

# Association Internationale de la Couleur

Newsletter 15 2001

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AIC

## Association Internationale de la Couleur Internationale Vereinigung für die Farbe International Colour Association

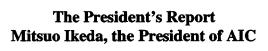
## Newsletter 15, April 2001

Edited by Paula J. Alessi

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The biggest event of the AIC in the past one year was the AIC Interim Meeting held in Seoul, Korea for three days, 6, 7 and 8 November 2000. Two hundred thirty four attendants gathered at the fourth floor of COEX and listened to invited papers and contributed papers on "Color and Environment." The last day was spent for the excursion of Seoul. At the opening ceremony I had the opportunity to make the AIC President's greeting and the President's Closing remarks at the end of the meeting. I would like to reproduce most of them here as they include what I want to say to all the AIC member countries.

## The opening greeting included the following:

It was February of 1998 when I received a letter from Professor Yan-Sup Lee, the past President of the Korean Society of Color Studies (KSCS), to formally invite the AIC Interim Meeting of the year 2000 to Korea. I was particularly happy to receive it because the society was still very young and yet felt it important to invite us to have a meeting in their country. The letter said; "Even though KSCS has its short history as a member country of AIC, it holds its regular conference twice a year and keeps a close relationship with researchers, designers and artists who are interested in color. The KSCS is certain that we will make a conference interesting, informative and successful to participants if the Executive Committee of AIC approves Korea's opening of the conference."

The AIC Executive Committee met at Nice, France in August 1998 and we heard the preliminary but already attractive program of the meeting from Prof. Jin-Sook Lee, an AIC Executive Committee member from Korea, and formally accepted the invitation. I see so many participants here to present papers. I counted 3 invited papers and 78 contributed papers to confirm the fulfillment of Professor Yan-Sup Lee's promise.

The AIC is to present an international forum for color scientists, engineers, designers, doctors, historians and others. We came here from the west and the east. We attended here from the north and the south. The culture may be quite different among us. But by talking with each other we can understand others and get new ideas about science and design and so on. Our backgrounds may be quite different from each other, color science, engineering, design, psychology, medicine, history and so forth. But by exchanging our opinions we can get new ideas for our activities. The AIC is to offer the forum. I sincerely hope you will make a full use of this Interim Meeting.

The AIC holds the Congress every four years. We had the 8th Congress in 1997 in Kyoto, Japan and will have the 9th in 2001 in Rochester, New York, USA. We just decided at the Executive Committee Meeting held yesterday that we will hold the 10th Congress in Granada, Spain in May 2005. In between the Congresses, we hold the Interim Meetings and the Midterm Meeting on some specific color topics, like Color and Environment. After Rochester

we go to Maribor, Slovenia in October 2002 to discuss "Color in Textile", and to Bangkok, Thailand in August 2003 for the theme, "Color Communication and Management". You have chance to present your papers and to meet your friends from other countries every year. I hope you will continue to come to the AIC meetings in the future.

Beside these meetings we have a system called Study Groups. At the moment we have three; Environmental Color Design, chaired by Professor Caivano from Argentina, Visual Illusions, chaired by Professor da Pos from Italy and Color Education, chaired by Ms. Bergström from Sweden. You can join any group at any time. You just contact the chairperson. If you don't know the chairperson, you can talk during this meeting to Professor Javier Romero from Spain who is in charge of the Study Groups in the AIC EC.

You will get valuable information on the subject of the Study Groups from other members mostly through e-mail or the Internet. We are happy to announce that we established a new and the fourth Study Group, Color Perception by the Elderly to be chaired by Professor Okajima from Japan. I hope you will enjoy any of the four Study Groups and also you yourself may propose yet another Study Group. The AIC's policy is "Do it yourself."

The AIC is expanding and our friends are increasing in number. In this past year three countries joined us; Brazil, Bolivia and Thailand.

## Now the closing remarks:

In the opening ceremony, I said that the AIC is to present an international forum where you make new scientific and professional friends from other countries. Did you make the new friends? I am sure that you did. I said also that the AIC is to present an international forum to exchange opinions with people from different professional fields so that our viewpoint can be enlarged. Did you have the chance? I am sure that you did. I also did.

But more than that, I could understand that the color science and the use of the color have infinite possibilities in the future. One speaker used the word, "expanding color" and the other, "Color comes first." I was greatly encouraged by these expressions. With these experiences we can now happily go home to our respective countries.

I would like to thank once again the Korean Society of Color Studies and the Organizing Committee. We will not forget their kindness and also their effort to make this meeting successful and fruitful. I see from the scientific program of this meeting that there were rather small numbers of the contributed papers in the oral sessions but large numbers in the poster sessions from Korea. This fact indicates, I believe, that the Korean colleagues sacrificed themselves to offer their time to the visitors for the oral presentations as much as possible. We will remember the kind consideration of Korean colleagues.

The fact that there were more than 150 attendants at the Seoul meeting from Korea, 40 from Japan and 5 from Thailand shows that it is important to hold AIC meetings in various countries so that people of any member country can have a chance to attend at least one or two AIC meetings over several years. The AIC EC carefully plans where to hold future

meetings; North America in 2001, Eastern Europe in 2002, Asia in 2003 and Europe in 2005. I hope we can get an invitation for the meetings from other continents as well.

My term as the President completes at the end of this year and we will have the new President, Ms Paula Alessi to succeed me on the first day of 2002. But I still have time and would like to continue to encourage non-member countries to join us by organizing their national societies if they don't have them yet. If you know any person in these countries who might work to organize his/her national society and wish to join the AIC, please let me know. I will contact him/her and visit his/her country to meet his/her colleagues to explain about the AIC if that works for both the country and the AIC.

## AIC Secretary/Treasurer's Report - Frank Rochow

#### Dear AIC members!

In the last year our friends of the Korean Society of Color Studies organized the outstanding AIC Meeting Color & Environment in Seoul. I am sure that the success of this meeting was the result of the hard work of the Korean organizers.

We, as the AIC Executive Committee, tried to help support all efforts to make people aware that AIC, its study groups and meetings are a major source for information and a solid base for exchange of knowledge in all fields of color. In this respect I fully supported Paula Alessi in the decision to have the Newsletter 14 / 2000 printed and distributed in a volume higher than ever. Although we had to face the fact that this would cost more than the amount we could regularly afford, it was very clear that money spent for this publication would be a good investment for the future of the AIC. The response from our member organizations was encouraging.

Before and during the meeting in Seoul, I could propose two new observers to the EC for approval:

Suzan Habib, living in Turkey, joined as an Observer

Dr. Leo Oberascher joined as an Observer and replaced the member Austrian Color Society

The financial report of the Secretary/Treasurer has been compiled and will be sent out to the auditors.

I will present this report during the Meeting of delegates in Rochester.

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# AIC Study Groups By Professor Javier Romero, AIC Executive Committee Member

During the last EC meeting in Seoul, EC member Professor Javier Romero reported on the activities of the different Study Groups of the AIC. The Study Groups on "Environmental Color Design", "Color Education" and "Visual Illusions and Effects" and the subgroup on "Color in Art Education" maintain a good level of work. They continue with different activities, many of them developed through the Internet. They are preparing information for our next Congress in Rochester, New York, USA.

Due to the initiative of Professor Ikeda, a new Study Group has been approved. Its topic is "Color Perception of the Elderly". Its first chairman is Professor Katsunori Okajima, from the Department of Applied Physics of the National Defense Academy of Japan. Those who are interested in this area of knowledge are invited to join the group.

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## **AIC Study Group on Color Education**

## Are you interested in participating in the AIC Study Group on Color Education?

The Study Group on Color Education of the International Color Association (AIC) is an international network of scientists, teachers within the field of color (color theory, color design, color psychology etc.) and other professionals like designers and architects with a specific interest in color education.

## Aims of the Study Group Color Education

- Exchange of knowledge and experiences among its members.
- Stimulation of teaching and research.
- Inform about coming congresses, seminars, workshops and exhibitions which might be of interest for the members of the group.
- Share with other members news from congresses, seminars, workshops, publications and exhibitions.

#### Membership of the Study Group Color Education

Membership is free, and is available for every person/organization who/which scientifically or practically deals with color in color education, contributes to the realization of the aims mentioned above to generally support the Study Group. The requisites for being incorporated as a new member of the Color Education Study Group are:

- To subscribe and participate in the e-mail list
- To have presented a paper or poster at an AIC meeting

Berit Bergström, Swedish Colour Centre Foundation

e-mail

Please fill in this form and fax it or mail it to the Swedish Colour Centre Foundation. I also would like to have a short description how you are working with color education.

Send your form to: Swedish Colour Centre Foundation, Box 49022, S-100 28 Stoc Tel: +46 8 617 47 00, Fax: +46 8 617 47 47, e-mail: swedish.colour.centre@ncscolo	
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University/Company	_
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## **AIC Study Group on Environmental Color Design**

José Luis Caivano and Leonhard Oberascher (chair-persons)

The AIC Study Group on Environmental Color Design (ECD) is an international community of scientists, designers, architects, artists and other professionals with a specific interest in color as a means of environmental design and its effects on human emotion, cognition and behavior. The aims are: the exchange of knowledge and experience among its members; the stimulation of research and teaching, meetings and exhibitions; the propagation of knowledge and experiences through congresses, seminars, workshops, publications and exhibitions.

At the AIC Congress 1997, in Kyoto, Japan, it was proposed to follow two steps to meet some of the mentioned aims in the present situation: 1) to establish an internet site, and 2) to create a e-mail list for discussion. The first aspect would include a home page with general information about the Study Group, the list of members with their addresses (in order to facilitate the knowledge of each other and the exchange of information), links to other web sites (a call is made to provide information about sites related to environmental color design), and a section where contributed papers on environmental color design could be published. The second aspect —the e-mail list—would allow more informal discussion on topics related to color design, posting news and information of interest to subscribers.

At present, the internet home page was set up, at least in its first aspects (www/fadu.uba.ar/sicyt/color/ecd.htm), and the e-mail list is running, with more than 160 subscribers from 26 countries (the list is constantly growing). It still remains to arrange the publication of papers on the web, but efforts to organize this matter are on the way. The idea is to establish an editorial board and a referral system to evaluate the articles before publication.

The e-mail list allows a continuous connection among ECD members and other interested people, exchange of abstracts presented to the AIC meetings, informal documents and images produced by subscribers, call for papers and programs of meetings, contents of journals and bibliography of interest, etc. Subscription is free; every interested person can subscribe, not only ECD members. However, it is arranged as a closed list, so that only subscribers can send messages to it. This is to avoid the list being saturated with commercial messages. The address of the list is <color@fadu.uba.ar>. In order to be included, it is only necessary to send the message "subscribe color <email address>" (just this line in the body of the message —without quotation marks, and with the address of the subscriber—, no subject, no signature) to <majordomo@fadu.uba.ar>.

ECD membership is also free, and is available for every person/organization who/which scientifically or practically deals with color as a means of environmental design, contributes to the realization of the aims mentioned above or wants to generally support the Study Group. The only requisites for being incorporated as a new member of the ECD Study Group are: a) to subscribe and participate in the e-mail list; b) to have presented a paper or poster at an AIC meeting (as a matter of fact, new members are incorporated at AIC meetings).

At present, the Study Group is organizing a Symposium on Environmental Color Design at the AIC Color 01, Rochester, where, in addition to the presentation of specific papers, a discussion will be opened to establish the future specific aims and activities of the group.

## 2001 AIC Judd Award Recipient - Lic. Roberto Daniel Lozano

The AIC Executive Committee is proud to announce that the recipient of its coveted 2001 AIC Deane B. Judd Award will be Lic. Roberto Daniel Lozano from the Argentine Color Group. This Award will be bestowed upon Lic. Lozano at the Thursday evening banquet, June 28th at the AIC 9th Congress in Rochester, New York.

The Award was established in 1975 to recognize work of international importance in the fields of colour perception, colour measurement, or colour technology. Lic. Lozano joins such distinguished previous recipients as Dorothy Nickerson, W. David Wright, Gunter Wysecki, Manfred Richter, David MacAdam, Leo Hurvich, Dorothea Jameson, Robert W. G. Hunt, Tarow Indow, Hans Vos, Pieter Walraven, Yoshinobu Nayatani, Heinz Terstiege, Anders Hard, Gunnar Tonnquist, Lars Sivik, and Fred Billmeyer.

Lic. Lozano received a B. S. in Science in 1970, a B. S. in Computer Science in 1972, and a M. A. in Applied Mathematics in 1972. His postgraduate studies included studying color reproduction from Prof. W. D. Wright and Prof. R. W. G. Hunt at the Imperial College of Science and Technology at the University of London. He did fellowships at NPL and BAM to study radiometry, photometry and colorimetry. He manages to speak six languages.

His publications include 137 papers on such topics as large-field color-matching, photometry, colour measurement of retroreflective materials, evaluation of colour difference formulae, goniophotometric measurement, and measurement of color in foods. He has published a book in spanish dedicated colorimetry: "La Medición del Color". He has been very active within the CIE and has contributed to many of its publications in the areas of photometry, radiometry, colorimetry, and retroreflection. He was editor of the Proceedings of the AIC 6th Session "Color 89".

He has been very active in the Argentine Association on Illumination (AADL), serving as President and Vice President of the Buenos Aires branch from 1967-1969; 1976-1978. He has been Chairman of the AADL Committee on Colorimetry since 1967. He served as Chairman of the Argentine Color Group from 1980 - 1992. He is an honorary member of the Argentine Color Group. He was Chairman of the Organizing Committee for AIC Color 89, the 6th session in Buenos Aires. He is a member of the Colour Group of Great Britain and the Inter-Society Color Council. He is the Argentine delegate to CIE Division 2 on Physical Measurement of Light and Radiation, consultant to CIE Division 1 on Vision and Colour, and consultant to CIE Division 4 on Lighting and Signaling for Transport.

He has taught many courses on colour from 1967 to the present. He worked at the National Institute of Industrial Technology (INTI) as head of the Optical Division of the Physics Department dealing with radiometry, photometry, colorimetry, optical instrumentation and physical optics. Later he became head of the Industrial Physics Sector, which included Acoustics, Materials and Optics. Currently he is a private consultant for his own company, Tecnologia del Color S. A.

Lic. Lozano is a most accomplished colour scientist with expertise in many different aspects of the field, which he acquired over the more than 35 years that he has devoted his life to colour. The AIC Executive Committee is proud to honor his accomplishments in the field of colour by bestowing upon him the coveted Deane B. Judd Award. Please join us at AIC Color 01 banquet in Rochester, New York to honor Lic. Roberto Daniel Lozano as he receives the Award. We will also have the pleasure of hearing him give a talk on his lifetime achievements on the area of colour.



## NEWS FROM THE ARGENTINE COLOR GROUP

#### **MEETING REPORT: ArgenColor 2000, 5th Argentine Color Congress**

Organized in cooperation with the School of Arts and Design of Cuyo National University, the meeting was held in Mendoza city during May 15-18, 2000. The attendance was 466 people, with 110 works presented: 21 invited lectures, 82 papers, 5 posters, and 2 workshops.

The invited lectures were: J. Caivano (Argentina): Linguistic and cognitive categorization in the domain of color; C. Calvo (Spain): Color in food legislation; E. Cerrato (Argentina): A proposal for the teaching of color at the university level; R. Césari (Argentina): The mapping of data applied to color; J. Finol (Venezuela): Semiotics of color: black & white vs color in photography; M. Garavaglia (Argentina): Quasi-moire patterns and color; P. Green-Armytage (Australia): Color questions: what? where? who? why? when? how?; E. Hita (Spain): Some aspects of color teaching and research; J. Hutchings (United Kingdom): Color and appearance in food and design; L. Jiménez del Barco (Spain): Considerations about color appearance; T. Kehlibarov (Bulgaria): Color science and its applications at the beginning of the millennium; A. Kibedi Varga (The Netherlands): The specificity of painting: the "debat sur le dessin et le coloris"; C. Kirschbaum (Argentina): The visual environment; J. Le Parc (France): Light and color in my artistic work; R. Lozano (Argentina): Quality control with color standards in Argentina and the Mercosur; J. Magariños (Argentina): Iconic qualisigns in the context of private semiosis; S. Marcus (Rumania): The logic of colors; M. Mattiello (Argentina): Synchronization of complex stimuli in space and time; H. Palomo (Argentina): Aesthetic assessment of color and shape in objects; H. Terstiege (Germany): History of color difference evaluation; J. Vila Ortiz (Argentina): Chromatic factors incident on the evaluation of products.

In addition, other participants from Argentina, Bolivia, Brazil, Chile, Colombia, Peru and Spain presented papers that covered different aspects of color: industrial design, architecture, interior design, urban heritage, landscape, textiles and clothing, typography, photography, packaging, cultural identity, painting and sculpture, light, shape, texture, cesia, movement, music, visual semiotics, semantic potential, language, literary works, influences on human beings, psychology, preferences, ergonomics, multimedia, teaching, Goethe's theory, NCS, Küppers, and CIE/RGB/CVS systems, zone system in photography, appearance, tolerances, standards, differences, computational models, vision, reproduction, metals, and food.

Papers and workshops were arranged in two parallel sessions, and invited lectures in plenary sessions. There was simultaneous Spanish translation for lectures and papers delivered in English and Portuguese. The book of abstracts was published before the congress (to get an attached file with the abstracts, write to jcaivano@fadu.uba.ar), while the full Proceedings are in preparation.

#### Next congress, new honorary members, and officers of the GAC

At the general assembly, during the 5th Congress, the next national meeting to be held in Rosario city in 2002 was approved. Also, three people were appointed as honorary members of the GAC: Mario Garavaglia, Jorge Glusberg, and Enrique Hita. As the result of the election of half of its executive committee, the following people are now the officers of the GAC: José L. Caivano (president), Juan L. Ferrari (vice-president), Rodrigo Amuchástegui (secretary), Cristina Manganiello (vice-secretary), Laura Quaintenne (treasurer), Ingrid Menghi (vice-treasurer), Salvador Melita, Andrea Pappier, Diana Varela, Hugo Sinelnicof, Liliana García Ferré (vocals), Roberto D. Lozano, Jorge Sánchez, and Silvio Roldán (control committee).

#### **PUBLICATIONS**

GAC revista (journal and newsletter). Three issues were published in 2000: Nr. 7 (April), 8 (August), and 9 (December), with 20 to 24 pages each.

ArgenColor 1998, Proceedings of the 4th Congress, compiled by J. Caivano and R. Amuchá stegui (Buenos Aires: GAC, 2000). With 64 papers divided in three sections: color in art & culture, color in design & architecture, color vision & color technology, 330 pages.

#### **OTHER ACTIVITIES**

Color Day at the National Museum of Fine Arts: Buenos Aires, October 25, 2000. With lectures by Gracia Cutuli, María L. Punte, Rodrigo Amuchástegui, Julieta Garavaglia, Andrea Pappier, Laura Quaintenne, Elda Cerrato, Diana Varela, José Caivano, María Mattiello & Mora Chague, Carlos Kirschbaum, Roberto Lozano, Mario Garavaglia, Sandra Sánchez, Mabel López, Juan Magariños, Cristina Manganiello, Omar Burgos, and Sergio Aschero.

Lecture: New conclusions on space and time from my previous work on invisible sculptures, by Jorge Iglesias, artist that has investigated and experimented on the ways in which color and light modify the perception of space. December 18, at the School of Architecture, Buenos Aires University.

Visits: During 2000, the GAC received the visit of Dr. Emilio Pérez Picazo and Dr. Vicente De Gracia, from the Industrial Association of Optics (Valencia, Spain), on June 15; and Arch. Rita Rao, from the Color Institute (Milan, Italy), on December 28.

**Exhibition**: The GAC participated with an institutional stand in ExpoCEPRARA 2000, exhibition of the manufacturers of paintings, August 31 - September 3, Buenos Aires.

## SPECIALIZATION AND MASTER ON COLOR AT THE INSTITUTE OF ARTS

With the assistance and advice of the Argentine Color Group (GAC), two new postgraduate careers have been created at the National Institute of Arts (IUNA), in Argentina, which are going to start in March 2001:

Specialization in Color: With seminars on Color Physics, Color Chemistry, Anatomy and Physiology of the Visual System, Semiotics and Psychology of Color, History of Colors, Compared Color Theories, Chromatic Reproduction I (graphic and photographic), Chromatic Reproduction II (film, TV, and video), Chromatic Production I and II.

Master in Color: With seminars on Color, Shape and Space I and II, Chromatic Reproduction III (digital), Color and Music, Color in Architecture, Color in the Natural and Urban Landscape, Applied Color I and II, Chromatic Production III and IV.

While some of the directors and professors of the seminars belong to the IUNA (Juan Astica, Alfredo Benavídez Bedoya, Guillermo Kexel, Ricardo Longhini, Duilio Pierri), most of them are members of the GAC (Antonio Alvarez, Sergio Aschero, María M. Avila, Omar Burgos, José L. Caivano, Roberto D. Lozano, Cristina Manganiello, María L. Mattiello, Salvador Melita, Susana Moralejo, Marcela Murgia, Andrea Pappier, Mauricio Rinaldi, Diana Varela, among others).

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## The Colour Society of Australia Report

The year 2000 was not as busy as 1999 for The Society, as it was the year in between biennial conferences, however the individual State committees have been busy running successful monthly or bi-monthly events for our members. The next conference in 2001 is being organised by the South Australian Division for September 2001, the venue being Adelaide University Union Cinema. Offers of speakers with international expertise and information are welcomed now. Perhaps some might like to visit us after Rochester.

The National Executive of The Colour Society of Australia is centered around Adelaide, with the President being Dr. Ken Pidgeon, President Elect Ms. Annamarie di Cara (NSW), National Secretary currently Mr. Bill Field who took over from Mr. Ian Threlfall mid year, and National Treasurer Mr Len Corena. The Chair will move to NSW late in 2001 following the next Conference and 2001 AGM.

The Colour Society of Australia was inaugurated in 1987 and has Divisions in New South Wales, Victoria, Western Australia, South Australia and Queensland. The membership is drawn from people whose work and interests involve colour. Our objectives are:

Provision of a forum on colour and its application in science, industry, the visual arts and education.

Promotion of colour consciousness, both within colour-related spheres and in the wider community.

Fostering of international collaboration in colour.

Provision of avenues for the acquisition of colour information for all members of the community.

Encouragement and promotion of research into all aspects and applications of colour.

SPECTRUM, the Journal of the Colour Society of Australia, is published 3 times a year. It contains information about events and developments within the Society and the international colour arena, as well as including the texts of papers delivered at the national conferences and divisional meetings and encourages the submission of original material.

We wish to interact more with overseas people who are venturing "down under". We have the ability to host visitors to each of the states, and are keen to foster more movement of colour knowledge this way. If you are planning to visit, and have something relevant to say about Colour, then please make contact with me.

Forward plans include a desire to host an AIC Congress sometime in the future, centered about Melbourne, Victoria.

Ken Pidgeon

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## Color Group - Bulgaria (CGB) Report

Meetings: The main event of 2000 was the National seminar, which took place last December, under the auspices of the Ministry of the Education and Science, on the main topics: "Color in education". Twenty reports were represented and more than 60 people, representatives of universities, colleges and institutes attended the event. The main goal of the seminar was to contribute to the establishment of new educational programs, concerning the different aspects of color.

The annual report meeting of the Color Group – Bulgaria was held in January 2000, along with a seminar on the topics: "Color – Architecture – Design". The most interesting lectures were the audio-video ones: "Architecture of churches and ritual houses in the USA", by architect Andreychin, and "Modern industrial design in Hong Kong and Singapore", by architect Dzharov.

A joint seminar was held on 3 and 4 April 2000 with the Union of Quality Specialists on the topics: "The role of advertising in business". The 14 lectures were published in the Proceedings of the seminar. The students' competition on art and design provoked a big interest amongst the participants.

During the International Fair in Plovdiv, which took place in May 2000, a national seminar on the topics: "Quality control of color and color measuring in the industry" was held. It gathered more than 50 participants and 8 lectures were presented to the audience. Great interest was shown in the presentation of the apparatus of "Gretag – Macbeth".

The member of our Board, Mrs. Ralitza Gueleva, participated in the poster session of the AIC Interim Meeting in Seoul, Korea, held in November 2000. Her lecture, including poster information about the activities of CGB, was presented by the organizing committee, because Mrs. Gueleva could not attend the meeting herself.

Since October 2000, CGB began to accept applications for collective membership and the first one amongst them was from the greatest scientific institution in Bulgaria – the Bulgarian Academy of Sciences. The greatest University – the University of Sofia, followed it. The University for Architecture, Construction and Geodesy, the New Bulgarian University, the South-West University, the National Polytechnic Museum, the biggest chemical firm Solvay-Sodi and many others joined them.

**Publications**: The Proceedings of the International Conference "Bulcolor '99", containing 41 papers, on 270 pages, including 24 pages in full color, are published in English. The book "Color and cultural heritage" with color illustrations on 100 pages, printed in English, and containing papers contributed by international and Bulgarian authors is also available (information about their content and price could be sent on request).

New initiatives: CGB offers all member-countries of the AIC its ability to organize joint (bilateral or multilateral) International Color Conferences in Bulgaria. This offer would include expositions at the International House of Scientists "Frederic Joliot-Curie", situated in the resort Saints Constantine and Elena (in the surroundings of Varna, at the Black Sea coast, with International airport). That location offers wonderful premises and conditions for organizing big international congresses, in the months from April to November.

More information is available on request.

The website of Color Group – Bulgaria (English version included) is under construction.

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## The Hungarian National Colour Committee

#### Address:

## **Hungarian National Colour Committee**

**Prof. Antal NEMCSICS** 

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## Representatives:

Antal Nemcsics (President), József Hegedüs (Secretary), Gyula Lukács, Klara Wenczel, János Zana, Éva Mester (Leaders of WGs), Árpád Szende (Chairman of Section ÉTE), Lá szló Miskei (Chairman of Advisory Board of "Foundation Colour and Light").

#### **Activities:**

Because the Hungarian Colour Committee operates as an international committee of the Hungarian Academy of Sciences, according to the procedure of new academy cycle which begun in 2000, in the same year the managerial body has been re-elected. In addition to regular members, some members with consultation rights were also adopted. It serves the aim that the Committee should represent all segments specialised in light the widest possible way.

Working Groups operating successfully in 2000: Trainig, Colour Environment Planning, Colour System – Colour Measurement, Information.

A "Scientific Standpoint" has been published about the official protection of visual appearance of built environment and it has been submitted to the supreme authorities concerned.

Collecting and commenting the training materials of higher educational institutions dealing with training of colours has been started.

Provided co-operation in creating the new Coloroid colour atlas, colour transformation and colour harmony software, supporting design of colour environment and improving the level of training.

Organised a traveling exhibition and conference series in the interest of boosting the culture of colour environment.

Investigated the status of Foundation of Colour and Light being established on the initiative of the Committee. Submitted a proposal for its operation as a public foundation. The Court has transcategorized the Foundation as a public foundation.

#### **Publications:**

Three publications of the informative circular "Colourinfo" (Szinfo) Coloroid Colour Atlas

## Meeting:

Conference: "Visual face of the town". September 2000. University of Debrecen (Hungary)

Conference: "The coloured town". November 2000. Training College Nyíregyháza (Hungary)

## Associazione Ottica Italiana (AOI)

During the year 2000, the AOI (S. Villani, Chair; L.R. Ronchi, responsible for Publications and for the AIC-Italy link) has been regularly pursuing its activity, as reported below.

The AOI was founded in the late twenties (of the past century!) as a non-profit organization, and as a reference point for people with common interests in Optics and related fields. Amongs other things, the AOI has been linking Italy to AIC since its foundation, by distributing its Newsletters, the calls to its meetings, by fulfilling requests of bibliographical material, etc.

Italy has been represented at the 2000 AIC meeting Seoul through an oral communication by O. da Pos (Padova), L. Fossati and K.D. Broota being the co-authors, a poster by S. Rizzo (Genova) and a poster by L.R. Ronchi.

At the AIC Color 01, Rochester, the Italian contributions will include O. da Pos, with an oral communication and as a panelist in the Symposium of invited speakers "What is Colour?", an oral communication by C. Oleari (Parma), and a poster by L.R. Ronchi. Other attendees are expected. In particular, some material testing the activity of the Istituto del Colore (Milan), led by R. Salardi will be displayed.

The official publication of AOI, the journal "Luce e Immagini" has been regularly issued.

The interest for colour, in Italy, is rapidly growing, and various initiatives are in course, ranging from computer-assisted colorimetry, restoration of art material, in addition to the classical themes, graphic art, fashion, textiles, interior decoration, and so on.

The AOI is often called to take part (even for a limited number of hours), in various courses, at various levels: from the beginners, sure that the colours are seven (like the bands of the solar spectrum) or that colour was invented by the computer, to the professionals who wish a serious and concise up-to-dating.

In particular, during the year 2000, particular attention has been devoted, on the part of AOI, to two sections: Dialogues with the Architects (in liaison with Lighting Engineering), and the Task Force on Binocularity where Optometrists were called to consider, in particular, colour-related problems.

For 2001, an educational program is planned, dealing with the non-independence of light-and-colour; from sensation to appearance; how difficult is it to transfer the laboratory data to the real world; the risks of "easy research"; man as a "measure instrument"; the perceptual organization and the photometric-colorimetric assessment of visual scenery. The role played by colour across all these items will be stressed. The bibliographical references are annotated and displayed in the books: Visione e Illuminazione alle soglie del 2000 (Vision and Lighting at the beginning of 2000) L.R.Ronchi, Vol. II e Vol. II.

Lucia R. Ronchi

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## The Color Science Association of Japan (CSAJ)

#### **2000 Board Members**

Naoyuki Osaka (President), Gentaro Ohmi (Vice-President), Shuntaro Higa (Vice-President), Yasuyuki Kuge (Chair of Kanto Chapter), Hiroaki Sobagaki (Chair of Kansai Chapter), Takuzo Inagaki (Chair of Tokai Chapter), Shoko Ashizawa (Treasure), Hirohisa Yaguchi (Representative to AIC), Yasuyo Ichihara, Tohru Ohzeki, Masayuki Ohtake, Masahito Suda, Kiyoharu Nakatsuka, Hideaki Kawasaki, Hiroshi Shimazaki, Kazuo Jo, Kenji Sugimoto, Sanae Nakagawa, Hiroshi Hasegawa, Katsuaki Sakata.

#### **Meetings**

The 31th annual meeting of the CSAJ was held in Osaka City University, Osaka, on May 19-20, 2000. The number of participants was 252, and 61 papers were presented. Fourteen companies put measurement instruments and books on display at another annexed exhibition.

Color Forum Japan 2000 was held in Tokyo on Nov. 16-17, 2000. The number of participants was about 200, and 37 papers were presented. A special session "Standards in Color Imaging" was programmed.

#### **Awards**

2000 CSAJ Award: Nagaichi Suga

2000 CSAJ Research Encouraging Award: Wonjoung Lee

### **Study Group**

In 2000, CSAJ has 11 study groups; Color Design, Environmental Color, Color Education, Colorimetry, Color Coordinate, Curriculum for Color Education, Tutorial Materials for Color Education, Personal Color, Illusion, Color Vision, and Color in Culture.

#### **Publications**

Journal of the Color Science Association, Vol. 24, No.1-4 and Supplement, 2000 were published.

CSAJ News were published bimonthly.



# Nederlandse Vereniging voor Kleurenstudie (Netherlands Society for Color studies)

Secretariat: Hans Vrijmoed, P.O.box 3, NL-2170 BA Sassenheim, The Netherlands.

Tel.:(31)713082616,Fax: (31)713086920, E-mail: = hans.vrijmoed@akzonobel.com

The "Nederlandse Vereniging voor Kleurenstudie" was founded in 1947 in

Amsterdam. Its aims and objectives are:

- 1. To encourage the study of colour and to disseminate the existing knowledge of color for all applications.
- 2. To promote the wittingly use of colour.
- 3. To bring together the members of the different disciplines (such as architecture, physics, art, therapy, education, etc.) that are working with colour.

#### **Boardmembers:**

Clara Froger, President
Hans Vrijmoed, Secretary
Onno de Vries, Treasurer
Diny Leijsen
Ciska Hosper-Jonkers
Hennie van den Boogert
Beata Franso, Editor Kleurenvisie

## Report of activities in 2000

As usual two conferences were held in 2000. The theme of the spring conference was "Colorfacets". The theme of the autumn conference was "Color and textile". Four issues of our magazine "Kleurenvisie" (in dutch) appeared during the year. Beata Franso has succeeded Pim Burgers as editor Kleurenvisie. The curriculum of the color course "Kleurenconsulent" that is given by the "Leyden educational establishment" under the auspices of our society was updated and as a consequence many lessons were rewritten or added by our (board)members. More than twenty books were added to our library that is located at the school of arts in Utrecht.

Sincerely,

Onno de Vries, NVvK boardmember

## DRUŠTVO KOLORISTOV SLOVENIJE

SLOVENIAN COLORISTS ASSOCIATION



Vetrinjska 16, 2000 Maribor

Slovenia

January, 2001

#### **ANNUAL REPORT 2000**

During the year 2000, the Slovenian Colorists Association carried out the following activities:

- organization of the regular SCA meeting,
- international activities,
- exhibition preparation entitled Phenomena of Colour,
- expert book publishing,
- research program conducting,
- designing of the SCA home page on Internet,

The SCA regular meeting was on 27th January 2000. At this meeting, the members of SCA voted the new leadership 2000-2004. The members elected again Prof. Dr. Slava Jeler for the president again, but for other members of the Executive Committee, there were some changes:

Executive Committee of Slovenian Colorists Association:

President: Prof.Dr. Slava Jeler

slava.jeler@uni-mb.si

Treasurer: Jože Pavlenič Secretary: Dunja Legat,

legat@uni-mb.si

Section for:

Architecture leader: Andrej Žižek

andrej.zizek@guest.arnes.si

Art leader: Andrej Skrbinek
Design leader: Vera Sešlar Založnik

Graphic and paper leader: Marko Kumar

marko.kumar@delo.si

Polymers leader: Prof.Dr. Vojko Musil

vojko.musil@uni-mb.si

Coatings leader: Nataša Barle, M.Sc.
Colour psychology leader: Prof. Dr. Maks Tušak

Textiles leader: Prof. Dr. Vera Golob

vera.golob@uni-mb.si

Health and medicine leader: Dušan Božič

Our Executive Committee or individual members, as representatives of their expert fields, are available for all expert information. They could be contacted directly or through the Secretary by e-mail or by post (address: Društvo Koloristov Slovenije, Vetrinjska 16, 2000 Maribor, Slovenia).

At the regular meeting, we also confirmed the rules of the student education fund. The SCA decided to maintain a fund to assist the international post-graduate education in the field of colour science of our members. The first student, to whom SCA contributed some funds, was Mrs. Klemetina Možina from University of Ljubljana. She visited the University of Reading, Department of Typography and Graphic Communication.

At this meeting we also included the new section for health and medicine into the association. The leader of this section is Mr. Dušan Božič, Doctor of medicine. We also made some other statute changes.

At last year's regular meeting, SCA also awarded two members in recognition of their merits to our association. The president Prof. Dr. Slava Jeler gave thanks to Mr. Marko Kumar and to Prof. Dr. Vera Golob. Both are unselfish members of our association and without them the association woudn't be as successful as it is.

We also succeeded to participate in some international symposia and meetings. Prof. Dr. Vera Golob participated at the Interim AIC meeting in Warsaw. There she presented our proposal to organize an AIC Interim meeting in Slovenia in 2002 with the main topic of colour in textiles. She and her collegue, Darko Golob, also actively participated at the AIC Interim Meeting in Seoul. She also took part in the AIC Executive Committee meeting, where she reported about our preparation activities for the Interim Meeting organization in 2002. Our members also actively participated in Farb-Info (October 2000) in Weimar, Germany. Because of less money, we couldn't attend the IFATCC and DfwG annual meetings.

This year SCA has also contacted some other associations abroad. We proposed our members to affiliate with the Swiss association, Procolore, as individual members. We also tried to contact the association Farbberater from the field of architecture and we have spoken with the representatives of the Royal Chemistry Association.

For our members and others interested in colour, we organized two lectures:

- 1. Colour and Human, January 27th, 2000 (Milena Plut Podvršič)
- 2. The Psychology and Perception of Colour and Shape, 14th April, 2000 (Prof. Dr. James Guthrie, University of Leeds)

SCA also prepared an exhibition entitled Phenomena of Colour. The exhibition was from 16th to 21th October, 2000. We featured 18 panels with different topics: theory of colour science (physics, chemistry, physiology, psychology, color systems, color measurement) and also the development of colour science in Slovenia. It also exhibited colour literature and measurement devices. 1270 vistors came.

The most important task of SCA in the year 2000 was the preparation of an expert monograph entitled Interdisciplinarity of colour. It will be published in two parts: theoretical basis and practical applications. All writers are our members. The first part of the book is almost finished. The papers are all reviewed. We planned that the book will have about 300 pages. This task will be the most important task of our association also in the year 2001.

The Slovenian Colorists Association is accessible also through the Internet. Welcome to our home page.

## The Color Committee of Spain

During this year, the Color Committee of Spain has tried to continue working for the development of color science, and looking for attending the professional needs of all its members. It has been improved and periodically updated the World Wide Web page of the Committee (<a href="http://sedo.optica.csic.es/color/color.html">http://sedo.optica.csic.es/color/color.html</a>), which we strongly invite you to visit. Among other events in this year, the next ones could be mentioned:

The Color Committee of Spain became a new endorsing society of the reputable American journal Color Research and Application, together with the color societies of 7 other countries (USA, Great Britain, Japan, The Netherlands, Sweden, Australia and France). This endorsement was proposed to the Committee by the journal, as a consequence of the numerous manuscripts received from Spain in the past few years, indicating a noteworthy color research activity. A welcome editorial with information about the history and goals of our Committee was published in Col Res Appl 2000; 25(4): 240. The current endorsement extends from January 1, 2000 through December 31, 2002, and it is renewable for annual periods. Dr. Manuel Melgosa, Universidad de Granada, was appointed by the Color Committee of Spain, and accepted by the publisher (John Wiley & Sons) as a new Associate Editor for this journal.

Some members of the Committee participated in different national and international meetings, such as, for example, the V Congreso Nacional del Color de Argentina, Argencolor'2000 (Mendoza 15-19.V.2000), AIC Interim Meeting (Seoul, 6-7.IX.2000), First International Conference on Color in Graphics and Image Processing, CGIP (Saint Etienne, 1-4.X.2000), and the Sixth Meeting of the Optical Society of Spain (Medina del Campo, 19-22.IX.2000). In this last meeting, there was a specific session devoted to color with 3 oral presentations and 21 posters (a brief meeting report will be soon published in the Spanish journal Óptica Pura y Aplicada, and also in Color Research and Application).

Dr. Enrique Hita, Universidad de Granada, who is the current President of the Optical Society of Spain, was distinguished in September as a new Honorary Member of the Grupo Argentino del Color.

The Color Committee of Spain renewed its board of directors. The current President is Dr. Angel I. Negueruela, Universidad de Zaragoza, who will be assisted by Dr. Jaume Pujol, Universidad Politécnica de Cataluña (Barcelona), as Vice-President (President Elect), and Dr. Manuel Melgosa, Universidad de Granada, as Secretary. Dr. Luis Jimenez del Barco, Universidad de Granada, was the previous President of the Committee during the period 1997-2000, and Dr. Joaquín Campos, Consejo Superior de Investigaciones Científicas (Madrid), acted as the Secretary in the period 1990-2000.

## Stiftelsen Svenskt Färgcentrum

## Swedish Colour Centre Foundation

Igeldammsgatan 30 • PoBox 49022 S-100 28 Stockholm Sweden Tel. 08-617 47 00 • Telefax 08-617 47 47 Stockholm January 2001

#### History

In 1964, the Swedish Colour Centre Foundation was founded by IVA (Royal Academy of Engineering Sciences), Swedish Design Council and the industry to carry out interdisciplinary research and development within the colour field. Dr Anders Hård, the creator of the NCS-system, was appointed to lead the work together with well-known colour researchers such as Dr Lars Sivik (psychology) and Prof. Gunnar Tonnquist (physics) and of course Hesselgren and many other influential architects, designers, teachers and industrial personalities.

Today the task of the Swedish Colour Centre Foundation is:

- to encourage scientific research within the colour field of interest for industry, education and people working with colour
- to spread new knowledge and experience within the colour field
- to be a natural centre for colour and colour research

## **Colour Day 2000**

This Year's Colour Day arranged by The Swedish Colour Centre Foundation had happily gathered 180 participants on May 10, 2000 in Stockholm. This year's theme was dedicated to food, under the heading "What does colour taste like?".

During this Colour Day, we also had the pleasure of introducing John Hutchings to the Swedish audience. How does the colour of the food influence its taste and smell? How important is the arrangement on the plate? How great an influence does the design of the room have? How important are such factors for how good we consider the food to be? What does the restaurant want the guest to feel during the meal?

#### **Members meeting**

In January we could listen to an interesting talk by Helle Wijk about colour perception in old age with implications about the environment.

During this year we have also had a very interesting debate about grey colours. Anders Hård contributes to the debate by asking whether grey is an elementary colour or a mere blending of black and white. He refers to the various historical sources and mentions also the electrophysiological research on colour vision. In Hårds' opinion, grey is a blending of white and black. Hård also wanted to try theories by Hans Fog about whether people are capable of distinguishing grey as an elementary colour. The members of the Colour Centre met in September to judge the grey colours in an experiment led by Hård.

In November we had our annual meeting and in connection with this we could listen to some presentations about colour. It was Anders Nilsson who talked about "Colour on computers", Monica Billger informed us about "Universeum – a new scientific centre" and Siri Homlang presented her thesis about "Colours on the old Amish quilt".

Berit Bergström, Secretary

## The Color Group of Thailand (CGT)

Since the establishment of CGT in 1998, the number of new members joining the group increased continuously. A meeting is held regularly so as to achieve the objective, which is to encourage the members to learn more about color as well as, to do research, relevant to its applications. We expand the research in various fields such as food, textiles and graphic arts, including standardization of thai color emotion words.

## **Activity Report**

Last November, our representatives, including Mr. Santi Songsermsawas. the President, attended the 2000 AIC Meeting at Seoul. One poster and 2 joint research papers were given at this event. The President also joined the AIC Executive Committee meeting to propose the AIC Interim Meeting in Bangkok on August 4-5, 2003; and finally the decision was supported. The theme will be "Colour Communication & Management". We welcome all who are interested in these fields.

The group plans to organize a meeting and color seminar for the thai public in May 2001, according to the title "Color Theory and Management", together with the announcement of AIC Color 01 in Rochester.

#### **Notification of Address**

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# **Inter-Society Color Council**



The Inter-Society Color Council was founded in 1931to advance knowledge of color as it relates to art, science, and industry. Each of these fields enriches the others, furthering the general objective of color education. There are three membership: Member-Body. classes of Individual, and Sustaining. Delegates are appointed to represent ISCC member-bodies, organizations which are national members have a professional interest in color. The ISCC has a large number of individual members and any person or organization who desires to support the goals of the ISCC can become a sustaining member. The ISCC

publishes a newsletter six times a year under the editorship of Prof. Gultekin Celikiz featuring accounts of various meetings, activities, book reviews, and articles of interest about color.

The ISCC representative to the AIC is Michael H. Brill, Past President of the ISCC. The ISCC office is located at 11491 Sunset Hills Road, Reston, VA 20190. Tel: 703-381-0263, Fax: 703-318-0514, <u>iscc@compuserve.com</u>, and our "newly renovated" website: <u>http://www.iscc.org</u>. Cynthia Sturke is our Office Manager.

Since the last AIC Newsletter, the ISCC has had a very exciting and active year beginning with the 69<sup>th</sup> Annual Meeting April 2000, in Charlotte, N.C., co-locating with the Color Pigments Manufacturers Association (CPMA). Romesh Kumar chaired the meeting, and also managed the facility arrangements. At this meeting, the ISCC presented the Nickerson Service Award to Hugh S. Fairman and the Macbeth Award to Brian A. Wandell. Eugene M. Allen was awarded Honorary Membership status at a ceremony separate from the Annual Meeting. The Annual Meeting featured many interesting speakers representing the three Interest Groups and the Education Committee. Impressive poster presentations were also featured. Robert Buckley, Mary McKnight and Alan Kravetz were welcomed as new ISCC Board members. Additionally, at this meeting the presidential gavel was passed from Michael H. Brill to Jack A. Ladson, and Danny Rich became the new ISCC President-Elect. Romesh Kumar Chaired a good and informative annual meeting for the ISCC.

In March 19-20, 2001, the ISCC will sponsor a color course, "Color Basics for Industry," chaired by Roland Connelly and Richard Harold. The course will be held in Cleveland, Ohio, and will be a practical introduction for industrial managers and technologists. Prior training in color science is not required for these two days of interactive instruction and learning. Whereas the first day will give a general background, the second day will have sessions devoted to four technology areas (textiles/dyes; paints/plastics;

graphic arts/inks/design, and digital color communication), among which each participant can select two.

The largest-ever event to be sponsored by the ISCC will be the AIC Color 01 Congress in Rochester, New York on June 24-29, 2001. Paula Alessi (Chair of the Organizing Committee) and many other ISCC members in Rochester are working hard to The AIC Congress is a large international forum for bring the Congress to fruition. exchange of information about color. Its program reflects the broadest range of perspectives, from color science to art and design; yet the program features revolutionary, groundbreaking papers, presentations, and exhibits in each of these fields. Because of the large size and international scope of the Congress, participants will be able to get as general or as specialized a view as they want. The symposia of invited speakers include the following topics: "What is color?" "What is color for?" "How is the CIE helping us make color work?" "How shall we teach color?" "The why's and how's of color management;" "The state of the art and future of color management;" "Imaging techniques for spectral estimation;" "The artist and digital media;" Color issues for digital archives;" "Future role of color in the three-dimensional world;" and "The future of color." Besides the technical symposia, the Congress will feature numerous tours and social events so participants can enjoy their visit and get the best possible view of the technical and cultural resources in Rochester, NY.

The ISCC has four current Project Committees: #51 – Materials Standards and Their Use in Calibration and Verification, chaired by Art Springsteen and Jack Ladson; #52-Comparative List of Color Terms II, chaired by Ellen C. Carter; and and #53-"Webliography" of Color, chaired by Michael H. Brill; and #54—Colors of Maximum Contrast, chaired by Hugh Fairman and Ralph Stanziola. (This last was approved at the September 2000 Board meeting.) Project Committees 52 and 53 met for the first time at the Charlotte Annual Meeting, and all the committees will convene at AIC 2001 this June.

Finally, in keeping with its goals to further education on color, the ISCC has a new Student Chapter at the Fashion Institute of Technology (New York), bringing our total up to three.

## **RECENT ACTIVITIES IN CIE DIVISION 1**

## Ken Sagawa, Director CIE Division 1

CIE Division 1 "Vision and Colour" is concerned with all aspects of visual functions and color as one of them in relation to light and lighting. The division is addressed as the most fundamental one among the 7 Divisions in the CIE. The terms of reference read "To study visual responses to light and to establish standards of response functions, models and procedures of specification relevant to photometry, colorimetry, colour rendering, visual performance and visual assessment of light and lighting".

There are two sections, Vision and Colour, in the Division to fulfil these terms of reference, both being supervised by an associate director. Dr Franáoise Viènot in France and Dr Mike Pointer in UK are in charge of these tasks for Vision and Colour respectively. There used to be a third section named "Visual Ergonomics" but this merged into the Vision section in 1998 as we found no clear distinction between the two.

The Vision section covers fields concerning luminous efficiency and photometry, colour vision, visual acuity, contrast sensitivity, visual field, visual recognition, visual performance and more cognitive aspects of vision. The colour section is dealing with all the aspects of colorimetry and its basics. The specific fields currently covered are colour difference evaluation, colour rendering, chromatic adaptation, colour appearance, standard sources for colorimetry, and colour specification in general. These fields are investigated for some technical standards or recommendations in relation to light and lighting. Each section has about 20 technical committees and several reporters to investigate specific problems. The following Table 1 shows these Technical Committees (TCs) and Reporters (R) currently running in the Division.

**Table 1: Technical Committees and Reporters in CIE Division 1 VISION** 

V XOXO		
TC1-19	Specification of Visibility for Real Tasks	W. Adrian (CA)
TC1-21	Testing of Supplementary Systems of Photometry	K. Sagawa (JP)
TC1-26	Individual Variation of Heterochromatic Brightness Matching	H. Yaguchi(JP)
TC1-30	Luminous Efficiency Functions	M. Ikeda (JP)
TC1-36	Fundamental Chromaticity Diagram with Physiologically Significant Axes	F. Vienot (FR)
TC1-37	Supplementary System of Photometry	K. Sagawa (JP)
TC1-41	Extension of $V_m(\lambda)$ Beyond 830 nm	P. Walraven (NL)
TC1-42	Colour Appearance in Peripheral Vision	M. Ayama (JP)
TC1-46	Concept and Application of Equivalent luminance	Y. Nakano (JP)
TC1-50	Disability Glare Formula	J.J. Vos (NL)
TC1-51	Visual Acuity	H.J. Schmidt- Clausen
TC1-54	Age-related Change of Visual Response	K. Sagawa (JP)
TC1-58	Visual Performance in the Mesopic Range	J Taylor (UK)
TC1-59	Standard Photometric 10- degree Observer	J Schanda (HU)
R1-03	Engineering Applications of Brightness Scales	T. Takeuchi (JP)
R1-06	Transient Adaptation	S. Kokoschka (DE)
R1-16	Visual Adaptation to Complex Luminance Distribution	H. Shinoda (JP)

R1-19	Specification on Individual Variation in Heterochromatic Brightness	H. Yaguchi (JP)
	Matching	
R1-20	Visual Performance in the Mesopic Range	J. Taylor (UK)
R1-22	Contrast Sensitivity Function for Detection and Discrimination	E. Martinez-
		Uriegas(US)
R1-23	Guidelines on Planning a Mesopic Photometry Investigation	P. Trezona (UK)
R1-27	Measurement of pupil diameter	P Trezona (UK)
COLOU	TR .	
TC1-27	Specification of Colour Appearance for Reflective Media and Self-	P. Alessi (US)
	Luminous Display Comparison	
TC1-38	Compatibility of Tabular Data for Computational Purposes	C. McCamy (US)
TC1-44	Practical Daylight Sources for Colorimetry	R. Hirschler (BR)
TC1-47	IC1-47 Hue and Lightness Dependent Correction to Industrial Colour Difference	
	Evaluation	
TC1-48	Revision of CIE Document 15.2 Colorimetry	J. Schanda (HU)
TC1-52	Chromatic Adaptation Transform	L. Luo (UK)
TC1-53	A standard Method of Assessing the Quality of Daylight Simulators	C. McCamy (US)
TC1-55	Uniform Colour Space for Industrial Colour Difference Evaluation	J. Nobbs (UK)

Following are some current topics of Division 1 among the above TC and Reporter activities.

The Use of Colour Identification Under Various Illuminance Levels

M. Brill (US)

M Pointer (UK)

G. Derefeldt (SE)

M. Pointer (UK)

M. Fairchild (US)

P. Walraven (NL)

T. Ishida (JP)

K. Witt (DE)

## (1) Supplementary System of Photometry

TC1-56 Improved Color Matching Functions

Cognitive Aspects of Colour

Colour Appearance Models

CIE Encyclopaedia on Colour

Liaison with ISO/TC35: Paint and Varnishes

Lighting Terminology

TC1-57 Standards in Colorimetry

R1-11

R1-15

R1-18

R1-24

R1-25

R1-26

The CIE photometric system, which is based on  $V(\lambda)$  function, is an excellent one and widely used in illuminating engineering. It has now become clear, however, that this system has a shortcoming in assessing coloured lights in terms of apparent brightness. discrepancy between luminance and apparent brightness appears in two manners; one is called the Helmholtz-Kohlraush effect in which highly saturated colours usually look brighter than achromatic colours of the same luminance, and the other is the Purkinje effect where bluish colours look brighter than reddish colours at low luminance levels, called mesopic vision, even if they are at the same luminance. Division 1 has been investigating underlying visual mechanisms and tried to develop a photometry for evaluating apparent brightness in order to supplement the current CIE system. Technical Committee, TC-21, has finished testing a number of proposed systems and a report is now almost ready for publication. In the next step, TC1-37 is now investigating a possible photometric system to be recommended as a CIE supplementary system of photometry. Some other TCs are also investigating related problems such as luminous efficiency functions for various viewing conditions (TC1-30), or conceptualization of equivalent luminance as a general photometric unit (TC1-46). As the need for correct evaluation of brightness of coloured lights at any level is practically important, the supplementary system, when it is established, will be a very useful tool for the assessment of lighting and visual environment including the mesopic range. Recently, the mesopic photometry based on visual performance (TC1-58) such as detection or acuity (TC1-51) is also under investigation to solve various practical problems in the mesopic vision.

(2) Cone Fundamentals and a Physiologically Based Chromaticity Diagram
There has been a need regarding colour-matching functions for scientific and educational
uses to understand if there are more reliable cone fundamentals and cone excitations when
tristimulus values are given. There have been a number of basic studies on cone

fundamentals and the research is still ongoing. Division 1 has been looking for a most reliable data set of colour-matching functions and a most reliable way to convert from these functions to cone fundamentals. An effort has also been taken to establish a new chromaticity diagram that is based on the physiological cone excitations that is able to tell us how much each of the three types of cones is excited when we see a colour of given tristimulus values. This will provide us a more accurate colorimetric system for general colour specification and a comprehensive chromaticity diagram for scientific study and education on human colour vision. TC1-36 is in charge of this task and the work is in a final stage to draw a conclusion to be published as a technical report.

## (3) Colour Difference Evaluation

Colour difference is one of the most active fields in the "Colour" section. Industry requires colour difference evaluation that can be used widey in the application fields where a large variety of samples and viewing conditions exist. It is well known that colour difference is largely dependent on these stimulus and condition variables. Division 1 has been trying to develop a better evaluation method that meets this large variety of stimulus conditions. In recent years, a number of TCs and Reporters have been established to solve these problems associated with colour differences. For example, dependence on chroma, lightness and hue have been investigated respectively, and some technical reports were already published. Now TC1-47 is in charge of specifying the influence of hue and lightness. This TC has just completed the work and is ready to publish a report.

#### (4) Colour Appearance and Related Topics

Appearance of colour is particularly important in the imaging industry for such things as colour displays and colour prints viewed under a variety of viewing conditions. Better prediction of colour appearance and colour reproduction based on it are always required. After long challenging work for the development of a colour appearance model, the former TC1-34 proposed a CIE colour appearance model whose simple version is known as CIECAM97s. It was proposed for interim use and this has been one of the highlights of the recent activities in the Colour section of Division 1. Related topics are also being actively investigated in other TCs and Reporters, such as colour appearance comparison between hardcopy and softcopy (TC1-27), and chromatic adaptation transforms (TC1-52). Problems in the practical application of CIECAM97s are investigated in Division 8. It has been generally agreed since the establishment of a new Division 8 that Division 1 covers fundamental aspects of colorimetry and Division 8 is more application-oriented. Since the work of both Divisions often relates to similar topics, it has been recommended that both Divisions keep a close liaison to exchange information and to link relevant works to avoid duplication of effort. Studies on colour appearance models are still continued in a scientific field. As such studies lead to new research outcomes, Division 1 will seek a better model that is a closer match to the human colour perception in the future.

## (5) Revision of CIE Publication No. 15.2

The CIE Publication No. 15.2 "Colorimetry" has been a best seller among the CIE Publications for a long time. It has been one of the most influential publications in the CIE colorimetric field. However, some of the contents are now outdated and, moreover, TCs in the Colour section have come up with new CIE colorimetric results that have been published separately. Division 1 thus decided to revise 15.2 for a new edition, 15.3, by including new information from these TC activities in the CIE colorimetry area. TC1-48 is taking this job of producing 15.3. The new edition will contain all the current relevant

information on basic colorimetry, such as colour specification, colour difference evaluation, colour rendering, standard sources for colorimetry, and so on. The work is almost coming to a final stage and the new Publication 15.3 will appear soon.

These above-mentioned activities are brief introductions to the current Division 1 activities. Of course there are many other activities important in Division 1, but not cited here. Among them, activities concerning visual ergonomics are expected to be more active to meet the various practical problems related to visual performance. TC1-54 on aging effects on vision is one of them and it is expected to meet requirements for designing better lighting and visual signs for the elderly people.

For more information on any activities within Division 1, please visit the web site at <a href="http://nml.csir.co.za/~cie1/">http://nml.csir.co.za/~cie1/</a>.

In order to discuss these activities, Division 1 meets once a year where the activities for the year are summarized and a future plan for the Division is discussed. As the fields covered by Division 1, especially in the Colour section, are very closely related to those of AIC, and the same people are involved in both AIC and CIE Division 1, it is usual to have a meeting in conjunction with AIC. We think we should keep this friendly relation with AIC in the future too.

## **Update on CIE Division 8**

Todd Newman
Director, Division 8
Canon R&D Center Americas, Inc.

In 1998, the CIE formed a new division, Division 8 – Image Technology. The division was formed to bring the CIE's expertise in vision, color science, and metrology to bear on a broad range of imaging problems. Its goal is to find common solutions that can be applied in such diverse areas as graphic arts, telecommunications, and medicine. Currently, engineers find that standards are either completely missing, lag behind the latest color science, or are inconsistent between different industries. Because it is vitally important that color standards be consistent across industries and applications, the division will make a concerted effort to form liaisons with all relevant standards bodies. While it is important for Division 8 to address the entire imaging problem as a whole, it would be unreasonably daunting to ask any one technical committee (TC) to attempt to solve all the imaging problems at once. Instead, we must break the problem into tractable sub-problems that the TCs can attack. It will be up to the division as a whole to make sure that these solutions can be integrated into a whole as we progress.

## **Color Appearance Modeling for Color Management Applications (TC8-01)**

The work of TC8-01 proceeds on two fronts. First, the committee is planning to produce a revised version of the CIECAM97s color appearance model that works better for imaging applications. Several problems have been reported reported by developers who use CIECAM97s. The minimum lightness correlate that can be obtained from the model is not equal to zero and is not any fixed value. The value for the surround should be based on a measurable quantity, not a qualitative judgement. The selection of surround conditions has a non-intuitive relation to the size of the device gamut. The chromatic adaptation transform is not always invertable. The model seems to expand the chroma of near-neutral colors. Finally, the model does not define a standard Cartesian co-ordinate system, only a polar co-ordinate system.

Second, the committee will focus on developing very clear guidelines for setting the models parameters for common image display and viewing situations, such a CRT in the home or office, prints on paper, and projected slides. CIECAM97s has quite a few more "knobs" than CIELAB. Those doing implementation work may easily misuse the model. It then runs the risk of being stigmatized as either "too complicated" or "broken." I believe that clear, complete defaults and guidelines for using the model, endorsed by the CIE itself, will go a long way toward encouraging acceptance and use of the model.

## **Color Difference Evaluation in Images (TC 8-02)**

The ultimate goal of TC8-02 is to derive an industrial color-difference evaluation method for images. Current color difference formulas (CIELAB, CMC, etc.) are based on color patches that subtend 2 degrees or more of the field of vision. Color patches in images tend to be much smaller. On the one hand, our eyes tend to be more forgiving of color errors for such small patches. On the other hand, systematic errors over the entire image would be quite noticeable and objectionable. Hence, we find a need for an image-specific color difference formula. The

method must be based on a quantitative model of color-differences for a standard observer under conditions typical of commercial imaging applications.

## Gamut Mapping (TC 8-03)

Consider the problem of reproducing an original image created on a desktop CRT monitor on the LCD of a laptop computer. If CRT displays and LCD displays could produce the same range of colors, then image reproduction would be a matter of determining the appearance of the original and then determining the voltages needed to reproduce that appearance. Unfortunately, these two media (CRTs and LCDs) cannot produce the same range of colors. We say that the media have different "gamuts." The same problems occur with more traditional media like ink and paper. A critical problem in image reproduction is what to do with the source image colors that are not reproducible within the gamut of a destination medium.

The goal of TC8-03 is to study, develop and recommend a baseline solution for cross-device and cross-media image reproduction. This solution will provide a standard procedure to calculate the color gamut of an image, an imaging system, or its components, and either one algorithm, or a set of algorithms and rules for use in specific applications. A "baseline" is a starting point, but it is open to extension by various specialised solutions from different vendors or for special applications. However, standardised baseline behaviour is vitally important for reliable communication of color information across networks.

## **Adaptation Under Mixed Illumination Conditions (TC 8-04)**

This is another area where Division 8 intends to extend the work done by another division in order to make it more useful to industry. CIE Technical Committee 1-27 has done fine work on appearance matching between video displays (soft copy) and paper (hard copy). However, their work requires that people completely adapt to each viewing condition. Both consumers and professional graphic artists want to compare an electronic original side by side with its hard-copy reproduction. This causes some problems for color scientists. The primary one is figuring out what stimulus will appear white to people in this situation. As most color appearance models do, CIECAM97s requires us to specify a white point. We know that people find neither paper white nor the monitor white to be a "true white" in this situation. As yet, we do not have a standard mathematical formula to determine their adapted white point. This technical committee is trying to determine that. The problem is even more complicated than that due to a phenomenon called "discounting." This has to do with the difference in color perception of reflective surfaces and light sources. In ways we do not yet fully understand, it seems that monitors and other self-luminous displays are perceived partly as light sources and partly as reflective surfaces.

### **Communication of Color Information (TC 8-05)**

Unambiguous color communication of images can be achieved in one of tow ways. Either colors in the image must be translated into a standard color space, or a mapping must be supplied with each image. The device profile format developed by the International Color Consortium (ICC) supports the second approach, associating with the image data additional data that describes the color space of the image data. The ICC is an industry consortium, but their bylaws

make it clear that they intend to move their work under an international standards body when they feel that it has reached an appropriate level of stability. When the ICC has perfected its method, it should be entirely adequate to solve color communication by the second method. Thus, the CIE sees no reason to develop a different solution along these lines.

However, there are many situations in which the use of this ancillary mapping technique is not possible. This mapping can be computationally intensive, and therefore slow. That makes the mapping approach too slow for current video applications, such as television and multimedia. There must also be a mechanism to associate this mapping data with the image data. Many existing file formats and computer programs are not extensible in this way. That makes the mapping approach commercially untenable in some areas. In these cases, unambiguous communication requires the use of standard color spaces. These color spaces may be based on an idealised device space, such as the International Electrotechnical Commision's sRGB spaces, which is based on an idealised CRT monitor. Or they may be based on the human visual system, using something like the CIE's XYZ space. Here the challenge is to find a small number of such standard color spaces that address a wide range of imaging applications. TC8-05 is working to develop appropriate criteria and metrics to serve as a guideline in selecting a color space. The TC is also working with other standards bodies to develop application profiles that may be used to weight the relative importance of the metrics.

## **Vocabulary (TC8-06)**

You might think that vocabulary was not a technical issue, but it is. Often our most heated arguments actually spring from inconsistent use of terminology. Terms such as "contrast" and "flare" can have very different uses in different technical fields. As these fields are brought together through the use of computer systems, we find that inconsistent use of terminology can lead to inconsistent use of technology. The work of this technical committee will be to create a master vocabulary of technical terms relating to image technology. This may either supplement the International Lighting Vocabulary or be published as a separate document. Of course, this is another area in which it is important to form and maintain active liaison with other standards bodies.

The CIE, like all standards bodies, depends on the voluntary contributions of technical experts. Since our goal is to find solutions that work for a broad range of activities, we need a broad range of expertise in order to succeed. Thus, the work of the Technical Committees is open to all, and experts are always welcome. To find out more about what's going, please visit our web site, <a href="www.color.org">www.color.org</a>. Be sure to follow the links to the web pages for each technical committee. The Technical Committee chairs would also be interested in hearing from you:

TC8-01	Nathan Moroney	Nathan_Moroney@hpl.hp.com
TC8-02	M. Ronnier Luo	m.r.luo@derby.ac.uk
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TC8-05	Rob Buckley RBuc	kley@crt.xerox.com
TC8-06	Janos Schanda schan	nda@ella.hu



## **AIC Color 01 Rochester Invitation**

On behalf of the Inter-Society Color Council and the Rochester Organizing Committee of the AIC Color 01, I would like to invite you to the ninth AIC Congress to be held in the "World's Image Centre", Rochester, New York, USA. The dates for the Congress will be June 24<sup>th</sup> to June 29<sup>th</sup>, 2001.

The AIC Quadrennial Meeting has not taken place in the United States since Color 77 Troy so we are pleased and excited about hosting our color colleagues from around the world 24 years later in 2001. This Congress promises to be stimulating and innovative as state-of-the-art color science, technology, art and design ideas are shared. We are preparing a dynamic program for the Congress, including symposia, invited talks, contributed and poster papers, and an entertaining excursion and delectable banquet.

I strongly encourage you to accept this invitation to participate in the ninth AIC Congress and join us in making an exciting forum for the interchange of the latest color concepts that we all face in the 21<sup>st</sup> century. All your United States Inter-Society Color Council colleagues look forward to your contributions and to welcoming our color friends from all over the world to Rochester, New York, USA, 2001.

Sincerely,
Paula J. Alessi
AIC Vice President
AIC Color 01 Organizing Committee Chair

# For the most up-to-date information on AIC Color 01, please see our web site at www.iscc.org/aic2001!!!!!



## **AIC Color 01 Technical Program**

The AIC Color 01 Congress promises to have an exciting technical program for the enrichment of color scientists/technologists, artists/designers/psychologists and educators from around the world. It will feature 263 state-of-the-art invited, oral and poster papers. Specifically, there will be 62 oral science/technology papers, 47 oral art/design/ psychology / education papers, and 103 poster papers. Both oral and poster contributed papers have been grouped according to the main headings of "What is Color?", "What is Color For?", "How Does Color Work?", "How Can We Control Color?", and "How Should We Teach Color?". Within the "What is Color For?" topic, there will be sessions on art, design, architecture, and Environmental Color Design. Within the "How Does Color Work?" topic, there will be sessions on color preference, vision, and physics. Within the "How Do We Control Color?" topic, there will be sessions on color difference, color appearance, color measurement, image analysis/synthesis, color order systems, industrial color, and color imaging applications. Within the "How Should We Teach Color?" topic, there are sessions on teaching aids and academic/industrial education. For the first time in AIC Congress history, awards will be given for the Best Student Oral Paper and the Best Student Poster Paper.

In addition to the contributed papers, the Congress will also feature 11 symposia on very important color topics that impact all of us around the world. These symposia will contain mostly invited as well as 18 contributed papers. This is an unprecedented number of symposia for an AIC Congress. Here is a listing of the symposia and the presentations contained within each:

## Symposium Speakers

\_\_\_\_\_

#### What is Color?

Coordinator: Paul Green-Armytage, School of Design, Curtin University of

Technology, Western Australia

Moderator: Larry Hardin, Emeritus Professor of Philosophy, Syracuse University Introduction Paul Green-Armytage, Curtin University of Technology, Western Australia

**Color Experience and the Human Animal** 

C.L. Hardin, Emeritus Professor of Philosophy, Syracuse University

What is Color?

Lois Swirnoff, Feltman Professor of Light and Color, Cooper Union for the Advancement of Science and Art

## Color vision is form and object vision

John S. Werner, Ophthalmology Department, University of California

On the nature of colours.

Osvaldo da Pos, Department of General Psychology, University of Padua, Italy

Color: what could it be?

Rolf G. Kuehni, Color consultant

#### What is Color For

## Organized by ISCC Interest Group III, Art, Design and Psychology

Co-moderators: Georgia Kalivas, Meg Miele, Fashion Institute of Technology, NY

## The Aesthetics and Commercial Value of Color

Margaret Walch, Associate Director of the Color Association of the United States (CAUS),

## **Color in Home Furnishings**

Catharine Stein, Director of the Color Council for the Home Furnishings Industries

## Color as a Language in Architecture

Grete Smedal, Centre for Form and Colour in the Art and Design School, Bergen, Norway

#### Color and the Worldwide Web

Ray Kinlock, Surface Design Department, Fashion Institute of Technology, New York

## How is CIE Helping Us Make Color Work

Moderator: Michael Pointer, National Physical Laboratory, Teddington,, UK

CIE: Vision, Colour and Imaging

Michael R Pointer, National Physical Laboratory, Teddington,, UK

Status of CIE Color Appearance Models

Mark D. Fairchild, Munsell Color Science Laboratory, Rochester, NY

#### The CIE 2000 COLOUR DIFFERENCE FORMULA: CIEDE2000

M. Ronnier Luo, Colour & Imaging Institute, University of Derby, U.K.

## **Making Color Work in Image Technology**

Todd Newman, Director, CIE Division 8, Canon R&D Center Americas, Inc

## Report on a fundamental chromaticity diagram with physiologically significant axes

By Francoise Vienot, chair of CIE TC 1-36 **Discussion and Wrap-up:** Michael Pointer

## **How Should We Teach Color?**

Coordinators: Geoffrey Rogers, Fashion Institute of Technology, NY

Chair, ISCC Education Committee

Manuel Melgosa, University of Granada, Spain

**Moderator: Geoffrey Rogers Creative Colour education** 

Berit Bergström, Scandanavian Colour Institute

Chair, AIC Education Committee

Interactive bibliographical database on color

Jose Caivano, Buenos Aires University, Argentina

Distance Learning: A Discussion of the Implementation of a Graduate Course of

**Study Using Various On-Line Technologies** 

Ethan Montag, Rochester Institute of Technology

Colour Zones - Connecting Colour Order and Everyday Language

Paul Green-Armytage, School of Design, Curtin University of Technology, Western Australia

Color Education as an Interactive Experience

Margaret Miele, Fashion Institute of Technology

The Why's and How's of Color Management: A Tutorial

Coordinator: Rob Buckley, Xerox Lecturer: Jim King, Adobe Systems

The State of the Art and Future of Color Management

and Moderator: Rob Buckley, Xerox

The Evolution of the ICC Profile Connection Space

George Pawle (Eastman Kodak) and Lars Borg (Adobe Systems)

CMS for Digital Photography, A Case Study

Bob Chung, Darunee Sa-areddee, Rochester Institute of Technology

Image-dependent Color Mapping for Pleasant Image Renditions

Hiroaki Kotera, Mitsunori Suzuki, Takeshi Mita, and Ryoichi Saito, Chiba University, Japan

**Image State Architecture** 

Geoffrey J. Woolfe, Kevin E. Spaulding, Eastman Kodak, Rochester, NY

Trends in Color Imaging on the Internet

Giordano Beretta (Hewlett Packard), Rob Buckley (Xerox)

**Imaging Techniques of Spectral Estimation (Spectral Imaging)** 

Moderator: Roy Berns, MCSL, Rochester Institute of Technology, Rochester, NY Welcome and Overview

Roy Berns, Rochester Institute of Technology

Optimization of total multispectral imaging systems: Best spectral match versus least observer metamerism Bernard Hill, Aachen University of Technology

Gonio-Photometric Imaging for Recording of Reflectance Spectra of Three Dimensional Object

Yoichi MIYAKE\*\*, H. HANEISHI, Norimichi TSUMURA, and Junichiro HAYASHI\* Chiba University, Japan; \*Mitsubishi Electronic Microcomputer Application Software Spectral estimation from laser scanner data for accurate color rendering of objects Réjean Baribeau, National Research Council Canada

**Representation of Spectral Images in Data Communications** 

Markku Hauta-Kasari, Juha Lehtonen, Jussi Parkkinen, and Timo Jaaskelainen, University of Joensuu FINLAND

## Spectral estimation of artists oil paints using multi-filter trichromatic imaging

Francisco Imai, Roy Berns, MCSL, Rochester Institute of Technology

## A New Procedure for Capturing Spectral Images of Human Portraiture

Qun Sun, Mark Fairchild, MCSL, Rochester Institute of Technology

Wrap-up, Roy Berns

The Artist and Digital Media

Coordinator: Wade Thompson, Assistant Head, Art and Design, Southwest Missouri

State University

**Moderator: Wade Thompson** 

Donna Cox, Beckman Institute, University of Illinois Liz Lee, State University of New York at Fredonia

Color Issues for Digital Archives

Coordinator: Franziska Frey, Image Permanence Institute, Rochester Institute of

Technology

**Moderator: Franziska Frey** 

**Color Strategies for Image Databases** 

Sabine Susstrunk, Audiovisual Communications Laboratory, Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland

Accurate colour images: from expensive luxury to essential resource

David Saunders, Scientific Department, The National Gallery, London, U.K.

# Spaces of probability distributions and their applications to color based image database search

Linh Tran, Reiner Lenz, Linkoping University, Sweden

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## **Environmental Color Design**

Moderators: José Caivano, Buenos Aires University, Argentina

Leonhard Oberascher, ÖKO-PSY, Austria

## Report of activities of the ECD study group

José Caivano, Leonhard Oberascher

# Colour appearance in rooms lit by daylight: observations of hue shifts in sunlight and skylight

Maud Hårleman, Royal Institute of Technology, Stockholm

Colour contrasts in advertising

John Hutchings

## Climate and coloured walls, in search of visual comfort

Malvina Arrarte-Grau, Universidad Ricardo Palma, Lima-Perú

What colour is the red house? Perceived colours of painted facades

Karin Fridell Anter, Royal Institute of Technology, Stockholm

Transformation of "paint" to "color" in urban space: Bursa example

Susan Habib, Nihal Cetinturk, Gazi University, Ankara, Turkiye

Black -meaning and connotation in Europe and Africa

Fatumata Oberascher, Leonhard Oberascher

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The Future Role of Color in the Three Dimensional World

Moderator: Shashi Caan, Design Director, Skidmore Owings & Merrill, Architects

Introduction

Shashi Caan, Design Director, Skidmore Owings & Merrill, Architects

Painting with Light: Enlightening Your Architecture with Color

Paul Gregory, Focus Lighting Inc

From Dante's Inferno to a Garden of Paradise: How color affects this global World

Chris Rainier

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The Future of Color

Coordinator and Moderator: Jack Ladson, ISCC President

The Future of Color in Design

Melanie Wood, Design Consultant, Mannington Mills, Inc.

Where have come from, where were we all week, where do we go from here?

Paul Green-Armytage, School of Design, Curtin University of Technology, Western

Australia

Robert Hunt, Consultant

Abstracts of all papers as well as details of the Congress schedule can be found on the web site at www.iscc.org/aic2001. Many thanks to Dr. Allan Rodrigues, the AIC Color 01 Technical Program Committee Chair, and his committee members for putting together a technical program that promises to be stimulating and informative for all participants.



## **AIC Color 01 Social Program Highlights**

The AIC Color 01 Congress will be hosting a number of exciting events for our social program.

In addition to the Welcome Reception at the Rochester Institute of Technology (Sunday evening, June 24<sup>th</sup>) and the gala banquet at the Rochester Convention Center (Thursday evening, June 28<sup>th</sup>), we have scheduled evening events to satisfy different types of interests. We will sponsor an evening at Rochester's Frontier Field (Wednesday, June 27<sup>th</sup>) to enjoy a baseball game with the Rochester Red Wings. The Memorial Art Gallery will be the setting for another evening event (Tuesday, June 26<sup>th</sup>); docents will provide gallery tours giving special attention to color. A Congress day excursion to the 19<sup>th</sup> century will be held at the Genesee Country Village and Museum (Wednesday, June 27<sup>th</sup>) where we will view historic buildings and live demonstrations of crafts.

Also, each day there are planned events for the companion program to include a historic village walking and shopping tour, a historic house tour with the Landmark Society of Rochester, a winery tour, and a tour of the George Eastman House and International Museum of Photography and Film.