

AIC Newsletter

NUMBER 6

APRIL 1992

President's Report

June 1991

I am very pleased to report that Dr. Kees van Trigt of the Netherlands has been confirmed as our new Secretary/Treasurer, replacing Dr. Jan Walraven, also of the Netherlands. I am very grateful to Dr Walraven for continuing to act as Secretary/Treasurer beyond his appointed term while we sought his replacement.

During the past year the Executive Committee voted to accept the Yugoslav Research Centre for Color as a new Member, bringing the total membership to 22 countries. The official representative of the Yugoslav member body is Dr Slava Jeler. Dr Jeler was previously an official Observer of the AIC.

In addition, one new Observer, Dr Todor Kehlibarov of Bulgaria was admitted bringing the total number of Observers to 7. Dr Kehlibarov recently organized an International Conference, 'Color 91 - Color as an Important Quality Feature in the National Economy'. This was not an officially sponsored AIC meeting, but of course we welcome any activities that encourage research, dissemination of information, and application of knowledge in the field of colour.

After an open nomination process involving all member countries, the Executive Committee received three nominations for the 1991 Deane B. Judd AIC Award. We had a difficult choice to make, but, after careful deliberation, decided to give the Award jointly to Hans Vos and Pieter Walraven of the TNO Institute for Perception in the Netherlands for their many contributions to the understanding of the mechanisms of colour vision. The Award will be presented during the 1991 Interim Conference in Sydney, Australia.

In addition to this good news, I must also unfortunately report on one of the saddest duties of a President, the writing of letters of condolence following the deaths of distinguished colleagues. In the last year I have been called on to perform this duty three times, following the deaths of Keith McLaren, Manfred Richter and Richard Hunter. We remember each of them, not just as colleagues, but also as friends who will be missed at our future meetings. In addition, we lost another friend whom many of us had known for many years. Dorothy Wright, the wife of our first President, David Wright, passed away in 1990.

Returning to brighter news, I was very pleased, in February of this year, to offer my congratulations to one of our founding members, the Colour Group of Great Britain, which celebrated its 50th anniversary and continues to be very active.

The Colour Society of Australia, on the other hand is one of our newer members, having been founded about five years ago. It is of great credit to them that they have been able, so soon, to organize an AIC Interim Conference. From my contacts with them over the last few months it is clear that they have many active members who have worked very hard to make the 1991 Conference a success. Already, even before the Conference begins, I am confident that they will have succeeded.

A. R. Robertson

EDITORIAL

It is disappointing not to have been able to achieve my ambitions for this newsletter and to have to begin this editorial with an apology for the long delay in publication. (I now have more sympathy for those politicians who fail to deliver their campaign promises!) Limited material for publication and the pressures from other responsibilities have each played a part. However, I would like to try one more time for the principle of an annual publication.

I am very grateful to those who have sent me reports. I hope you will be able to send more material by the end of the year and I hope other representatives will also be able to send reports. I will try to publish the next newsletter early in 1993.

This newsletter does not contain all the items that I hoped it would be possible to include on an annual basis and it contains some material that does not conform strictly to the guidelines I proposed. Rather than try to impose order on the newsletter, it would seem to be wiser to let it take whatever form emerges from the material at hand. Such a policy could liberate the newsletter from being just a collection of reports and allow it to become a forum for comment and debate.

If you think that is appropriate, I hope you will contribute. I look forward to receiving material for the newsletter, including photographs.

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HANS VOS and PIETER WALRAVEN RECEIVE DEANE B JUDD - AIC AWARD

The Deane B Judd - AIC Award was established in 1975 to recognise work of international importance in the fields of colour perception, colour measurement or colour technology. Funds were provided by Mrs Deane B Judd to establish and administer the Award in memory of her late husband. The Award recognises important work in colour science. The selection committee is given wide latitude and the choice may be made for a single outstanding piece of work, for an on going programme that covers a wide range of co-ordinated studies, for leadership in colour science education or for some other meritorious service in the field of colour science.

Previous recipients of the Award have been:

1975	Dorothy Nickerson
1977	David Wright
1979	Gunter Wyszecki
1981	Manfred Richter
1983	David L MacAdam
1985	Leo M Hurvich and Dorothea Jamieson
1987	Robert Hunt
1989	Tarow Indow

To these we now add

1991	Hans Vos and Pieter Walraven
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The award is given for, and I quote the committee,

".....many contributions to the understanding of the mechanisms of colour vision".

The linking of the names of Vos and Walraven for the award is, of course, most logical and appropriate but they are two people from different backgrounds with other, rather different research interests. It may come as a surprise to many to know that joint papers represent a minority of their publications. It is therefore, the quality of these joint publications which makes them especially memorable.

Dr Vos completed a Master of Science degree in physics at the State University, Utrecht in 1954, his published work from that time shows a mixture of visual and ocular work, which included night vision, glare, the Stiles-Crawford effect and radiation effects on the eye. He completed his PhD at the same university in 1963.

He joined the TNO Institute for Perception in 1953 rising to the Head of the Vision Branch in 1966.

Dr Walraven graduated as an engineer from the Technical University, Delft in 1963 with colour vision as his major field. Colour vision features largely in his publications right from the beginning. He completed his PhD in mechanisms of colour vision at the State University at Utrecht in 1962 and joined TNO in 1964 as Deputy Director of the Institute for Perception rising to Director of the Division for National Defence Research.

Their first joint paper was published in 1962 and related to the Stiles-Crawford effect. Their first joint paper relating to colour appeared in 1963.

Bouman, Vos & Walraven. "Fluctuation theory of luminance and chromaticity discrimination" in The Journal of the Optical Society of America.

Hans Vos maintained research interests in radiation changes to the eye, applied aspects of vision and visual ergonomics amongst many others.

Pieter Walraven proceeded within a wider scope of colour vision issues including the applied and ergonomic aspects of colour vision and colour vision deficiencies.

They continued to come together to develop the work which has its basis in Walraven's PhD thesis "On the mechanisms of colour vision".

It is a two stage colour vision model which is now commonly used as the basis of attempts to explain colour vision phenomena. Walraven's work was published after an opponent colour theory paper of Hurvich and Jameson and he brought together the classical Helmholtz trichromatic theory and the Hering opponent colours theory into one framework when they were seemingly incompatible and contradictory. His work precedes the first introduction of the electrophysiological colour vision works of De Valois, Hubel and Wiesel amongst others. The work also led to the best quantitative analysis of the Bezold-Bucke phenomenon and cone pigment density determinations. The combined approach of Vos & Walraven gave the model its mathematical basis and from the work they derived the foveal receptor primaries, ratios of L-M-& SWS cones and the line element colour discrimination analysis.

At the same time they also continued collaborating with other co-workers and also shared co-authors - a most productive group - not just the two of them.

The most conspicuous part of their work must have been the Helmholtz Memorial Symposium on Colour Metrics in September 1971. Dr Walraven was the chairman of the organising committee and Vos, Fiele and Walraven edited the proceedings. It was a meeting which fell on the 150th anniversary of the birth of Hermann von Helmholtz, although this was a happy coincidence. This was the first in the series now known as AIC intersessionary meetings, of which this Sydney meeting is the most recent. It was intended to be a small specialised limited attendance symposium. Sixty four participants met to hear twenty-five papers. They assembled a magnificent array of participants, provided a vital dialogue and created a proceedings publication which is still used as a reference

book. As an illustration of the standing of the attendees and the effects the symposium must have caused, of the nine recipients of the Deane B Judd - AIC award which I listed, including today's, only Hurvich and Jamieson were not present at that symposium. Including Vos & Walraven themselves, eight of the attendees are here at Colour & Light '91 including four paper presenters. It was clearly a landmark in colour science.

Their own paper at the meeting must now be a citation classic, the diagram of the neural processing model and the receptor primaries must have been made into slides for lectures around the world countless times.

In retrospect, knowing what we know now and having the techniques now available, electro-physiological, morphological, immunochemical as well as psychophysical, it is all too easy to underestimate the contribution of their work.

Like many, if not most eminently successful researchers, they have also made substantial and significant contributions to other areas of colour science, visual science and other fields.

It never ceases to amaze me that so often I find the significant contributors to the field with which I associate them have also achieved prominence in another field. These two are no exception. One of the fascinating things about colour science is the diverse backgrounds the discipline brings together. Here we have the highly productive synergy of an engineer and a physicist, but then we should never confine people by looking at their first degrees.

It is appropriate, therefore, that this award is for their ".....many contributions to the understanding of the mechanisms of colour vision"

I believe it was Newton that said "If I have seen further, it is because I have stood on the shoulders of giants".

I have no doubt Hans Vos & Pieter Walraven would say the same.

To them we, in turn, say - there are lots of people now standing on your shoulders.

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Access to material supplied by the AIC Committee is gratefully acknowledged.

AIC - Interim Symposium

INSTRUMENTATION FOR COLOUR MEASUREMENT

Berlin 1990

"What's a person like you doing at a meeting like this?"

This was a reasonable question for a scientist to ask a designer at a meeting on "Instrumentation for Colour Measurement". I might have answered that I was there in my capacity as a member of the AIC executive and editor of the newsletter; it is certainly true that I would not otherwise have made the journey from Australia. And it is certainly true that many of the papers were too technical for my limited understanding. However I found the Symposium immensely stimulating. Once again I was grateful that colour is such an excellent passport which opens the door to so many different disciplines.

The Symposium was well planned. Each day began with an invited paper. Contributed papers were presented in the second half of the morning and instruments were demonstrated after lunch.

As an outsider it seems to me that there are now two main frontiers for scientists working in the field of colour measurement, one at the micro level, as it were, and the other at the macro level. At the micro level : perhaps there can be no such thing as the perfect colour difference formula just as we may never find a single entity in the universe which is not itself made up of smaller bits. In Berlin the emphasis was on the macro level and current efforts to extend the reach of colour measurement beyond simple light sources and matte surfaces.

For each day of the symposium the focus was on a different problem area with invited papers to set the theme. The speakers not only managed to make the technical problems accessible to non-technical people like me but also conveyed something of the excitement of what it means to be at the cutting edge of science.

Dietrich Gundlach, in his paper on "Colorimetry for Standard Conditions (including fluorescence)", spoke about the problems of defining "standard conditions" and the difficulties associated with the measurement of fluorescent samples, especially the difficulty of finding suitable light sources.

Allan Rodrigues introduced the magic world of metallic and perlescent pigments. Metallic paints can reduce the apparent bulk of an object like a motor car by accentuating the contours. One of the most memorable images of the Symposium was Rodrigues' slide which showed a cylinder of uniform diameter painted in bands of matte, glossy and metallic paint. In the slide it looked like a stack of three separate cylinders of different diameters, the smallest, painted metallic, on top. (He has promised to bring the original cylinder to the next AIC meeting in Sydney!) Perlescent paints are even more extraordinary. A perlescent painted car can look yellow from one angle and blue from another.

How do you measure that? Metallic and perlescent paints have given rise to a new generation of viewing booths and measuring instruments which allow for several different angles of illumination and viewing. Many of these were on display in the exhibition.

Norbert Johnson's paper on the "Colorimetry of Retroflective Materials" demonstrated very clearly the importance of an interdisciplinary approach to colour. The colours of retroflective road signs convey a meaning. What is important is that a sign that is "red" in daylight must still appear red (and so mean the same thing) in the light from a car's headlights at night. It is not so important that the two reds should have the same chromaticity as that both would be described as "red" without hesitation. There are problems of perception, language and culture as well as problems of physics.

Contributed papers followed the morning coffee breaks. Six papers, one after the other, in a two hour session was rather gruelling. This was the nuts and bolts part of the Symposium where very specialised aspects of colour measurement were dealt with in detail. One problem with a meeting like this is where to draw the line between science and advertising. Many of the speakers are employed by manufacturers whose instruments were used in the experiments being reported. If a new instrument has made possible a significant scientific breakthrough is it acceptable to describe that instrument at a meeting of scientists? Or is it only permissible to show the instrument in the exhibition at the back? I gathered that some people felt that the line had been crossed once or twice. Issues like that must make life very difficult for members of a papers committee.

If the Symposium itself was excellent, the social programme was outstanding. It was particularly exciting to be in Berlin at such a time in history and the opportunity was not wasted. The boat trip down the Havel to Potsdam in September 1990 was unforgettable. Even the rain seemed to have been made to order. When we were issued with out blue AIC umbrellas it seemed that the organisers had thought of everything. (We would have got our umbrellas anyway, but umbrellas distributed in bright sunshine do not have the same impact.) The light rain and misty conditions might not sound the best for a boat trip, but for that boat trip they created a powerful atmosphere which contributed to the sense of History.

Whether or not the closing banquet was a success can be judged from the fact that serious after dinner speeches soon gave way to amateur cabaret and community singing. In leading the assembly in a chorus of "Waltzing Matilda" I was very conscious that Sydney would have a tough act follow.

Paul Green-Armytage

AIC Interim Conference

COLOUR AND LIGHT

Sydney 1991

The Sydney Opera House was a very appropriate symbol for "Colour and Light '91". The vision behind the Opera House is so grand that it defies criticism.

The Opera House itself, with its spectacular view of Sydney harbour, was the venue for registration and the opening ceremony. Its long wide flight of steps was a perfect stage for the obligatory group photograph (a year's supply of Dulux paint is on offer to the person who can identify everyone in the picture) and at the bottom of the steps was the jetty and the boat waiting to take us on our luncheon cruise. This was all so magnificent it was like a challenge to the rest of the World, but it was also an extremely pleasant day with plenty of time to meet people and renew acquaintances. After that the pace hotted up and the "best laid plans" encountered the human factor.

Perhaps the conference was a victim of its own success or perhaps we are still under the spell of the tyranny of distance. In any event a no-win situation seems to have arisen. A broad and attractive theme was needed to persuade people to come all the way to Australia. Perhaps "Colour and Light" was too broad for an interim meeting where the AIC rules do not permit parallel sessions; it was certainly attractive since it drew the crowds (141) and a great many proposals for papers. No doubt an extension into a fourth day was not considered because of prohibitive extra costs. This left the option of a very crowded programme with only half an hour for invited speakers and twenty minutes for the rest. As one of the latter I found that time constraint very challenging. And one should not complain since I have heard that twenty minutes is considered by some to be our maximum attention span when exposed to new information. What I don't know is how long our brains need for recovery before the next twenty minutes. In fact we were asked to limit ourselves to fifteen minutes to allow five minutes for questions and that might have worked if everyone had kept strictly to the time table. Enter the human factor. It is not really possible to ask a keynote speaker to begin sharp at nine when the hall is half empty and there is a steady procession of late arrivals. More time was lost in this way after breaks for refreshment and there were also a few speakers who needed more than their allotted time so the sessions were always under pressure. An iron fist was needed for chairing the sessions and Lucia Ronchi set an early standard with her charming demonstration of how to be firm without giving offence. One of my favourite moments came when Bryan Powell himself showed signs of exceeding his time. Alan Robertson, in his warning from the chair, was apologetic but said he was afraid of a complaint from the chairman of the organising committee! It was all a bit like being hurried through a great exhibition with not enough time to look at things properly. It was possible to grasp something of the master plan - the sessions were very well structured with keynote papers followed by shorter papers to deal with different aspects of the theme - but I suspect that the full

richness of the programme will not be revealed until the proceedings are published. (A possible way of taking the pressure off the lecture sessions without disappointing people who wanted to contribute might have been to divert more papers to the poster session.)

Rather than attempt an account of the whole programme I will deal with just one session which I found particularly satisfying and which I was privileged to chair - the session on colour education:

The keynote paper was presented by Roy Berns. Roy is director of the Munsell Color Science Laboratory at Rochester Institute of Technology which offers what is probably the world's leading course in colour science. He described the role of colour science in tackling two kinds of problem. In one situation the task is to produce a material with a colour to match that of a standard in which case metamerism is "evil". In the other situation - reproducing the colours of objects through photography, printing or television - metamerism is the thing which makes it possible. The two situations are coming together with the emergence of computer colour imaging and computer colorant formulation and Roy described how the courses at Rochester, which are concerned with both kinds of problem, are evolving to keep pace with developing technologies and the changing needs of industry. I was pleased to learn that it is not all mathematics, physics and chemistry and that graduates are expected to have some grasp of aesthetics. When Roy mentioned scholarships I noticed a gleam in the eye of at least one member of the audience.

From science the emphasis shifted to design with Eva Fay and Prue Leith. Having softened us up with their demonstration of colour psychology in action (never trust a man who prefers a blue circle to a red square) they beat us into submission with their truly spectacular audio visual presentation of their students' work at the School of Colour and Design. Further evidence of the school's outstanding work was on display at the poster session and in Carol Arthur's designs for the conference. I was struck with the thought: what kind of colour super-hero would we have in someone who had graduated from both the School of Colour and Design and the course in colour science at Rochester!

Lars Sivik spoke about the pioneering work that has been done in the Nordic countries with special emphasis on the perceptual nature of colour and the development of the Natural Color System (NCS). He described the role of the NCS in general education and in the education of architects and designers in Sweden, where it has become a common language for manufacturers and paint companies as well as designers. He also referred briefly to his research and issued an invitation to anyone interested in participating in an international cross-cultural project to investigate the relationships between colours, colour names and colour meaning.

Maria de Matiello described her work at the School of Architecture in Buenos Aires. Art and Science are nicely blended in her colour course and I was particularly struck by the emphasis she places on the subjective aspects; her

students are encouraged to explore personal imagery, fantasy and illusion and thereby make new discoveries and create new experiences.

Eugene Maxwell Smith is also firmly committed to the marriage of art and science. His must be one of the very few colour laboratories attached to an art school. He has brought colorimetry to bear in his investigation of artists' pigments and has developed a new approach to mixing paints which he calls "colour navigation", inspired by his other passion - the sea.

Peter Day is working with high school students and if his corner of NSW suddenly finds it has a glut of colour scientists or painters and designers with a passion for colour it will be Peter's fault. He described his current project which has involved over 200 students so far: after scouring their neighbourhood for such things as leaves, berries, flowers, tree bark and samples of rock and soils the students match the colours to the colours in a range of house paints (I think they are using Taubmans but Dulux or Wattyl would serve just as well). From this they have developed a "localised environmental colour palette" and are redecorating their school accordingly.

Other sessions at the conference dealt with Lighting for Colour Assessment and Reproduction and Instrumentation for Colour Measurement. There were also three sessions devoted to Colour in the Visual Arts and Architecture so that, overall the arts and sciences received about equal attention.

The interaction of art and science is also very much a theme of the Powerhouse Museum which made it a near perfect venue for the conference. It is exciting enough to have a display of colour atlases and measuring equipment available at a conference but to have a whole museum devoted to design and technology, and a world class museum at that, was another major coup for the organizing committee.

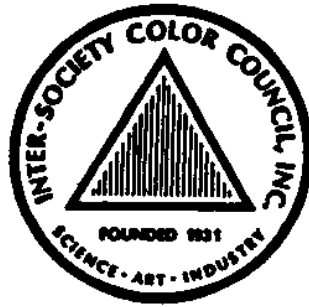
The venue for the conference banquet was the Overseas Passenger Terminal at Circular Quay, another famous Sydney location. Not only was this the conference banquet and the occasion for presenting the Deane B. Judd AIC Award, it was also the occasion for announcing the winners of the Dulux Colour Awards. On the face of it there should be no objections to presenting awards for colour design and for colour science at the same event and one might argue that it is to the AIC's advantage to have some of the country's leading colour designers made aware of our work, but I know that some people objected to the fanfare surrounding the Dulux awards and what they saw as the commercialisation of the AIC banquet. I think we need the partnership of science, design and industry so that we need to get this kind of thing right. If the two award ceremonies are incompatible it is in neither party's interest to combine them but we need to be able to offer the right kind of exposure to companies like Dulux because without their generous support an event like "Colour and Light" would not be possible.

The banquet contained what was, for me, one of the highlights of the conference and that was Stephen Dain's stirring citation for the joint winners of the Deane

B. Judd AIC Award - Hans Vos and Pieter Walraven. This was more than a catalogue of achievements, it was an acknowledgement of fundamental contributions to our understanding of the processes of colour vision from a fellow scientist and I found it strangely moving.

At the very end of the conference came my other favourite moment which also involved Bryan Powell. The Council of the Colour Society of Australia had voted two days before to make Bryan our first honorary life member to be effective immediately. At that stage there were four days remaining to the end of the financial year which meant that Bryan was entitled to a refund for those four days. At the closing session Peter McGinley announced the Council's decision and presented Bryan with his refund - 30 cents! - a very small sum to express a very large sense of gratitude.

Paul Green-Armytage



AIC 25th Anniversary
ISCC 61st Annual Meeting

Princeton, NJ, U.S.A.
June 21 - 24, 1992

Computer Color Formulation

The International Colour Association (AIC) was founded at a meeting in Washington, DC, U.S.A. in 1967. It will return to the United States in 1992 to celebrate its 25th Anniversary with a two-day international symposium on Computer Color Formulation. This meeting will be held on June 23 - 24 on the campus of Princeton University, easily accessible from New York. It will be preceded by the ISCC Annual Meeting on June 21 - 22. The meetings will include discussions on a wide range of topics related to color and appearance, working sessions of an ISCC project committee, social functions to get to know your fellow-workers in color, visits to nearby places of interest, an "open house" at a major color instrument manufacturer, the symposium, and a banquet celebrating the AIC Silver Jubilee. You are invited to both parts of this meeting as well as the preceding CIE Divisions I and VI meetings and the ASTM E-12 (Optical Properties) meeting following. All three meetings will be on the Princeton University campus.

Technical Sessions:

- | | |
|------------|--|
| 18-June-92 | CIE Division I |
| 19-June-92 | CIE Division I and VI |
| 20-June-92 | CIE Division VI |
| 21-June-92 | ISCC Project Committee "Uniform Color Solid"
Poster Paper Session
Interest Group on Art, Design and Psychology |
| 22-June-92 | Interest Group on Appearance, Vision and Modeling
Interest Group on Color Education
Interest Group on Measurement and Colorimetry |
| 23-June-92 | Symposium on "Computer Color Formulation" |
| 24-June-92 | Symposium on "Computer Color Formulation"
Formulation Systems Exhibit
ASTM E-12 (Optical Properties) Executive & Planning Meetings |
| 25-June-92 | ASTM E-12 |
| 26-June-92 | ASTM E-12 |

Social Functions:

- Wine and Cheese Reception
- ISCC Awards Luncheon
- Picnic and "Open House" at Datacolor International
- AIC Silver Jubilee Banquet
- Accompanying Persons tour of Ellis Island and the Statue of Liberty
- Daily continental breakfasts and coffee breaks for informal discussions

Place of Meeting:

All conference sessions will be held on the campus of Princeton University in Princeton, New Jersey. Princeton is located about 50 miles (80 km.) from New York City and 45 miles (70 km.) from Philadelphia. Ground transportation is available from all New York airports, and the Trenton, New Jersey AMTRAK train station. From JFK and Newark airports, the Princeton Airporter (ph: 01-609-587-6600) offers convenient service to Princeton. Fares are approximately \$20 from Newark and \$30 from JFK. Continental Airlines is the official meeting carrier and offers discount fares of 45-50% off normal coach or 5% off the lowest published fare. Continental flies into Newark Airport from many cities in the USA and from London's Gatwick airport. Local travel arrangements are supplied by Revere - American Express travel services (01-800-325-3314, Fax 01-908-463-3396).

Multi-passenger vans will be on call during the meeting for use in transportation between the hotel and the campus for handicapped attendees. All facilities have handicapped access.

Accommodations:

The headquarters hotel for the meeting will be the Nassau Inn, adjacent to the Princeton University campus. Rooms are \$95 for one bedded single or double occupancy, \$135 for two queen-size beds double occupancy. There are state and local taxes added, currently 7%. Make your reservations directly with the Nassau Inn, Palmer Square, Princeton, NJ 08542 (phone: 01-609-921-7500).

Both more expensive as well as less expensive hotels and bed-and-breakfast accommodations are available within a few miles of the campus. Bed & breakfast inns can be booked through Bed & Breakfast of Princeton (01-609-924-3189).

Campus dormitory rooms (no air-conditioning) will also be available for participants (\$15). The list of additional housing, information on ground transportation and an area map can be obtained from Dr. Danny Rich, Datacolor International, 5 Princess Road, Lawrenceville, NJ 08648 (Fax: 01-609-895-7461).

Accompanying Persons:

There is no fee for registration of accompanying persons. They are invited to the Sunday wine & cheese reception and the Monday picnic at Datacolor International at no charge. There is a fee if they wish to attend the Awards Luncheon, the AIC Banquet, or the Ellis Island Tour.

Most immigrants to the USA between 1892 and 1924 entered through Ellis Island. The museum dedicated to these immigrants allows a computerized search of ones relatives. A short distance away by boat, is the Statue of Liberty. A gift of France, it is the eternal symbol of liberty, hope, freedom and democracy. An accompanying persons tour of these attractions will depart from the hotel by bus at 9:45 am on Tuesday, June 23, returning by 4:30 pm. The \$40 fee includes transportation, admissions, and a box lunch.

AIC President: Dr. Alan Robertson	National Research Council, Ottawa, Canada K1A 0R6.
ISCC President: Mr. Hugh Fairman	Armorguard Products, P. O. Box 215, Andover, NJ 07821
Program Chairman: Mr. Ralph Stanziola	Industrial Color Technology, 410 Clover Court, Neshanic Station, NJ 08853
	Ph. or Fax: 01-908-369-8736
Meeting Chairman: Dr. Allan Rodrigues	E. I. Du Pont, P.O. Box 2802, Troy, MI 48007-2802, U.S.A.
	Ph: 01-313-583-8245
	Fax: 01-313-583-8479

AIC Symposium on Computer Color Formulation
June 23 - 24, 1992

Invited Papers:

Hugh R. Davidson - Davidson Colleagues
The Origin and Development of Instrumental Color Matching.

Dr. Henry Hemmendinger - Hemmendinger Color Lab
Formulation to a Numerical Color Specification

Contributed Papers:

Donald S. Andrade - DSA Consulting, Inc.
In Pursuit of Absolute K&S Values for Use in Kubelka's Hyperbolic Equations

Dr. Roy S. Berns - Rochester Institute of Technology
A Generic Approach to Mathematically Modeling Color Systems

Roland L. Connelly, Sr. - Shelyn, Inc.
How to make Formulation Really Work - Special Techniques for the Textile Industry

James T. De Groff - Colortec Associates, Inc.
Automation of Computer Color Formulation Systems for the Paint Point-of-Purchase Market

Dr. N. S. Gangakhedkar - Compute Spectra Color Pvt. Ltd.
Computer Color Matching: Indian Experience

Dr. Robert Hirschler - SENAI/CETIQT
Spreading the Light: A Colorimetry and Colour Matching Centre for the Brazilian Textile Industry

- SENAI/CETIQT

Evaluating Dyeing Strength Formulae by Colour Matching

Tibor Illés - Eötvös Loránd University
A Non-Linear Programming Approach to the Color Matching Problem

William R. Mathew - Americhem, Inc.
Measuring Refractive Index - A Photometric Approach

Dr. Leonhard Oberascher - University of Salzburg
Gravure Printing - Will Computer Color Formulation be able to help?

Dr. Danny C. Rich and Jocelyn Jalijali - Datacolor International
Numerical Standards: Are the Materials ready?

Dr. Daniel Spitzer - Akzo Coatings
Innovations in Industrial Colorimetry of Paints

David L. Spooner - Du Pont Imaging Systems
A Technique for Matching Colors with Three and Four Color Process Printing



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REGISTRATION FORM

(One registrant per form - please copy if you need more forms)

Dr.
Mr.
Ms.

(Last name)

(Given name)

Company _____

Postal Address _____

Tel. No. (inc international code) _____

Fax No. _____

Accompanying Person(s):

Mr./Mrs./Ms. _____

Mr./Mrs./Ms. _____

Mr./Mrs./Ms. _____

Is this the first ISCC meeting you have attended? Yes No

ISCC Membership Status: ISCC Delegate from _____

Individual Member Retired Member Hon. Member Student Guest (Name)

If guest, are you a member of other national organization? _____

Would you like ISCC Membership information? Yes No

Registration Fees

ISCC Meeting only (June 21-22) \$160 _____
(Includes Wine & Cheese, Awards Luncheon, Datacolor visit)

AIC Meeting only (June 23-24) \$160 _____
(Includes Datacolor visit, Silver Jubilee Banquet)

Full meeting registration (All of the above) \$200 _____

Students (Includes Wine & Cheese, Datacolor visit) \$ 40 _____

Accompanying persons:

Awards Luncheon \$ 20 _____

AIC Silver Jubilee Banquet \$ 45 _____

Ellis Island Tour \$ 40 _____

Total enclosed \$ _____

Registration must be received by May 31, 1992 to guarantee participation. Tickets are to be picked up at the registration table - NO CONFIRMATIONS WILL BE MAILED. Make checks payable in US \$ to ISCC and return by mail to the Arrangements Chairman:

James E. Grady, 7187 White Pine Drive, Bloomfield Hills, MI 48301, U.S.A.

Hotel reservations must be made directly with the Nassau Inn. If you wish information on other hotels, or to stay in campus housing, contact ISCC Secretary, Dr. Danny Rich, Datacolor International, 5 Princess Road, Lawrenceville, NJ 08648. Phone: 01-609-895-7427. Fax: 01-609-895-7461

Campus Housing preferred? Yes No Arrival date: _____ Departure date: _____



FIRST CIRCULAR

The 7th Congress of the
Association Internationale de la Couleur
International Colour Association
Internationale Vereinigung für die Farbe

COLOUR 93

BUDAPEST
HUNGARY

will be held at the
Technical University of Budapest
between 14-18 June, 1993

The Congress is being organized by the Hungarian National Colour Committee on the basis of the request from AIC Executive Committee according to the decision of AIC general meeting.

General Chairman: Prof. ANTAL NEMCSICS
Co-chairman: Dr. JÁNOS SCHANDA

Congress Office:
Technical University of Budapest
Conference Office, Building Z, Room 101/b
H-1521 Budapest, Műgyetem rkp. 3-9.
Phone and Fax: (36-1) 185-2218



THE SUBJECTS OF THE CONFERENCE:

Coloured vision and the appearance of colours, adaptation of colours, colour contrast, irradiation, invariance of colours, colour memory.

Colorimetry, colour standardization, colour difference, fluorescence, colorimeters.

Colour order systems, analysis of historical and contemporary colour systems, transformation between colour systems, printed and electronical colour collections.

Research into colour dynamics, colour preference, colour association, colour physiology, colour psychology, theories in colour harmony, colour and function, colour and lighting, colour and space.

Application of colours in industry, colour reproduction, colour matching, colour TV, questions of colour identity of printed samples.

Colour design; colour formation of institutions for different functions, townscape, monuments, industrial and individual objects; colours in arts. Computer aided colour design. Basic, intermediate and advanced education of colours. Graduate and postgraduate training. Teaching aid.

LECTURES:

Internationally recognized experts on the most important subjects have been invited to deliver lectures of 40 minutes duration. In two parallel sessions there will be about 70-80 contributed papers of 20 minutes duration.

Posters will be displayed over an area of about 200 m². Ample time will be guaranteed for the oral explanation and discussion of posters. 6 x 50 minute forums will be held to discuss the current problems of each subject group.

Exhibitions:

The subjects of the AIC work-groups, such as colour systems, the fields of colour design and education will be displayed at study exhibitions.

It will be possible to exhibit instruments, paints, colour design equipment and books for commercial purposes.

During the conference we hope to hold other exhibitions in connection with colours, eg. on art and architecture.

Other programmes: Excursions will be organized to show the folk colour culture in different parts of Hungary.

There are preliminary plans for several other international conferences and programmes to be held at the time of the conference, such as the CIE DIV.1 and DIV.2, International Fashion Show, International Conference on Ecology and International Conference of Colour Designers.

CONFERENCE LANGUAGE

The official language of the Conference is English. No translation service will be available.

INTERNATIONAL CENTRE OF COLOUR INFORMATION, EDUCATION and MUSEUM

On the initiative of the Hungarian National Colour Committee in agreement with the AIC Executive Committee the Technical University of Budapest has endowed a FOUNDATION to create a centre as mentioned above, for which it has offered a building site in the centre of Budapest, or the banks of the Danube to the value of 500,000 Swiss francs. One of the tasks of the FOUNDATION will be to sponsor the participation of colour experts in AIC conferences and programmes.

The members of the curatorship will be appointed by the TUB, AIC EC and institutions, enterprises and organizations joining the foundation. We wish to inaugurate the centre at the time of the opening of the COLOUR 93. The detailed programme will be sent to those wishing to join the foundation.

CONTRIBUTED PAPERS

Papers, which may deal with an aspect of the science, art and technology of colour, must be submitted to the Chairman with 3 copies of an extended abstract of not more than 2 A4 pages (including figures) by August 1992.

The abstract, which will be published in the Proceedings, must be patterned following the guides which will be provided to each contributor.

Papers will be accepted in English, French or German. The preferred language is English.

The International Papers Committee will decide on the final selection of the papers. Authors will be informed of acceptance of their contribution by 1 November 1992.

Authors of papers and posters will receive the Authors Instructions at the same time as the letter of acceptance. The final manuscript in a camera ready form is due by 1 March 1993.

PREPRINTS AND PROCEEDINGS

A preprint of the Conference Proceedings will be handed out to the participants of the COLOUR 93 Congress. It will contain the invited Papers and the extended abstracts. The cost of the Preprint volume will be included in the registration fee.

SOCIAL PROGRAMME

A full social programme will be arranged and participants are invited to bring members of their families with them.

- Pre- and Post Conference Tours will be organized to sites of interest and natural beauty. These programmes will be organized on special request and at extra charge.

Ladies' programmes:

- Guided shopping tour in the downtown area of Budapest.
- Sightseeing tour in the Buda Castle area.
- Traditional cooking party, where participants may learn how to prepare traditional Hungarian dishes.

BUDAPEST

Budapest is the political, cultural, industrial and educational capital of Hungary, with over two million inhabitants. Within its area of 326 square kilometres it encompasses the river Danube, wooded hills and a pleasant combination of the old and new.

TRAVEL and ACCOMMODATION

Budapest, in the Heart of Europe, can easily be reached by air, train and car from all major European cities. A bus service from the airport to Erzsébet tér takes airline passengers every half an hour. From there the Technical University can be reached either by public transport (trams line 47 or 49 or bus line 1) or by taxi.

The participants can select accommodation in hotels of different categories. Accommodation in student residences (in hotel-type rooms) will also be provided. Hotel rooms in Budapest should be booked long in advance whatever the season. (We will give detailed information in the second circular.)

REGISTRATION FEE

The registration fee for participants is expected to be USD 350 (for accompanying persons USD 200), but a firm announcement will be made in the second circular. Registration fee for the Congress includes the Proceedings, light refreshments, welcome reception and conference dinner. Excursion fees and accommodation in Budapest are not included.

This form should be sent to:

Technical University of Budapest
Conference Office
Műegyetem rkp. 3-9.
Building Z. Room 101/b
Budapest Hungary
H-1521
Phone and fax: (36-1)-185-2218

Deadline: 15 March 1992

PRELIMINARY REGISTRATION FORM

**7th Congress of the Association
Internationale de la Couleur at the
Technical University of Budapest,
Hungary**

14-18 June 1993

Please check:

- I am interested in the above Congress and shall be grateful to receive the second circular with the registration form.
- I hope to present a contributed paper and will submit a title and extended abstract by 1 August 1992.
- My individual contribution should be presented in the poster sessions.

Proposed title of the individual contribution
.....

I propose to arrive with ... accompanying person(s).

.....
Family Name, First Name and Initials, Title

.....
Name of Company/Institute, Profession

.....
.....
Address: Street, No., City, (Postal Code), Country

Telephone:

Telex:

Fax:

ECD

Environmental Colour Design
study group of the
AIC

Salzburg
90-09-25

ECD report to AIC

ECD (Environmental Colour Design, study group of AIC) had been active during 1998/90.

At the end of 1989 ECD produced it's first Newsletter, which was sent to more than 200 potential members of the group. The first circular of the AIC Interim Symposium 1991, "Colour and Light" in Australia, was included in the newsletter.

ECD became an official member to COG (Coordination Group of Non Governmental Organizations in the Field of Man-made Environment), which offers an information service for it's member organisations and publishes a calendar of coming events in the fields of architecture, design and art.

Members of ECD presented their contributions on environmental colour design in several meetings on architecture and design (e.g. International Biennale of Architecture in SOFIA in 1989, Colour for Town in Moskow in 1990).

Members of ECD were also cooperating in research projects and the publication of books on environmental colour design.

Despite the fact that the membership fees ECD collected during this year, did not even cover a third of its expenses, ECD plans to expand its activities in the next years.

The 5th meeting of ECD will take place in Sidney in 1991 during the AIC interim Symposium "Colour and Light".

Leonhard Oberascher
chairman

chairman : Dr. Leonhard Oberascher, University of Salzburg, Institute of Psychology, Hellbrunner-
straße 34, 5020 Salzburg, Austria
or : Kaltnergasse 8, 5020 Salzburg, Austria (Tel. 0662 / 28459, Fax 0662 / 274051)

secretary : Dr. Lars Sivik, Departement of Psychology, University of Göteborg, Manstengatan 7,
42163 Frölunda, Sweden

**Activity Spectrum
of the
Colour Group of India
(1980 - 1991)**

1. 'Colour 80' Seminar, Feb. 12, 1980, Hotel Tajmahal, Bombay.
2. Seminar on "Colour Tolerances" - Visual Vs Instrumental", June 6, 1980, VJTI Auditorium, Bombay.
3. Seminar on 'Colour and its Applications' Nov 26, 1980, West End Hotel, Bombay.
Topics covered :
 - "Colour in everyday life" by Prof. R.P. Joshi
 - Panel Discussion on "Who will be your best Colourist Tomorrow? Men or Machine.
4. Workshop on Colour Technology for Management, May 9, 1981 Hotel TajMahal, Bombay.
5. Refresher Course on "Colour Technology" March 2-6, 1982 held at Hotel Searock, Bombay.
6. "Colour for Decoration"-28.09.1981, SASMIRA, Bombay.
7. Dr. Henry Hemmendinger with Indian Colour Group-March 12, 1982 Hotel Centaur, Bombay.
8. Symposium on "Colour Technology for Textiles", 14th Dec.1982
9. Dr.Allan B.J.Rodrigues meets Colour Group-Sept 15, 1982 at M.G. Consultancy, Bombay.
10. Colour Technology Course, April 19-23, 1983, West End Hotel, Bombay.
11. Symposium on "The Quality Assurance in Colour Industries- Current Trends-15th Dec.1983, Hotel Centaur, Bombay.
12. A Book on "Fundamentals of Computer Colour Matching" by Dr (Mrs) S. Patwardhan, Dr. N.S. Gangakhedkar and Mr. V.C. Gupte. A publication of Colour Group of India (Price Rs. 100/- plus postage and handling)
13. Colour Technology Course-April 16-19, 1984, West End Hotel, Bombay

14. Seminar on "Advances in Colouration of Textiles" 10th Jan.1985-ACTI, Ahmedabad and Colour Group of India at Lions Hall, Ahmedabad.
15. Colour Technology Course-March 1985, Hotel Centaur.
16. Colour Technology Course in Surat 14-25, 1985 CGI Surat Chapter
17. Refresher course in Colour Technology 12-15 Jan.1987, West End Hotel, New Marine Lines Bombay.
18. Half-day Seminar by CGI Surat chapter 29.01.1987
19. Colour Technology Course, March 23-26, 1988, Hotel West End, Bombay.
20. Advance Course in Colour Technology March 25-27 , 1991, Hotel Airport Centaur.
21. "Colour News"-Quarterly Newsletter of the Colour Group of India was started on Oct.1980. (36th number is being circulated as on September 1991) Dr. N.S. Gangakhedkar, Mr. V.C. Gupte, Dr. Mrs.Patwardhan and Mr. M.D. Dixit worked as Editors.

**Colour Technology Courses
conducted by
Colour Group of India
(1980 - 1991)**

1. Refresher course on "Colour Technology", March 2-6, 1982 held at Hotel Searock, Bombay.
2. Colour Technology Course, April 19-23, 1983, West End Hotel, Bombay.
3. Colour Technology Course, April 16-19, 1984, West End Hotel, Bombay.
4. Colour Technology Course, March 1985, Hotel Centaur, Bombay.
5. Refresher Course in Colour Technology, 12-15 January, 1987, West End Hotel, New Marine Lines, Bombay.
6. Colour Technology Course, March 23-26, 1988, Hotel West End, Bombay.
7. Advance Course in Colour Technology, March 25-27, 1991, Hotel Airport Centaur, Bombay.

Membership of Colour Group of India

Membership	1986	1987	1988	1989	1990	1991
Patron Member	3	3	3	3	3	3
Organisation Member	15	3	4	4	4	3
Life Member	13	20	33	33	34	40
Individual Member	125	13	20	20	20	25
Total	156	39	60	58	61	71

Florence, February 7th, 1991

ASSOCIAZIONE OTTICA ITALIANA

ENTE MORALE R. D. Legge n. 344/1940

Sede: via Fiume, 8 - 50137 Firenze - Tel. (055) 280181

Sepr.: via del Castellare, 1/1 - 51017 Pescia (Pt) Tel. (0572) 453339

The interest for "color", in Italy, is very large, ranging from Measurement to Fashion, through a variegated set of items, partly indicated in the Circular Letter dated October 1991. Informations about the world activities are recurrently requested to the Associazione Ottica Italiana (AOI) which, routinely, fulfills its role.

In matter of meetings, "On the use of Color", Capri, May 1990, sponsored by AOI, was duplicated in Florence, December 1990. The AOI is now organizing "The tests of color vision", for Spring 1991.

In matter of seminars, the Centro Interdipartimentale di Studi Colore ed Arte in Padova has been very active, and its future programme is also very attractive.

Also the educational activity has been very intense, during the past year. On March-April 1990, O. da Pos held, in Padova, a course devoted to Color Perception, flanked by practical demonstrations. L. Ronchi held courses on color vision in Rome and in Florence, at the ISIA Institutes (for Industrial Designers), where C. Castellini lectured on Color Measurement. Moreover, L. Ronchi held a course on the optimization of visual displays (CVM) in the Higher School of Specialization in Optics of the University of Florence. The 1991 topic tackled by L. Ronchi with F. Quercioli will be "Pseudocolor and Camouflage". In turn, S. Villani (AOI President) is regularly including color in his courses for Optometrists.

In matter of publications, let us quote the booklet entitled "Trasparenze" by O. da Pos, Icone Ed., Milano, just coming to the light. Two Italian papers appeared on the Proceedings of the IRGCVD Meeting in Tokyo (26-28 March, 1990), Y. Ohta Ed.. A paper by L. Ronchi on the Purkinje effect appears on the February 1991 issue of Color Research and Application.

The AIC was represented by L. Ronchi at the Color and Colorimetry Meeting (Barva in Barvna Metrika) in Yugoslavia (Maribor, 27-29 September, 1990), where she presented a paper, Dr. J. Schanda being co-author, entitled "On the blue complications".

A number of Posters and papers have been proposed to the organization of AIC Interim Session '91 in Sidney, as well as to XI IRGCVD Symposium and to the joint IRGCVD-AIC meeting

At last, L. Ronchi and O. da Pos are starting an inquiry about the prerequisites of the "Color Consultant" in various parts of the world, to try to create a similar profession also in Italy.

The correspondence should be addressed to the Italian AIC Member, L. R. Ronchi, Istituto Nazionale di Ottica, 6 Largo Fermi, 50125 Florence, Italy

Lucia R Ronchi



Stiftelsen Svenskt Färgcentrum Swedish Colour Centre Foundation

Igeldammegatan 30 • PoBox 49022 S-100 28 Stockholm Sweden
Tel. 08-617 47 00 • Teletex 8106238 SCANDCOLOR • Telefax 08-617 47 07
08-617 47 00 08-617 47 47

Stockholm, April 9, 1991

The Swedish Colour Centre Foundation has in the last year and will during the coming year work with the following items.

Every year the Swedish Colour Center Foundation arranges a Day of Colour under different themes.

Our annual Day of Colour 1990 was given in Malmö in the south of Sweden. It was held under the theme of "Colour and Design". Colour is a very important element in design, but discussions of colours seems to be a matter of taste in a more simple way. Behind good colour design you find intuition, feeling and artistic quality. But the colour is not the only factor in colour design. You have to consider other factors as form, function, information, association, character, identity, fashion, tradition, length of life and target group. In this Day of Colour we tried to illustrate and probe colour questions in design in different ways and from different points of view from designers, customers and experts.

This year's Day of Colour 1991 will be held in Stockholm May 14th. The theme will be "Colour and environmental responsibility". How does the choice of colour in the environment affect man? Can the different colours affect your health and well-being? New paint materials compared to the old paint "mixtures". Which are the paints in the future? These are some of the questions which will be discussed on "Colour Day 91".

During this year we are also working with an investigation about the colour research in the future. A new organization, a scientific council, will be established for taking care of questions of colour in research. The purpose of this council is to initiate and inspire to research within the field of colour and to develop knowledge for a more conscious use of colour. It is also important that the knowledge and the results will reach market and education so that it can be used.

SWEDISH COLOUR CENTRE FOUNDATION

Berit Bergström



Technical Faculty, Department of Engineering,

Smetanova 17, 62 000 Maribor, Yugoslavia,

Phone:(062)25-461/293, Telex: 33334 YU TF MB, Fax: (062)212-013

On the Technical Faculty in Maribor a research team actively employed in science of colour and colorimetry, acts already since 1982. In 1989 this team got an agreement to establish the Yugoslav Research Center for Colour which is interdisciplinary projected. Members of this center are scientists and experts of many different fields of science. The head of Yugoslav research Center for Colour is Prof. dr. Slava Jeler.

In September 1990 JRCB organized the 3rd international Symposium with the main topic on colour and colorimetry. This symposium was visited by many foreign and domestic experts from various fields of science: colorimetry, physics, mathematics, psychology, medicine and architecture. The symposium also included demonstrations of measuring systems for evaluation and vizualizing of colour and computer aided reciping and laboratory dyeing devices. Exposers represented the latest developement achievements of software and hardware for colorimetry and laboratory dyeing devices. There was also an exhibition of technical literature in the field of colorimetry.

With this symposium the JRCB has represented its three year-period of work 1987/1990 (The 2nd international Symposium was organized in 1987). In this period JRCB has intensified and extended its activities in research, co-ordination, education and information in the Yugoslav environment.

With the scope of the center, a special role is taken-in by the research team which participates in many different projects, e.g. in scientific as well as in projects for industrial use. This team solves the problems of colorometry, computer aided reciping, vizualizing of colour, designing in textile print, spectroscopy of dyes,...

One of the important achievements ot the Yugoslav Research Center for Colour in the last period was also the edition of "Dictionary for Colorimetry". The dictionary includes 707 scientific and technical terms in German, English, Slovene, Croatian and Serbian language.

Maribor, March 1991

SOUTH AFRICAN COLOUR SCIENCE ASSOCIATION. (SACSA)

With Dr. Kok in the chair, the SACSA AGM and One Day Conference was held at the Division of Production Technology CSIR Pretoria on 18th October 1990. With the theme of 'Colour in Working Life', maybe that was why so many people failed to take an opportunity to enjoy a feast of talented lectures. But at any rate, the relatively small audience, after being welcomed by SACSA Chairman Dr C. J. Kok, were most certainly intrigued and entertained by the Opening Speaker Mr A Breedt, the General Manager of Technology Operations of the SABC. On the theme of colour television Mr Breedt spoke on the matching of electronics of the TV cameras, and the necessity to align each day. He mentioned the lack of colour standards, the problems of stable phosphors, all meat and wine to the present day lighting technologists.

As a complete contrast to present day technology, the Keynote Speaker, Professor R. Doepel, with a presentation of a vast variety of colour slides, reviewed Colour in early 20th Century Art, as an alternative comparing it with much of our present day political activists use of colour in presenting their personal opinions on past, present and future for us all.

For all our good health, Mr. H. Ebrahim most certainly enlightened us all with his paper "Colour & Illumination of Microbial Colonies". The work of the Medical University of Southern Africa is well known and one must congratulate Mr. Ebrahim on his many lighting solutions to enable accurate photography to be carried out of not only microbial colonies but also of virus cultures.

Dr Deon Ferreira also of MEDUSA presented a wonderful series of slides not only on plain dentistry but also of the specialist field of Prosthodontics and Maxillo-Facial prosthetics, where colour most certainly plays a major role. For those who do not know of Dr Deon Ferreira, he qualified as a dentist in 1981 and practised dentistry in the UK. In 1986 he joined MEDUSA and today is busy with post-graduate studies in Prosthodontics.

Mr T Delacy presented details of the many light sources available to us all, since he is now with the Osram company in RSA. Ms K W Grieve of UNISA in her paper "Psychological Responses to Colour & Implications for Work Environments" reviewed the traditional meanings of colour amongst black population groups and a comparison with findings from a recent empirical study she had conducted on colour preferences and meaning of colour in a sample of urban black South Africans, as well as practical implications thereof.

Mr Angus M Clarke, Manager Lighting Design & Vision Control in company with Mr Fanie Du Toit of SABS Television dealt with "Problems Encountered in Television Programme Production with the Colour White & Other Colours that are Lighter or Brighter than Human Skin and Ways to Overcome Them." Mr. Clarke pointed out that advising potential Television Stars not to wear white, brightly coloured or reflective clothing generally resulted in their doing such things, thus resulting in poor picture quality. Well, if you do want to be a TV

Star, consult Mr Clarke, who grew up in Cape Town, served in the SA Navy and joined the SABC TV service shortly after it was established.

Your Reporter presented a Paper "Some Colour Fact & Fancy", reviewing the past wonderful colour work of such notables as Harrison, Ruff, Henderson, who as well as reporting on the peculiar colour shadow effects in carrying out Spectral Power Flood-lighting for such authorities as City of Johannesburg, Municipality of Benon, whilst others flounder in darkness. But certainly not the Australians in Sydney University carrying out much research work in the remarkable effects obtainable with colour floodlighting, not forgetting the genius of the Japanese in these fields. With cheerful discussion periods, such notables as Dr Einhorn, Mr Dempster and others in the audience developed all those leading questions that make authors think hard about their theories.

Dr C J Kok conducted the Annual General Meeting with his customary aplomb, having been Chairman for the past two years. The Minutes of the previous 1989 AGM were tabled and approved, as were the Chairman's, Secretary's and Treasurer's Reports.

50125 ARCETRI - FIRENZE

LARGO ENRICO FERMI, 6

TEL. 22.11.79 - 22.17.35 - 22.36.129 - 22.96.184 - 22.60.200
FAX 22.37.755


Firenze, October 29th, 1990

ITALIAN NEWSLETTER N°1

Dear sirs,

with the present letter you are informed about the interest for color, in Italy, in a rather general manner. In near future you will receive more detailed information, and the Newsletter will be given a better format.

Sincerely Yours,


Lucia Rositani Ronchi
1)- AIC RELATED ACTIVITIES

Italians are present in every AIC Study group:

- * Color and Education : Prof.O.da Pos, Dipartimento di Psicologia Generale, Università di Padova , 35100 PADOVA, Italy
- * Color and Environmental Design : Prof.A.Marcogli Politecnico di Milano, Dipartimento di Programmazione e Progettazione e Produzione Edilizia, 3, via Bonardi, 20133 MILANO, Italy
- * Color order Systems: an Italian expert is Prof. N.Silvestrini ,MILANO,Tel. 02/ 87 99 08
- * International Research Group on Color Vision Deficiencies (IRGCVI).

The Italian "Founding Member" is: Prof. L. R.Ronchi, INO, 6 Largo Fermi
50125 FLORENCE.

The list of Members includes:

- Dr. M. d'Aiotti, Cattedra di ottica Fisiologica, Istituto di Clinica Oculistica, Nuovo Policlinico, Cappella dei Cangiani, 80131 NAPOLI
- Dr. M. d'Atri, Via Salvator Rosa 24, 09100 CAGLIARI
- Biblioteca Interdipartimentale Psicologica- Università degli Studi, P.Capitanato 3, 35139 PADOVA
- Dr.R.Casti, Ct.Ottica Fisiopatologica, Via Croce Santa 11, S.SPERATE/CAGLIARI
- Dr.C.M.Dessy, Via Boiardo 25, 09047 SELARGIUS
- Dr. M.Fontana, Via Nuovaluce 73, 95126 CATANIA
- Dr.M.Fossatello, 20 Via Fleming, 09126 CAGLIARI
- Dr.R.Fusco, Cattedra di ottica Fisiologica, Istituto di Clinica Oculistica, Nuovo Policlinico, Cappella dei Cangiani, 80131 NAPOLI
- Dr.G. de Martini, 31 via Parigi, 09100 CAGLIARI
- Dr.A.Mulas, 10 Via col d'Echele, 09100 CAGLIARI
- Dr. S.Mulas, 35 via dell'Abbazia , 09100 CAGLIARI
- Dr.M. C. Palmas 55 via S.Antonio 55, 09016 IGLESIAS
- Dr.A.Piras, 8, via Berlino 09100 CAGLIARI
- Dr.M.Piscitelli, 3, via Salaris, 09128 CAGLIARI

./.. continued

Dr.A.Pitzus, 19 via Piemonte, 09127 CAGLIARI
Dr.M.Piu, 20 via Pasteur, 09100 CAGLIARI
Dr. G.Puxeddu, 62 via Crocifisso, 09106 IGLESIAS
Dr.M.Puxeddu, 74 via Casaglia, 40135 BOLOGNA
Prof.A.Serra 5 via Belgrado, 09047 CAGLIARI
Prof.A.Vannini, Ospedale Oftalmico, 19 via Juvarra, 10122 TORINO
Prof.S.Villani, 1-T via del Castellare 31017 PESCIA (PT)

An IRGCVD meeting took place in Cagliari in 1989. For the Proceedings contact:
B.Drum, Wilmer Eye Institute, B-20, John Hopkins Hospital, Baltimore MD 21205, USA

2) HOW THE AIC IS LINKED TO ITALY

Since the birth of AIC , the Associazione Ottica Italiana (AOI) included in its tasks the link of Italy to AIC. Accordingly, basic textbooks and specialized publications have been gathered and up-to-dated, to be available to those who requested informations. The largest part of the material above is in the library of INO (Istituto Nazionale di Ottica), another part is c/o the present president of AOI, Prof.Sergio Villani (Segreteria AOI, Via del Castellare 1-T, 31017 Pescia, Italy, Telephone: 0572.453339).

An important group has been intermittently active in Padova, until Prof.O. da Pos has given it a stable profile, by creating the Centro Interdipartimentale Studi Colore ed Arte , linked to his University. One of da Pos' aim is also that of issuing an on-line Roster of the Italians interested in color, under various respects.

3) THE GENERAL INTEREST FOR COLOR, IN ITALY

It is other-than easy to indicate all the color-related activities in Italy, without missing important contributors, since various initiatives grow individually. Hence, the list displayed in the following pages should be intended only as a preliminary indication.

Norms in various color-related areas are under the control of UNI.
the "contact person" is Dr.S.Raiteri, Via Rho 8, 20125 MILANO, Italy

T O P I C	Contact Person
<p>OPTICAL RESEARCH AND APPLICATIONS</p> <p>Work on color as related to thin layers, holography, pseudocolor, image digitization, monitors (phosphor, LC), etc. in part is under the control of CIO (Commissione Italiana di Ottica)</p>	<p>Dr. Franco Quercioli Istituto Naz. di Ottica 6, Largo Fermi 50125 FLORENCE Italy</p>
<p>COLORIMETRIC CALIBRATIONS</p> <p>The Istituto Elettrotecnico Nazionale Galileo Ferraris is equipped for measurement of color and for spectrophotometric assessments. It operates also in connection with CIE Division 2. Other Institutions get the facilities above.</p>	<p>Prof. Paolo Soardo INEGF, Strada delle Cacce 91 10135 TORINO, Italy</p>
<p>COMPUTERIZED COLOR METERS</p> <p>The Italian Industry is very active in this area. In addition to automation and robotics, also portable instruments (e.g. for medical screening) are developed.</p>	<p>Dr. Carlo Castellini Istituto Nazionale di Ottica 6, Largo Fermi 50125 FLORENCE Italy</p>
<p>COLORIMETRY (mathematical models)</p> <p>There are some initiatives, in the Departments of Physics of the Italian University</p>	<p>Prof. Claudio Oleari Dipartimento di Fisica Viale delle Scienze Università di Parma 43100 PARMA Italy</p>
<p>PSYCHOPHYSICAL, PSYCHOLOGICAL RESEARCH</p> <p>Units interested in visual research, including color vision, are in Florence, Pisa and Padova</p>	<p>Prof. L.R. Ronchi INO, 6 Largo Fermi 50125 FLORENCE, Italy Prof. A. Fiorentini Centro di Neurofisiologia CN 51, via S. Zeno 56100 PISA Prof. O. da Pos Dip. Psicologia generale Univ. di Padova, 35100 PADOVA</p>
<p>PSYCHOLOGICAL CHROMODIAGNOSTIC</p> <p>Specialized tests based on color are developed in Italy, for various applications, not last to test retarded or handicapped children</p>	<p>Prof. O. da Pos Dip. Psicologia generale Univ. di Padova, 35100 PADOVA</p>
<p>DYE INDUSTRY</p>	

<u>T o p i c</u>	<u>Contact Person</u>
TEXTILE INDUSTRY	Dr.R.Casini- ORITEX S.r.l. Viale della Repubblica 106 50047 Prato(FI) Dr.A.Mauro-Tecnotessile S. Centro Ricerche - 14, via Valentini - 50047 Prato(FI)
<u>GEMMOLOGY</u> The Centro Informazioni e Servizi Gemmologici in vital ly interested in color(of gems) and a proper color order system is being sought for.	Dr.Soperchi CISGEM Via Brisa 5 20123 MILANO, Italy
<u>HISTORY OF ART</u> In some cities the departments of the University incl ude color-in-art in various forms	Prof. Brino Torino
<u>RESTORATION</u> Color in restoration is one of the main interests in Italy,as far as paints, ceramics,frescoes, ancient tapestry, etc. are concerned	Dr.M.Cetica INO 6 Largo Fermi 50125 FLORENCE, Italy
<u>COLOR AND ARCHITECTURE</u> Many Italian Universities include in their courses color as related to architecture and urbanism.Moreover, emphasis to color is given at the level of ISIA schools for industrial designers.	Arch. G. Corretti Via di Villamagna 42 50100 FLORENCE, Italy
<u>COLOR AND FOOD</u> Research studies are performed in different centers.	Dr.D.Matassino Dipartimento Sci.Prod.Animal Università di Napoli Via Università 100 80055 Portici(NAPOLI),Italy
<u>COLOR AND FASHION</u> Italy appears to be a leader in the field of fashion (dresses,cosmetics,accessories etc.)	
<u>PHOTOTHERAPIES(Chromotherapies)</u> The research in this area, refernce is mainly made by making reference to lasers.	Prof.R.Pratesi LEQ Via Panciatichi 50100 FLORENCE, Italy

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Thessaloniki 2/9/1990

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Dear Sir,

I am in receipt of the AIC Newsletter bearing your first "Message from the President". Please accept here my personal congratulations for your election and my best wishes for an enlightened and memorable presidency.

May I introduce myself because I feel we have not so far - since 1985 when I first joined the AIC - had the opportunity to meet personally. I am an observer member of the AIC, since my country does not have a member organization. During these years I presented my work in Monte Carlo, in Buenos Aires and in Winterthur, at the Interim Meeting of The AIC Environmental Group, of which I am also a member. I am very happy about my membership in AIC. I met so many important people, exchanged opinions with them, was instructed by them and carefully heard to. I even became friends with many of them. I personally feel that joining the AIC was the most rewarding event of my life. Since 1985 I have been trying and shall continue to try to keep up the standard of my research for the sake of my membership to the AIC.

However, even within the AIC there are, roughly put, "first-class" and "second-class" members, not due to the difference in experience and competence which is natural and noble, but due to the means some people dispose of for the execution of their research or the realization of their projects in comparison with others. I, for example, find it very difficult to

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continue to be efficient without the financial, technical and moral support every researcher needs in order to continue a harsh life of dedication and isolation. For ten whole years, since I started my postgraduate studies at the Sorbonne until now, I have worked alone at the end of my physical forces. The result was a serious damage of my spine around the waist and the neck. One just simply cannot do everything by oneself and, even if he can for a while, he might have always done better if he had shared opinions with somebody else from another discipline, for the problem of Colour in the Environment is complex beyond a single man's compass. Otherwise it all ends up into an "one man's show" depending on how theatrical one can be on the tribune(..)

As early as the Monte Carlo Congress I exposed my problem to Lars Sivik who advised me to be interdisciplinary rather than intradisciplinary and sent me to Anders Hård. The latter suggested that I propose first an outstanding project for architecture in Sweden and then apply for an one year's sponsorship(!). I am not to criticize Anders Hård, for he does not handle money that belongs to him. What I would like to suggest is that for its better function the AIC should first of all support the potential of all its members, new and old, not only in isolation but in collaboration, as well. Paul Green-Armytage in the last Newsletter and Warner Spillmann earlier at the Winterthur meeting pointed out to this disparity in the understanding of the various members between them. There are the two big classes, the scientists and the artists and many smaller ones among them, as for example the psychologists who do not belong either to the scientists or the artists, etc. Is this not the reason why the Environmental Study group is sinking? Who wishes to pay a contribution to an institution that simply does not work?

I suggest that in the future joint lectures and workshops are encouraged more than individual ones. In their frames each participant could have his own presentation. In what way have we, AIC people, contributed to the solution of practical problems with all the "wisdom" we dispose of? We continue to live in urban disorder, aesthetic offense and generalised disbelief due to bad and excessive information. My humble opinion is that the theoretical presentations of every meeting are announced to everybody so that common applications in practise may next be proposed by the practitioners (artists, architects, designers, etc.). To this end the theoreticians should be obliged to make their presentations more easy to grasp by everybody, by means of non-verbal representational methods, including diagrams, charts, photos, real-life samples. There might even be a small funding of the volunteering working teams. Or even a sum of money as a prize for the best, most original and most useful practical suggestions for everyday life problems. In this way both the theoreticians would be delighted to have big audiences and the practitioners to have an

opportunity for real action (these last hate mere talk). The AIC would also give to the wider society the example of mutual understanding and collaboration which admittedly are not simple because of the multiplicity of the human nature. The good execution of such a plan would naturally take an ongoing effort of good will and respect in all directions. It's not the knowledge that we lack but the decision for that.

Ending up I wish to offer my personal help with eventual similar organisational undertakings in order to give the good example of no easy inspirator. Thanking you for your kind attention I remain

Yours sincerely,

A handwritten signature in black ink, appearing to read "J. F. Cascaes", written over a horizontal line that extends across the width of the signature.

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