to boldly decorate buildings, ceramics, textiles and other material. Hutchings tells companies how to use it to sell fresh, frozen and processed foods. Caivano uses color to create a mood and attract attention to buildings and other structures.

These and dozens of other interesting and timely uses for color were in the spotlight this week in Rochester at the prestigious 9th Congress of the International Colour Association, which concluded yesterday. Held once every four years, the congress is the world's premier convention for color science, technology, art and more.

Travis, Hutchings and Caivano were among about 300 professionals who spent the last five days here discussing various aspects of their craft and comparing notes about reds, greens and blues. If there's a common thread, it's that all three seek to use color to provoke some emotional or psychological response from their customers.

For Travis, who teaches at the University of South Wales in Sydney, Australia, that emotional response is the "wow" that visitors might utter when they enter a building and see his decorative scheme. He talks about how he decorated a new parliament building in Australia. Architects wanted the Senate chamber to be red, the House chamber to be green. Red's not exactly easy on the eyes, so Travis muted it by mixing in some green. The result was a red that was more pink - a more calming tone. The job is not really about picking a single color, Travis said. It's about picking schemes of colors that work well together. In that context, he says, his job is much like that of a writer who has to choose words that fit together well. "You have to make sure you pick the right color for the right position, just like you have to make sure you've got the right adjective," he said.

Caivano, who teaches architecture at the University of Buenos Aires, isn't quite so poetic about his industry, but he is no less intense about the use of color as a tool in the design of buildings. Color, he says, helps communicate information to individuals in a building. It can direct them where to go, where to sit, how to feel. "We use it sometimes as a psychological tool, to make you feel something or not feel something," Caivano said.

Psychology plays a huge role in Hutchings' position as a food color and appearance consultant and a former executive at Unilever Foods. Consumers have come to expect foods to have certain colors or shades, he says. Companies alter those colors at their peril. It's not trivial. Researchers have served meals to individuals in the dark, then turned on the lights to reveal green-colored meat or other odd hues. "People get physically sick," said Hutchings, based in Bedford, England. Most companies don't play with food colors but spend their time understanding how they can keep natural, frozen or processed foods as close as possible to their natural state. There's no one answer, Hutchings said: "It's the total visual experience."

The local business and academic communities added their own expertise to the conference this week, which came to Rochester in part because of the color science program at Rochester Institute of Technology.

It's the only program of its kind in the United States, said Roy Berns, an RIT color science professor. RIT tries to produce graduates with a color science background who can hold jobs in various industries, such as the digital imaging programs at Eastman Kodak Co. and Xerox Corp., Berns said.

"Reprinted by permission from the Democrat and Chronicle"

Closing Remarks

We will begin this closing ceremony with the AIC Student Awards. These awards were inspired by Professor Mitsuo Ikeda to honor students for their excellent work in color. We hope these Student Awards will become an AIC meeting tradition. Two awards will be presented. They are the Best Student Paper in the area of Science and Technology and the Best Student Paper in the area of Art and Design. The Student Paper Awards Committee was chaired by Karen Braun. Our thanks goes out to her for establishing a process by which to make this happen for the first time. She arranged for at least three judges to evaluate each student paper for content and presentation style. Our sincere thanks goes out to these judges who had the very important task of evaluating these papers. Now it is time to announce the winners. The winner for Best Paper in the area of Science and Technology is Caterina Ripamonte from Derby University for her presentation entitled "Perceptual Transparency". The winner for the Best Paper in the area of Art and Design is Margareta Tillberg from Stockholm University for her presentation entitled "The Russian Avant-Garde and Colour as Worldview". Before we close this Awards Ceremony, let's thank all our students who contributed very high quality papers to this AIC Congress.

Now it is time to share some very important information with you. First, all AIC Color 01 participants will receive the Congress Proceedings in the mail by the end of this year. Second, throughout the week, Lawrence Toplin, an RIT student, has been taking candid digital pictures of all Congress activities. We are going to post these pictures on the web site at www.iscc.org/aic2001. Please visit this site to see if he may have captured a picture of you or your friends. Many thanks to Lawrence for providing us with the opportunity of digitally recording this Congress so that we may keep it as our permanent record and everyone around the world can enjoy and experience what happened here. Third, many of you may have seen the video cameras in the back of the rooms recording the symposia. Since there were so many parallel symposia sessions with invited and contributed speakers, people could not be in two places at one time. So we have decided to produce video tapes of all the symposia in whatever format may be of interest. We owe Ken Pidgeon from the Colour Society of Australia our sincere gratitude for bringing two cameras from Australia so that we can provide this service. Our thanks also goes out to Christian Bruschank, who assisted in the videography. We have not yet produced the videotapes and we are still working out the details of how we can make these tapes available to the AIC color community. So please stay tuned for details on this by checking our web site at www.iscc.org/aic2001.

Now I would like to begin my closing remarks as I began my opening remarks; with an embrace. Only this time it is a farewell embrace. Here is the largest, warmest farewell embrace I can offer you, the AIC Color 01 participants. I'm not good at saying good-byes. So let's just say until we meet again. All week we have been thanking the AIC Color 01 Organizing Committee, but now it is time to thank you, the AIC participants for traveling from your homes around the world to this Rochester Congress. You have made it a success! Thank you to the oral presenters. Thank you to the poster presenters. Thank you to the invited speakers. Thank you to the session chairs. Thank you to the assistant session chairs. It was your enthusiastic participation that made AIC Color 01 a unique and memorable experience!

I hope everyone is going home with some answers to our five basic theme questions; what is color, what is color for, how does color work, how do we control color and how do we teach color? I hope there has been some cross-fertilization between the science/technology and art/design communities. The one thing that pleased me the most about this Congress was the networking that went on outside the meeting rooms. I saw many people engaged in intense hallway conversations over a pad of paper or a computer. Ultimately, this is what Congresses like these are all about; people exchanging ideas with other people. I hope you enjoyed meeting your international friends from other AIC countries and met some new international friends that you look forward to meeting at future AIC meetings.

I will close with another quote from the artist, Thomas Kinkade. "If we think of joy as colors in an artist's palette, we can say that giving joy to others actually adds dabs of joy in the form of color to our hearts." On behalf of the AIC Color 01 Organizing Committee, I hope we have added color to your hearts this week. We wish everyone a safe journey home.

Paula Alessi, Conference Chair

AIC Color 01 Congress Sponsorship

The AIC Color 01 Organizing Committee and the Inter-Society Color Council extend their sincere appreciation to financial supporters of the 9th Congress of the International Colour Association.

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The Inter-Society Color Council
wishes to express its sincere thanks to the
AIC Color 01 Organizing Committee,
in particular, Paula Alessi and Alan Rodrigues
for all their years of planning and preparation
prior and during the AIC Color 01 Congress.

Your contributions to the color profession
by way of the Congress in Rochester, NY
are greatly appreciated.

Color and Research Application

In This Issue, August 2001

It is with great sadness that we have to say good bye to Max Saltzman. We begin this issue with edited excerpts from the obituary that Roy Berns wrote and was published in the Inter-Society Color Council's *News* Number 390, March-April 2000.

Moving on to the articles in this issue, a quantitative measure of the difference in color performance between a given observer or device and a standard one is very useful. In the case of observers, often their color-matching functions are compared or their responses to a fixed set of stimuli. In "The Use of Metamers to Compare the Color Vision between Observers" J. M. Ezquerro, F. Carreño, J. M. Zoido, and E. Bernabeu propose a procedure to compare the colorimetric behavior of two observers.

Next we have the third and final part of the "Cross-Cultural Colour-Naming Study" by H. Lin, M. R. Luo, L. MacDonald, and A. W. S. Tarrant. Part 1 described an experiment that allowed the participants complete freedom in naming the color samples presented. Results showed a close agreement between the English and Mandarin in terms of color categories, but a large discrepancy in the use of secondary names due to cultural differences. In the experiment described in Part 2 the participants were asked to find the colors corresponding to basic names, modifiers, and secondary names in terms of one focal color or color region. The main aim of this experiment was to map focal colors corresponding to each of the important basic and secondary terms. Now we come to Part 3, in which a colour-naming model is described. This model categorizes the volumes for each of the 11 basic names in CIELAB color space. While the model performs quite well, with an average prediction error of roughly 8%, the authors challenge others with suggestions for future investigations, particularly into the use of other languages, and naming of CRT colors seen against dim or dark surrounds.

It has been widely accepted that our memory of col-

ors of common items such as sky, skin or grass is different than the actual colors we perceive for these objects. Our next authors Peter Bodrogi and Tünde Tarczali studied whether these shifts in color are systematic, and whether the color in the context of an image exhibits the same amount of change as a separate patch representing the object. In "Colour Memory for Various Sky, Skin, and Plant Colours: Effect of the Image Context," Bodrogi and Tarczali suggest a method to quantify these object colors and give tolerance bounds on them.

Gray is the topic of the next article. In "Some Modifications to Hering's Opponent-Colors Theory," Yoshinobu Nayatani introduces a middle neutral area between Herings opponent colors. In this article Dr. Nayatani talks about the different kinds of color-appearance space, in particular the space derived from color perceptions of objects, and the type that is modeled from the colorimetric values for predicting color perceptions. Looking primarily at the space derived from color perceptions of objects, and introducing the reference color Gray unifies the theories explaining a number of observed color effects.

The last article of this issue also examines color vision models and the effects they seek to explain. Specifically it is "On Saturation and Related Parameters Following Guth's ATD Colour Vision Model." P. Capilla, M. J. Luque, J. Gómez, and A. Palomares use Hunt's 1991 color-appearance model and the color-discrimination model by Yeh *et. al.* for comparison to Guth's ATD model.

We close this issue with several book reviews. First, Luke Mauk and Danny C. Rich each review *Billmeyer & Saltzman's Principles of Color Technology, 3rd Ed.* by Roy Berns. Haim Levkowitz reviews Levine's *Fundamentals of Sensation and Perception, 3rd Ed.* and Faith Florer reviews *Printing Materials: science & technology* by Bob Thompson. In an item entitled "Is There a Perceptual Color Space?" Qasim Zaidi reviews *Geometric Representation of Perceptual Phenomena* edited by Luce, D'Zmura, Hoffman, Iverson, and Romney. Finally Gary Field author of *Color Reproduction* comments on an earlier review of that book.

Ellen C. Carter, CR&A Editor

First European Conference on Color in Graphics Imaging and Vision (CGIV)

The Society for Imaging Science and Technology will hold the first ever European Conference on Color in Graphics, Imaging, and Vision will be held at the University of Poitiers, France, April 2 to 5, 2002. This new conference will fit a key niche in the imaging community. Some of the key points of interest on the program include: Colorimetry & Color Measurement, Color Vision and Image Understanding, Color Image Processing and Analysis, and Color Synthesis.

CGIV seeks to create a new cycle of conferences with a distinctly European flavor, in which the scientific program is complimentary to the programs of the International Conference on Image Processing (ICIP) and the Color Imaging Conference (CIC). CGIV will feature a number of basic and advanced seminars on color science, color vision, and color processing, with Tutorials planned on many similar topics.

The General Chairs, Drs. Christine Fernandez-Maloigne of the University of Poitiers and Raimondo Schettini of ITIM CNR, along with the IS&T would like to invite original technical contributions related to the topics outlined in the proposed program. For more information, please visit our website at <http://www.imaging.org> or contact the IS&T directly at (703) 642-9090 or email at cgiv@imaging.org.

"Optical Performance of the Human Eye"

**11th/12th September 2002
UMIST, Manchester, UK**

The Department of Optometry and Neuroscience, UMIST (University of Manchester Institute of Science and Technology), is hosting a conference in honour of the work of Neil Charman. Over the past thirty years, Neil's work on visual optics, accommodation, instrumentation and related optometric areas has been enormously influential to a generation of researchers and clinicians.

Invited speakers include Ken Ciuffreda (SUNY, USA), Neville Drasdo (Cardiff, Wales), Mike Freeman (Wales), David Henson (Manchester, UK), Howard Howland (Ithica, USA) and Jacob Sivak (Waterloo, Canada).

If you would like to register and/or give a short twenty-minute presentation please contact:

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BOLcolor 2001

1st Bolivian Color Congress

Asociacion Boliviana

September 24-26, 2001

Bolivian Catholic University, La Paz, Bolivia

Color study and investigation work will be presented in 20 minute speeches along with Graphic (Poster) exhibits. For more information please contact:

Nicolas Petit *anco@mail.Megalink.com*
or

Alfonso Claros *alfonsoclaros@mail.megalink.com*

Book Review

The New Munsell® Student Color Set, Second Edition, by Jim Long and Joy Turner Luke, Copyright 2001, Fairchild Publications, Inc., Maple Press Co., Legionaire Drive, POB 1287, Lebanon, PA 17042; \$45, 153 pages.

The New Munsell® Student Color Set is an easy to use guide for the artist, designer, or student to learn color and color science, and to apply that knowledge, practically. It is designed to teach color and color theory to those who interact with color without rigorous mathematics. An individual can use the set as a teaching tool to self-teach, or an instructor can use it in the classroom teaching a class. Chapter 1 is a discussion on the Munsell system developed by Albert Munsell in the early 1900's. This chapter forms the foundation for the instructive materials contained in the other chapters.

The Munsell® Book of Color, which is also called the Munsell Color Atlas or the Munsell Color System, is a system representing color appearance in terms of a three dimensional color space. The Munsell system describes color appearance in terms of three perceptual attributes. These are **Hue**, **Value** and **Chroma**, and these attributes can be assigned representative numerical values. For a comprehensive discourse visit the Munsell website, www.munsell.com.

The New Munsell® Student Color Set is a tool for teaching color, color science, and the Munsell Color Order System. As a teaching tool, it allows for creative expression, using imagination, emotion and talent. The *Munsell Student Color Set* is rich with history. It first appeared as *Color Notation* published by Albert Munsell in 1905. Later colored chips were added to accompany the text. It existed in this form with name changes and minor revisions until 1996. Then, Joy Turner Luke performed the first major revision. It contains materials one needs to teach color and color science. The update of *The New Munsell® Student Color Set* from the first edition includes utilizing our 21st Century tool – the computer. The updating consists of adding explanations and exercises for presenting color and appearance representations on monitors and color printers. This utilizes today's technological tools. The second edition represents a significant rewrite and expansion of the first edition. Jim Long is the contributing author for this edition.

The set contains 262 colored chips. The chips are approximately ½ x ¾ inch with a matte finish. The set contains a 10 Hue sub sets: 5R (Red), 5YR (Yellow-Red), 5Y (Yellow), 5GY (Green-Yellow), 5G (Green), 5BG (Blue-Green), 5B (Blue), 5PB (Purple-Blue), 5P (Purple), and 5RP (Red-Purple). The set is packaged in an attractive 7 x 10 inch three ring, black, plastic, binder. The name is printed on the front and side of the binder for easy identification in your bookcase. The binder contains a set of cards, 10 Hue and 1 neutral; a tutorial on color, color science, and the Munsell System; and a re-sealable pouch that holds the colored chips. Each of card contains an empty grid. The grid represents light to dark from top to bottom, and more chroma (saturation) across each hue page. One of the lessons is to place and glue each of the colored chips, 262 in total, into their appropriate position. This is really an exercise left for the student. The appropriate position for each chip is determined by understanding the hue circle and the meaning of value and chroma. The tutorial is printed on single pages so that when the binder is open it lays flat on a working surface.

The tutorial contains 10 chapters. Some of the most prominent people in our business reviewed each chapter or manuscript. There are 126 pages with a thorough Glossary, Reference Section, and Index. The Chapters are: Vocabulary; Science, Color, and Art; Light and Color; Vision and Color; Color Anomalies, Preference and Emotional Response; Additive Color Mixing; Subtractive Color Mixing; Relationships among Colors; Combining Colors; and Color in Designed Products, Installation and Printing. The publisher included 8 full color plates printed on four pages of heavy, glossy, paper stock that adds to the appearance, quality and usefulness of the book. These plates are a delightful addition to the second edition.

Each chapter contains an explanation of the phenomenon or subject, a Summary Section that reviews what one should have learned, and exercises, which are left for the student. The exercises are at the end of each chapter and reinforce a principle learned. I also noticed that a careful reading of the text had the exercise mentioned in the text of the tutorial. Remember exercises like this in college? The exercises are meaningful because they use the paint chips supplied in the

set. The authors cleverly designed the front and back covers of the tutorial to be a neutral gray, Munsell N 5/. These covers provide an excellent background for accessing color and visual phenomena when viewing against a neutral background is appropriate. To illustrate one of the exercises included and unique to the second edition, there is an exercise in Chapter 3, Light and Color, which instructs the student to “draw a large square on the computer monitor and color it. Print the same square on a matte paper and a glossy paper. Describe in Munsell terms the differences in appearance that you see . . .” This exercise was fun to do. It clearly demonstrated the difference between color and color appearance. In addition, it should be noted that this exercise is on the leading edge of the new frontier of color science and several challenges are before the student to complete this exercise successfully. These exercises and others require an application program capable of drawing. MS Word, Corel Draw, Photoshop, Paint, and Visio are programs that I have on my (PC) computer capable of creating and coloring the elementary shapes (the drawing). I used MS Word and Corel Draw to create colored images (squares) and was able to modify the color of those images. These types of exercises and explanations clearly separates the second edition from the first edition, which makes it a valuable modern day teaching tool. Students who studied color and color science using the first edition will profit from acquiring the second edition.

There are adequate numbers of illustrations. One of the illustrations is a copy of the 15th Century drawing by Uccello based on a system of perspective developed by Brunelleschi in the 14th Century. This illustration clearly demonstrates how the illusion of depth is created and provides a brief glimpse into the history of our science.

The New Munsell® Student Color Set is written so that it is an easy to use studio guide without the rigors of color theory. There is a conspicuous absence of math, even numbers, and technical terms in the entire book; yet, the authors meaningfully convey the important concepts and precepts. For example, in Chapter 4, Vision and Color, the concept of color vision is conveyed pictorially by using three graphs. The first graph is a curve shape (spectral reflectance factor) of an object. The second graph represents relative responses of the cone receptors, and the third graph is a bar chart showing the resultant relative combining effect of the visual channels; and of course all this finally being visualized as a color. This simple to understand treatment of a complex subject conveys the concept clearly. Together all the concepts presented in the tutorial provide an excellent foundation of understanding for what could be called “technical color. There is a companion Instructor’s Guide available with the book. Long and Luke authored this guide. This is an excellent tool for the educator that would assist and guide them in the classroom. The 23 full-page guide provides either a description of an exercise and the answers to more than 50 multiple-choice questions. These 50 plus questions in the tutorial can be used to measure a student’s comprehension of the presented materials. There are additional exercises that the instructor could choose to use, should the student require more challenges.

By in large the *The New Munsell® Student Color Set* is excellent. There is some room for improvement. For instance, the colored chips subtend about 1 degree with a normal working distance when seated of 27 inches. In addition, the size of the chips is difficult to handle when doing the exercises. I suggest that next time a larger specimen be provided to subtend a greater field of view. The quality of the printing and illustrations could be better. The quality of the Munsell Hue Circle presentation needs improvement. For instance, there are radial hatch lines in the blue section of the Hue circle that turn to tangential hatch lines towards the green part of the circle. The lines are distracting and I don’t understand their presence – perhaps they are erroneous. If they are, the producer should have taken more care in production. An obvious omission in the set is a tool or procedure for calibrating a monitor and printer. I hope the next edition describes or provides such a tool, because in my experience the absence of monitor or printer calibration causes unbelievably poor color representations on some monitors and printers. There are several software, hardware, and accessing tools on the market today. Each of these achieve various levels of precision. A monitor calibration tool would significantly enhance the quality of the observation and the reward the student for completing the exercise.

In aggregate, I recommend the book highly. It bridges complex color theory by using understandable concepts and illustrations. The exercises transform color theory into practice so that the student acquires a good practical understanding, and working knowledge of the concept. This book gives one an excellent, well-rounded knowledge of our science. Maple Press Company, Legionaire Drive, Lebanon, PA 17402, distributes the book.

Reviewed by Jack A. Ladson, ISCC President

Verriest Medal Awarded to Donald I.A. MacLeod by International Colour Vision Society

The International Colour Vision Society is pleased to announce that the Verriest Medal will be awarded at the biennial meeting in Cambridge, England to Donald I. A. MacLeod, Professor of Psychology at the University of California, San Diego.

This award is bestowed by the Society to honor long-term contributions to the field of color vision. Dr. MacLeod's empirical and theoretical contributions include some of the most striking advances in vision science in the second half of the twentieth century.

Among his many contributions, MacLeod (with Boynton, 1979) developed a constant luminance cone excitation chromaticity space. The MacLeod-Boynton chromaticity diagram is widely used, and has become the preferred way of expressing chromatic discrimination data. The Commission Internationale de l'Eclairage will include a version of the MacLeod-Boynton chromaticity diagram in its new physiologically based colorimetric system. With Eisner (1980), he provided experimental evidence that the S-cones do not contribute to flicker photometric sensitivity. With Williams and Hayhoe (1981), MacLeod psychophysically mapped the S-cone distribution in the fovea. With Webster (1983, 1987), MacLeod analyzed individual differences in cone receptor spectral sensitivities before molecular genetics provided a cellular basis for functional polymorphism. The conclusions of the Webster-MacLeod analysis are concordant with modern molecular genetic studies.

The selection committee members were: Samir S. Deeb, Joel M. Pokorny, André Roth, Luiz Carlos Silveira, Shoko Tanabe, Françoise Viénot and John S. Werner.

*Ken Knoblauch
General Secretary
International Colour Vision Society*

International Lighting Conference, 2001

Dhaka, Bangladesh - October 27-28, 2001
Illumination Society of Bangladesh (ISB).

The venue of the conference will be at Academic Council Building, Bangladesh University of Engineering & Technology (BUET). Renowned Engineers, Architects, Scientists, Professionals, Manufacturers from home and abroad will present technical papers and take part in the discussion. The recommendations of the conference will be submitted to the Government of Bangladesh for implementation. A large numbers of delegates from SAARCH countries, Europe, Malaysia and USA has already sent technical papers and have express their willingness to attend the conference.

We kindly request submissions of technical papers in this Lighting Conference to increase the awareness of Bangladeshi's in this field in any one of the following field.

1. Training and Education in Lighting Design & Application.
2. Standards, Codes, Safety measures in lighting Installation.
3. Lighting and Architecture.
4. Rural and Remote Area Lighting.
5. Road, Traffic, Monument and Area Lighting.
6. Lighting for Entertainment and Sports.
7. Renewable Energy Prospect in Bangladesh & World.
8. Problems and Prospectus in Mfg of Light Fittings and accessories.
9. Economics and Optimum Lighting.
10. Any other relevant to developing world.

You are requested to send a camera ready paper by September 30, 2001. Registration fees US\$200 for foreign delegates with US\$100 for accompanying persons and US\$125 for SAARC countries with US\$50 for accompanying person which will cover cost of conference proceedings, tea/coffee, lunch, transport between Airport-Hotel-Conference Venue etc. Please contact:

Syed M. A. Quddus, General Secretary
ISB and Member Secy Int'l Lighting Conference
2001 M. N. Plaza, 1st floor
2 New Eskaton Road
Baramaghbazar, Dhaka 1217 Bangladesh.
Tel: 880 2 8319603 Fax: 880 2 9335715, ical@bdmail.net

N.B. Those who have already sent full papers for the conference are requested to kindly confirm their participation as earliest as possible.

Argencolor 2002
6th Argentine Color Congress
September 9-12, 2002
Rosario, Argentina

The congress will be held at the School of Architecture, Planning and Design of Rosario National University. A wide thematic spectrum is proposed, where all kinds of color research, reflections and experiences, both general and particular, are to be included. A call is made to present proposals for papers or posters classified in the following four areas, according to their main approach, even if they follow interdisciplinary paths: 1) Color science and technology, 2) Color and the arts, 3) Color and design, 4) Color education.

Abstracts of 500 words maximum should be submitted before March 1, 2002. E-mail submissions are encouraged, along with a hardcopy sent by post; otherwise, send a diskette and hardcopy by post. Do not send abstracts by fax. The main language of the congress is Spanish, but presentations in English and Portuguese are welcome.

| | | |
|--------------------|--------------|--------------|
| Registration fees: | Before | After |
| | July 1, 2002 | July 1, 2002 |
| General | US\$ 50 | US\$ 60 |
| Student | US\$ 25 | US\$ 30 |

Info: ArgenColor 2002, Prof. Enzo Grivarello
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Fac. Ciencias Exactas UNR
Av. Pellegrini 250, 2000
Rosario, Santa Fe, Argentina
(54-341) 480-2649, fax (54-341) 480-2654
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Grupo Argentino del Color
Prof. Jose Luis Caivano
SICyT-FADU-UBA
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1428 Buenos Aires, Argentina
tel/fax (54-11) 4702-6009
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ABSTRACT SUBMISSION FORM

ArgenColor 2002 - 6th Argentine Color Congress
Rosario, Argentina, September 9-12, 2002

Author's name, title
Affiliation
Address
Tel/fax E-mail

Title of paper or poster
Check preference: Oral presentation
Poster

Equipment required for oral presentation
.....

Subject area of choice:
1. Color science and technology
2. Color and the arts
3. Color and design
4. Color education

Send this form along with the abstract to "Grupo Argentino del Color" (address above).

"Color and Light"

by Fred W. Billmeyer Jr., & Harry K. Hammond, III.
ASTM Paint Manual, Chapter 40, 23 pages
\$5 each or 20 copies \$50.00

Authorized reprint from:
ASTM Manual 17, Copyright 1996
American Society for Testing and Materials
100 Bar Harbor Dr., W. Conshahocken, PA 19428

"Demystifying Color"

by Bob Chung
11 pages (color)
\$5 each or 20 copies/\$50.00

Discusses and explains ten myths about color.

Either publication can be ordered by sending a check or money order (if pre-paid, s&h will be included) to:

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Cynthia J. Sturke, Admin. Asst.
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Jobs Wanted!

This Section is intended to help ISCC members that are in need of, and are looking for employment. Here is an opportunity to use the resources at hand. There is no charge for this service, however, the restrictions are as follows:

1. This service is for ISCC members' use only.
2. No more than 50 words may be used to describe yourself. (Not including name, address and/or telephone number, fax, email)
3. If you are using a P.O. Box, you must supply a complete address.
4. No Agency representing member(s) is allowed.
5. Neither the ISCC News nor the editor are responsible for any errors.
6. You must advise us in writing when you have obtained employment.

Contact the ISCC News Editor
Prof. Gultekin (Tek) Celikiz for more information.
celikizg@aol.com

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CALENDAR



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

Ms. Cynthia Sturke

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11491 Sunset Hills Road, Reston, VA 20190

703-318-0263 tel

email: iscc@compuserve.com

703-318-0514 fax

website: <http://www.iscc.org>

2001

- Sept 11** DCC, Panel Discussion on "Weathering", MSU Management Edu. Ctr., Troy, MI
Contact: Jim Keiser, james.r.keiser@dupont.usa.com
- Sept 19-20** AATCC Workshop on Color Measurement Principles and The Textile Industry, AATCC Technical Center, Research Park, NC, For information contact: Patty Whitaker P.O. Box 12215, Research Triangle Park, NC 27709-2215; 919-549-3546
- Sept 23-25** CAD/SPE RETEC 2001 "Hot Color - - -Cool Plastics", Marriott Resort Hotel, Marco Island, FL. Chair: Gary Beebe, A. Schulman, 330-239-3059
gary_beebe@aschulman.com
- Sept 27-29** Colour in Focus, Adelaide Australia 2001, Biennial Conference, The Colour Society of Australia (SA division) Contact: Ken Pidgeon, kpidgeon@bigpond.com
- Oct 13-15** Color and Vision Mtg of the OSA followed immediately by OSA Annual Mtg Long Beach Convention Ctr, Long Beach, CA <http://www-cvrl.ucsd.edu/osa>
- Oct 14-18** OSA Annual Meeting, Long Beach Convention Ctr, Long Beach, CA
- Oct 21-24** AATCC International Conference and Exhibition, Hyatt Regency, Greenville, SC, Contact: Shirley Clifton 919-549-8141 919-549-8933 fax
- Oct 22-26** NewRad at NIST, Gaithersburg, MD
- Oct 31-Nov 2** ASPRS and the Management Association for Private Photogrammetric Surveyors (MAPPS) are jointly planning a Digital Elevation Model (DEM) Specialty Conference for in St. Petersburg, Florida. Press Release. www.asprs.org/st.pete
- Nov. 5-9** IS&T/SID 8th Color Imaging Conf., Color Science, Systems & Applications, Scottsdale, AZ. Fax: 703-642-9094, info@imaging.org
- Dec 5- 7** The Art of Seeing and the Seeing of Art, Canberra Australia A conference exploring how normal and abnormal visual processes influence the interpretation of art. For more information: <http://cvs.anu.edu.au/artsci/> or Dr. T. Maddess, Visual Sciences Group, RSBS, ANU, Canberra ACT 0200 ted.maddess@anu.edu.au <http://cvs.anu.edu.au/maddess/>

2002

- Jan 20-23** ASTM D-1 on Paints, Embassy Suites, Ft. Lauderdale, FL
- Jan 22-25** ASTM E12 on Color and Appearance, Embassy Suites, Ft. Lauderdale, FL
- Rescheduled** ISCC Williamsburg Conference, Solutions for Industrial Color Problems, Chair: Ralph Stanziola, rascolor@juno.com **Changed to March 2003**
- Apr 2-5** CGIV'2002 First European Conference on Color in graphics Imaging and Vision, University of Poitiers, France Contact: Society for Imaging Science and Technology, 703-642-9090, 703-642-9094 fax, info@imaging.org or www.imaging.org

- | | |
|--------------------|--|
| Apr 7-10 | IS&T's PICS 2002 International Technical Conference on Digital Imaging, Portland, OR <i>http://www.imaging.org/conferences/pics2002/authors.cfm</i> |
| Apr 14-17 | TAGA 2002, Asheville Renaissance Hotel, Asheville, NC |
| Apr 20-23 | ISCC/Detroit Colour Council Joint Meeting, Troy, MI Chair: Jim Keiser, <i>james.r.keiser@usa.dupont.com</i> |
| April 22-26 | 2002 ASPRS-American Congress on Surveying and Mapping Annual Conference and FIG (International Federation of Surveyors) Congress, Washington, DC <i>http://www.fig2002.com/</i> |
| May 6-8 | CORM Annual Meeting, Sheraton Westport, St. Louis, MO |
| June 3-7 | SID Annual Meeting, Boston, MA Contact: Bill Klein, 212-460-8090x204 Fax: 212-460-5460 <i>wklein@palisades.org</i> |
| June 9-13 | Fourth Oxford Conference on Spectrometry, Davidson College, Davidson, N.C. Info: Art Springsteen <i>arts@aviantechnologies.com</i> Teresa Goodman <i>tmg@npl.co.uk</i> |
| June 16-20 | ASTM D-1 on Paints - Meeting and Centennial Symposium, Philadelphia, PA |
| June 26-28 | ASTM E-12 on Color and Appearance, Little America Hotel & Towers, Salt Lake City, UT |
| Aug 29-31 | Interim Meeting: AIC Color 2002, "Color & Textiles" Maribor, Slovenia Contact: <i>vanja.kokol@uni-mb.si</i> |
| Oct 1-4 | AATCC International Conference and Exhibition, Charlotte Convention Ctr, Charlotte, NC Contact: Shirley Clifton 919-549-8141 919-549-8933 fax |
| Nov 8-15 | Integrating Remote Sensing at the Global, Regional and Local Scale. The 15th William T. Pecora Memorial Remote Sensing Symposium/Land Satellite Information IV Conference and the ISPRS Commission I (Platforms and Sensors) Symposium, Denver, Colorado, conference website <i>www.asprs.org/Pecora-ISPRS-2002</i>. For more information about ISPRS please see <i>www.isprs.org</i> |

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|----------------|--|
| March | ISCC Williamsburg Conference , Solutions for Industrial Color Problems, Chair: Ralph Stanziola, <i>rascolor@juno.com</i> Philadelphia (exact date TBD) |
| May 3-9 | ASPRS Annual Conference , Anchorage, AK, |
| Aug 4-6 | Midterm Meeting: AIC Color 2003, “Color Communication & Management” Bangkok, Thailand Contact: <i>aran@sc.chula.ac.th</i> |

Combined Issues #392 & #393

July/August 2001

September/October 2001

Editor: Prof. Gultekin (Tek) Celikiz
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Erdenheim, PA 19038-7025
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celikizg@aol.com

All submissions must be in English.

November/December articles must be submitted by October 1st, 2001.

Advertising Policy

The ISCC advertising policy for the Inter-Society Color Council News is as follows. Pre-paid color-related advertising will be accepted thirty days in advance of the publishing date. The rates are:

| | |
|---------|-----------------------|
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Artwork must be publisher ready and will be returned within 30 days after publication. The publishers reserve the right to determine the acceptability of the advertising. A 20% discount is offered for a yearly contract.

Contact: Tek Celikiz, Editor 703-215-836-5729 or
Cynthia Sturke, ISCC Office Manager 703-318-0263

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