

# Inter-Society Color Council *News*

## ISCC MACBETH AWARD TO W. DAVID WRIGHT

The 1980 ISCC Macbeth Award was presented to William David Wright at the Annual Meeting Luncheon of the Inter-Society Color Council, April 22, it was announced by the ISCC. The Macbeth Award was established by the late Norman Macbeth, Jr., in honor of the memory of his father, Norman Macbeth. The award is presented biennially for one or more outstanding recent contributions to the subject of color.

The Award citation recognized Professor Wright's lifetime achievements but stressed his recent unusual and important contributions to color. This work has taken place in the past ten years, since Dr. Wright's retirement from the Imperial College of Science and Technology in London. Dr. Wright has remained very active in color, particularly in teaching and in the application of principles of color technology to the preservation of paintings. He has lectured and worked at the University of Calcutta, India, the University of British Columbia and Waterloo University, both in Canada, and at the City University of London to promulgate his philosophy that color should be a part of the liberal arts curriculum. Dr. Wright has developed two colorimeters for measuring the chromaticities of paintings, which do not damage them by abrasion or radiation. Under Dr. Wright's guidance, these colorimeters have been used at the Courtauld Institute of Fine Arts and the National Gallery of Art in London to measure color before and after restoration and for continued monitoring of pigment fading. This effort has convinced a number of artists, art historians, and restorers of the usefulness of applied colorimetry in their work.

David Wright received both his Bachelor of Science degree in physics and his Doctor of Philosophy degree from Imperial College, London University. After two years spent working on television both with the Westinghouse Company in the USA and with the Electrical and Musical Industries Ltd in England, Dr. Wright returned to Imperial College in 1931 as a lecturer in the Technical Optics Section of the Physics Department. He was appointed Professor and Head of the section in 1951, several years after having received the degree of Doctor of Science from London University.

Dr. Wright is the author of five books: "The Perception of Light" in 1938, "The Measurement of Colour" in 1944 (with subsequent editions in 1958, 1964, and 1969), "Researches on Normal and Defective Colour Vision" in 1946, "Photometry and the Eye" in 1950 and "The Rays are Not Coloured" in 1967. He has also authored many papers, stemming from later research work with the colorimeter he first built to conduct his doctoral thesis studies. These include reports of his work on relative spectral luminous-efficiency curves for different field sizes, field positions, and levels of luminance; color-matching data for foveal and extra-foveal viewing; discrimination data for saturation, hue, and chromaticity under different conditions of adaptation; and haploscopic matching to investigate the effect of adaptation to white and colored light at various luminances and for various lengths of time. Dr. Wright's thesis work, using his own colorimeter for the measurements, resulted in the  $2^\circ$  spectral coefficient curves for ten observers.

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Together with like data by J. Guild for seven observers and the relative luminances of the equi-energy spectral colors standardized by the CIE in 1924, the Wright data helped define the CIE 1931 Standard Colorimetric Observer.

Dr. Wright was founder Chairman of The Colour Group (Great Britain) from 1940 to 1943, and its Secretary from 1944-1948. He has been involved in many additional activities including Vice-President of the Physical Society (1948-1950), Secretary of the International Commission for Optics (1953-1966), Chairman of the Physical Society Optical Group (1956-1959), Director of Undergraduate Studies in the Imperial College Physics Department (1960-1968), and activities on many CIE and other committees. Dr. Wright was the first president of the International Colour Association (AIC) from 1967 to 1969, and organizer of its 2nd International Congress Colour 73 at York in 1973. He was the recipient of the first Newton Medal of The Colour Group (Great Britain) in 1963 and the Deane B. Judd AIC Award in 1977.

## APPLICATIONS APPROVED FOR INDIVIDUAL MEMBERSHIP BOARD OF DIRECTORS MEETING APRIL 20, 1980

- |   |  |
|---|--|
| Dr. Robert E. Bannon<br>American Optical<br>Corporation<br>Scientific Instrument<br>Division<br>Buffalo, New York 14215 | Color Vision Anomalies — Color as applicable to ophthalmologic instruments. American Academy of Optometry, ARVO, National Society for the Prevention of Blindness. |
| Mr. Hilton Brown<br>1432 Park Avenue<br>Baltimore, Maryland<br>21217  | Artists colors (application not yet received).   |
| Mr. Howard W.<br>Childress, Jr.<br>1 Majestic South<br>Lincroft, New Jersey<br>07738                                    | AChS. Instrumental measurement of small color differences, predicting color blending.  |
| Ms. Donna D. Faber<br>Sandoz Colors &<br>Chemicals<br>Rt. 1<br>Martin, South Carolina 29836                             | Instrumental evaluation and control of dyestuffs, computer assisted color analysis.  |
| Mr. Tony Howard<br>60 Tyndall Avenue,<br>Apt. 702<br>Toronto, Ontario M6K 2E5<br>Canada                                 | How colour affects the human body. Canadian Society for Color.   |

Mrs. Helen Jacobson  
6317 Park Heights  
Avenue  
Baltimore, Maryland 21215

Dr. Yoshinobu Nayatani  
Electrotechnical  
Laboratory  
Osaka Branch  
Nakoji, Amagasaki  
Hyogo, 661, Japan

Mr. Milton Pearson  
16 Colleen Way  
Pittsford, New York  
14534

Dr. Michael R. Pointer  
Kodak Limited  
Research Division  
Colour Laboratory W-93  
Harrow, Middlesex HA1  
4TY  
England

Mr. Raymond N. Shaw  
102 Drake Road  
Somerset, New Jersey  
08873

Mrs. Elizabeth Ann  
Stasiak  
3540 N. Meade Avenue  
Chicago, Illinois 60634

Mr. Leslie Stroebel  
266 Antlers Drive  
Rochester, New York  
14618

Mr. Robert H. Trimmer  
909 River Road  
Piscataway, New Jersey  
08854

Mr. John D. Vorlicek  
Philadelphia College  
of Textiles & Science  
Schoolhouse Lane &  
Henry Avenue  
Philadelphia, Pennsylvania  
19144

AEA. Painting — color and design.  
AAUP.

Chromatic-adaptation theory, Photometry of fluorescent materials, and assessment of artificial daylight sources. Japanese National Committee of CIE, the Color Science Association of JAPAN, and the Illuminating Engineering Institute of JAPAN.

SPSE, TAGA. Reproduction of colored images and in particular using photomechanical printing methods.

Ph.D. work in colour discrimination. Present work in chromatic adaptation and colour reproduction in photography. Lecture in colour science both inside and outside Kodak. Associate Editor of Color Research and Application representing the Colour Group (Great Britain).

AATCC. Computer colorant formulation in textile industry. Effect of luster on colored textile substrate.

The control problems that occur in the color matching and the coating of paint on paper in a color card company. The computer formulations of color matches, the psychology of seeing color, and the problems of color control in industry.

Teaching photography students color nomenclature and color notation systems, the photographic reproduction of colors, and the visual perception of colors. Society for Photographic Education, AAUP, Photographic Society of America.

Fluorescent whitening agents and laundry bluing.

Continuing research in color relationships explored in my work in painting and photography. Teaching courses in "Basic Design" with color to textile design students and "Color in Design" to textile technology, textile engineering and design students. College Art Association of America.

## FOR INFORMATION: NEW DELEGATES

Dr. Robert Stuart Cohen, Artistic and educational (general).  
AEA  
11213 Powder Horn  
Drive  
Potomac, Maryland  
20854

Dr. Ivor L. Preiss, FARA AChS. Inorganic pigments, chemical  
Department of Chemistry composition and aging. American  
Rensselaer Polytechnic Physical Society, Sigma Xi, American  
Institute Association for the Advancement of Science, New York Academy of Sciences.  
Troy, New York 12181

Mr. Walter G. Smith, Jr., Fine arts application of "state of  
609 Prospect Place the art" color technology, update/  
Alexandria, Virginia upgrade of commercial standard for  
22304 artists' paints; instruction in color  
theory for artists.

## CHANGES IN CORPORATE REPRESENTATION

Calty Design Research, Inc.  
2810 Jamboree Road  
Newport Beach, California 92660

From: Mr. Hideichi Misono to Mr. Takashi Okuda  
Ontario Research Foundation  
Sheridan Park  
Ontario, Canada L5K 1B3

From: Mr. Tibor G. Perlus to Mr. Victor K. Crutch  
Standards Department Telefon AB  
L M Ericsson  
S-126 25 Stockholm  
Sweden

From; Mr. Lennart Ryden to Mr. Anders Åberg

## DETROIT COLOUR COUNCIL

The Board of Directors of the Detroit Colour Council are pleased to announce that this organization has become a member-body of the ISCC. This once-local group, dedicated to furthering interest in color science and design for nearly 25 years in an automotive-oriented region, has in recent years drawn speakers, members and guests on a national level.

Detroit Colour Council members meet at four dinner meetings annually, featuring programs of varied interest, many with a distinctly automotive flavor. Non-members are also welcome. Speakers to date in 1979-80 have been Dr. James Davidson (Macbeth), Jon Hall (PPG), Lois Zolliker (consultant), Dr. Fred Billmeyer (RPI), and Jack Christie (Hunterlab). In addition, two panel discussions averaging 200 attendees dealt with color concentrate for plastics and pigment regulations for coatings and plastics.

Potential new Detroit Colour Council members may contact the President, James E. Grady, E. I. duPont, 7187 White Pine Drive, Birmingham, Mi. 48010, (313) 855-2353. Anyone interested in providing a program may contact the Program Chairman, William V. Longley, Ford Motor Company, Design Center, 21175 Oakwood Blvd., (P. O. Box 2110), Dearborn, Mi. 48123, (313) 323-3726.

## THE CENTER ON THE MATERIALS OF THE ARTIST AND CONSERVATOR

The Center on the Materials of the Artist and Conservator, under the direction of Dr. Robert L. Feller, was established at Mellon Institute in 1976 through a grant from the Andrew W. Mellon Foundation. The Institute is happy to announce that a second generous grant has been received from the Andrew W. Mellon Foundation that will provide the basic support for continuing the Center's activities in the period 1979-1981.

Dr. Feller, Senior Fellow, came to Mellon Institute in 1950. He started out investigating thermoplastic resins, particularly acrylics, that could be used for picture and retouching varnishes as well as for adhesives and pastel fixatives. More than two decades of research on the effects of visible and near ultraviolet radiation on the higher alkyl methacrylates will be summed up in an invited paper at the Houston meeting of the American Chemical Society in March 1980. The paper is co-authored by Bob Feller, Catherine Bailie and Mary Curran.

The Center's present technical staff of 8 are principally engaged in studies regarding the thermal and photochemical deterioration of organic materials found in museum and archival collections — paints, varnishes, adhesives, organic colorants and paper. Intensification of the studies regarding deterioration problems grew out of the investigations of pigments and of picture varnishes that had been sponsored at Mellon Institute by the National Gallery of Art from 1950 to 1976. This long and successful research program has led to more than 50 publications by the Research Project, including 2 editions of a 250-page book, "On Picture Varnishes and Their Solvents." The Center is planning to begin work on a third edition late in 1980. Editorial work is expected to be completed on a new book by March, 1980. The book will comprise monographs on the history, properties and characterization of 10 artists' pigments. Chapters in the pigment book, being sponsored by the National Gallery of Art and the National Endowment for the Arts, have been contributed by German, Canadian and English specialists as well as American colleagues. Mary Curran is serving as managing editor for the project, underway since 1973. The Center's expertise in the history of pigments stems in part from the collection of several thousand well-dated and characterized pigments that Bob Feller and Mary Curran have assembled at the Center in the name of the National Gallery of Art "Pigment Bank" and in part from the highly successful nuclear-science studies in pigment characterization conducted at the Institute for a number of years.

The Center is proud of its highly professional staff. **Mary Curran** came to the Institute in 1967 from the Ontario Research Foundation where she had been employed on the Ontario Paper Company Fellowship. Much of her work has been involved with the potentially troublesome problem in which some types of acrylic resins are able to become insoluble even under the mild conditions of light-exposure on a museum wall. Using some old varnishes coated-out in 1942 by a W.P.A. Art Project at the Fogg Art Museum, Harvard, Bob Feller and Mary Curran were able to demonstrate the occurrence of an "induction time" of 11 years before detectable insoluble matter began to form in commercial butylmethacrylate polymers on the wall of the third floor conservation workshops at the Fogg. This corresponded well with predictions made earlier on the basis of accelerated-aging tests.

**Dr. Jonathan Arney**, coming from a year's postdoctoral experience on thermal reactions of cyclopropane under Professor

Jerome Berson at Yale, joined the new Center in 1977 to undertake investigations on the basic mechanistic aspects of the aging of organic materials. Much of his work has been supported by grants from the National Endowment for the Arts, including a one-year project on the measurement of peroxides during the early stages of deterioration of varnishes and adhesives. Dr. Arney's principal interest has been in studies of the rate of deterioration of both high- and low-grade paper under accelerated aging conditions. An initial publication in TAPPI concerned the kinetic role of oxygen concentration on the rate of embrittlement and discoloration of paper. The results of studies on the influence of acidity on these phenomena will be published shortly. Another publication in press will discuss the effect of oxygen concentration on the fading of organic colorants, part of a project to explore the various technical aspects of protecting museum objects by placing them under an inert atmosphere. One phase of these studies has been to demonstrate the fact that the darkening or fading of a number of colorants can be either indifferent to or speeded up by an inert atmosphere. Presently, **Jon and Kate Novak**, who recently joined the group, are studying the influence of heat in a number of practical problems associated with photochemical deterioration. Jon also has been supervising the work of a number of interns that have engaged in one-semester research projects at the Center as a practical working experience phase of masters-degree training programs in conservation at Oberlin, Harvard and New York University.

Early in 1978, **Dr. Sang B. Lee** joined the Center's staff, bringing with him more than 10 years' experience in pulp and paper chemistry. Sang had done post-doctoral research with Dr. Philip Luner, College of Environmental Science and Forestry, SUNY, at Syracuse before joining the Research Center of CPC International Inc. at Argo, Illinois. The initial investigations of Sang and CMU graduate, **John Bogaard**, have concerned the influence of lignin, hemicelluloses and wood resins on the thermal and photochemical deterioration of paper. At least 2 stages, proceeding at different rates, have been demonstrated in the deterioration of good quality paper. Current studies are concerned with the ways in which exposure to chemical bleaches and to light will influence the relative importance of each stage. A second line of investigation, supported by a grant from the National Museum Act, specifically concerns the bleaching effects of ultraviolet and visible radiation and the potential harm that may be associated with such bleaching in contrast to chemical bleaches. Because light can cause paper to darken as well as to bleach, the Center will review the chemistry of these opposing results extensively in order to provide guidelines to curators and conservators of books, documents and works of art on paper regarding the care of both high and low quality papers and of partially deteriorated papers.

The Color Measurement Laboratory at the Center is under the responsibility of **Catherine Westervelt Bailie**, who rejoined Mellon Institute in mid-1977. She had previously worked with the National Gallery of Art Research Project in the years 1958-1961. The laboratory enjoys the benefit of advice and consultation of **Mrs. Ruth Johnston-Feller**, who was Manager of the Coatings and Colorimetry Laboratory of the Ciba-Geigy Corporation, Ardsley, New York, before her marriage. Ruth Johnston-Feller and Katie Bailie are concerned with quantifying the net color change in paints and inks in terms of changes in surface and vehicle scattering, in hue and in loss of pigment. The lab has found it possible to apply the concepts of chemical kinetics to the phenomenon of fading and, in the process, to

demonstrate that colored intermediates are often formed as an organic pigment or lake fades.

Along with evaluating adhesives, ultraviolet absorbers and antioxidants for use in the care of museum and archival collections, David Encke, whose masters degree training in chemistry includes experience in museum practice, is responsible for the maintenance, calibration and scheduling (usage) of the xenon-arc fadeometer. Accelerated aging tests are conducted in the instrument with the radiation source limited to the near ultraviolet as well as visible, the shortest wavelength likely to be encountered in a museum. Some of the tests last from 6 months to a year. The length of the exposure requires regular monitoring as well as record keeping, because more than one experiment can be in the fadeometer at the same time.

The work of the laboratory has ranged from studies of the kinetics of deterioration reactions to the very practical problem of building an unobtrusive-but-safe carrying case to transport the National Gallery of Art's Leonardo da Vinci painting of Ginevra de'Benci from Lichtenstein to Washington, D. C. in the winter of 1967.

The Center on the Materials of the Artist and Conservator, in its research effort, seeks to understand the fundamental causes of deterioration and to develop, on the basis of this knowledge, better ways of preserving our material and cultural heritage.

Reprinted, with permission, from *Mellon Columns*, Mellon Institute, December 1979.

## HARVEY F. GEORGE, HEAD OF GRAVURE RESEARCH INSTITUTE, TO DELIVER KEYNOTE ADDRESS AT FSCT ANNUAL MEETING

The Federation of Societies for Coatings Technology is pleased to announce that Harvey F. George, Executive Vice-President and Research Director of Gravure Research Institute, will present the E. W. Fasig Keynote Address at the Federation's 1980 Annual Meeting, to be held October 29-31 at the Civic Center, Atlanta, Ga.

Mr. George, who will be featured at the Opening Session on Wednesday morning, October 29, will speak on "The Challenges of the 80's in Coatings and Graphic Arts."

A native of New York City, Mr. George received a Bachelor of Mechanical Engineering Degree *cum laude* in 1945 from the City College of New York, where he was elected to Tau Beta Pi, Engineering Honor Society, and Pi Tau Sigma, Mechanical Engineering Honor Society. He received a Master of Industrial Engineering Degree from New York University in 1952 and did doctoral research in management of research and development. Prior to entering the graphic arts field with Mergenthaler Linotype Co. in 1949, Mr. George worked as an aircraft stress analyst and structures engineer at Fairchild Aviation Corp., and was project engineer on the development of a Sterling cycle engine for the Navy with North American Philips.

Mr. George has more than 30 years of broad experience in the graphic arts and related fields and has served in his current capacity since 1955. Prior to joining Gravure Research Institute, he was head of the graphic arts research section of Mergenthaler for six years. He was recruited by the Board of Directors of GRI to set up and head its first research laboratory. Prior to that, GRI research was conducted at Battelle Memorial Institute in Columbus, Ohio. During Mr. George's tenure, the Institute has grown many fold in membership and research expendi-

tures, and has an excellent record of accomplishment in printing research.

Mr. George has traveled extensively, keeping abreast of gravure developments for his organization. He is well known in, and has many contacts within, the graphic arts industry and many printing research institutes throughout the world as a member of the International Association of Research Institutes for the Graphic Arts Industry, of which he is Vice Chairman. He coordinates research programs with the European Roto-gravure Association, with which GRI is affiliated.

He holds more than two dozen U.S. and foreign patents on offset and gravure press developments, including the gravure electrostatic assist process which is widely used on gravure presses throughout the world, more than 2,000 units having been installed.

Mr. George is Past President of the Technical Association of Graphic Arts, Past Chairman of the TAPPI Graphic Arts Committee, a member of the Executive Committee of the Research and Engineering Council of the Graphic Arts, Chairman of the Gravure Industry Emission Control Subcommittee which represents the gravure industry with the EPA and other government agencies, and is active in the Gravure Technical Association. He frequently participates in conferences as both an organizer and speaker and is the author of numerous articles on gravure printing and a contributor to McGraw-Hill's "Encyclopedia of Science & Technology," and Van Nostrand's "Handbook of Pulp and Paper Technology."

He is also a member of the Inter-Society Color Council, American Society of Mechanical Engineers, Static Electricity Committee of the National Fire Protection Association, Society of Photographic Scientists and Engineers, Society of Photo-Optical Instrumentation Engineers, and the American Society of Association Executives. He received the TAGA Award for outstanding contributions to the graphic arts industry in 1979.

## ANNUAL CORM TECHNICAL CONFERENCE

The Council for Optical Radiation Measurements (CORM) will hold its annual meeting and technical conference at the NBS Gaithersburg (Maryland) Laboratories on June 10, 1980, following the CORM-NBS workshop on Radiometry Using Silicon Photodiodes at the same location on June 9. The CORM meeting will be in two parts:

### Morning Technical Conference

Short papers will be presented on the following topics:

- Redefinition of the Candela
- CIE Activity in Retroreflection
- State of the Art of Flash Radiometry
- Standardization Problems in Densitometry
- State of the Art of Specular Reflectance Measurement
- Pyroelectric Radiometry
- Irradiance Measurement of Line Sources
- Calibration of Low-Light-Level Sources

### Afternoon Discussion Groups

Discussion groups will be held on the above topics, the CORM-NBS Workshop on Radiometry Using Silicon Photodiodes, and on other topics to be announced.

Preregistration for this meeting is urged, as discussion groups will only be held on those topics having sufficient preregistration. However, registration at meeting time will be possible.

There will be a \$10 registration fee for this meeting. A full program, registration and discussion group attendance form, and hotel registration form will be sent to CORM members early in May. Others may receive them by writing the CORM Secretary-Treasurer:

Dr. Fred W. Billmeyer, Jr.  
Department of Chemistry  
Rensselaer Polytechnic Institute  
Troy, New York 12181

## NATIONAL BUREAU OF STANDARDS (NBS)

### Standard Reference Materials 2009, 2010, 2013, and 2014

#### Didymium Glass Wavelength Standards for Calibrating the Wavelength Scale of Recording Spectrophotometers

The NBS Office of Standard Reference Materials (SRM) announces the availability of Standard Reference Materials 2009, 2010, 2013, and 2014, for use in calibrating the wavelength scale of recording spectrophotometers in the visible spectrum.

These SRM's are intended to be used for spectrophotometers with bandpasses between 1.5 and 10.5 nm. The wavelengths of transmittance minima and the wavelengths of some points of inflection in the transmittance curve are certified.

SRM's 2009, 2010, 2013, and 2014 differ in size and method of calibration. SRM's 2009 and 2010 were calibrated by measuring a few filters that are representative of the lot, whereas SRM's 2013 and 2014 are individually calibrated. SRM's 2009 and 2013 are approximately 1 cm wide by 3 cm long and are supplied in a holder which fits in the place of a standard analytical cuvette. SRM's 2010 and 2014 are in the form of squares approximately 5.1 cm on a side.

These SRM's will be accompanied by a special publication, NBS SP260-66 containing information on their certification and their use and an appendix with background material and terminology.

SRM's 2009, 2010, 2013, and 2014 are available from the Office of Standard Reference Materials, Room B311, Chemistry Building, Washington, D.C. 20234.

The price of SRM's 2009 and 2010 is \$165.00.

The price of SRM's 2013 and 2014 is \$421.00.

## REPORT OF THE 147TH MEETING OF THE COLOUR GROUP HELD ON 7TH NOVEMBER 1979 AT THE NATIONAL GALLERY, LONDON

### Colour in Carpets, Cars and Clothes

Audrey Mitchell gave a brief introduction to the papers commenting that this meeting was about REAL colour and not the other sort (e.g. lopsided ellipses).

Paul Angliss opened with his talk on colour and design in cars. He contrasted the present situation where colour is extremely important in both exterior and interior design with the original Henry Ford statement that you could have any colour 'as long as it's black.' Cars are multi-coloured and represent the largest single article that anyone buys. Colour has become just as important as the sophisticated engineering that goes into the production of a car. Colour has to be treated with respect and is almost as important as the cost, fuel consumption, or engineering. Paul Angliss works as a colour stylist

at the Ford factory at Basildon and has a European responsibility for both exterior and interior colour and design. He stressed the need for harmony between the exterior finish and the interior design. Sporty models have almost invariably a bright exterior and bright interior colours. For approximate initial specification of colours the Munsell system is used although some difficulties arise with the most saturated colours. At a fairly early stage the actual coloured materials are used. To check the ability to withstand bright sunshine (and its consequent u.v. fading) car panels are exposed for 12 months in Florida.

Sporty colours are used for sports cars and luxury colours with the Granada rather than the Fiesta or the sporty Capri. The colour preferences of men and women in their choice of car was also mentioned. All Ford cars and their colours are ordered via a dealer telex system. They are not stockpiled. The whole exercise is computer controlled with the output, quoted month by month, of what is selling, colour by colour, over Great Britain and over the European continent.

A three year programme is involved in producing new colours but not every colour is changed each year. Over recent years there has been a preference for metallic finishes. All colours are equally available despite any sales pressure to persuade you to keep to certain colours.

The lecture was illustrated with excellent colour slides. Robert McLean gave his illustrated talk on colour and design in carpets. Starting with a slide of a carpet 2000 years old, he gave a brief history of the development of carpets. The importance of the "right" colour was stressed. A good design with the wrong colour is useless and non-saleable. This does not mean that a particular design is restricted to one colour or set of colours and illustrations of good designs executed in different colours were given during the lecture. The total range of possibilities is very large indeed and a figure of 35 million was given for all combinations of design and colour.

Colour is of prime importance both aesthetically and as a sales factor. A poor design with good colours may sell well but a good design badly coloured will not. The proportion of colour, the depth of colour, the juxtaposition of colour and the hues themselves all play a subtle part. Colour and design must be skillfully integrated if a successful pattern is to be created. The principal types of carpet were described and many examples of these were shown in the slides indicating how a successful combination of design and colour can be achieved. Other slides showed how the ambience of a situation demands differing treatment of design style, proportion, scale and the colours employed. Thus a pattern's appearance can be changed even though the design itself remains unaltered.

Deryck Healey was the last of the three speakers and his topic was Colour in Fashion. The dominance of the French and Italians in specifying colour for fashion is gradually being overcome. On the demise of the British Colour Council, Deryck Healey International purchased their library and this is part of the background of their training for fashion; they have considerable experience of colours and backgrounds and their method of working is now copied by many others.

Colour references are collected on traditional surfaces and these are stored in transparent cake tins. The main line colours for, say, M & S are selected from these samples as illuminated by the particular lighting used by them. Whereas one had brilliant pinks (Schiaparelli) some time ago, the new main interest is in natural colours and in the use of natural fibres. DHI is concerned with the preservation of true and good colours (not

fluorescent). By the use of many jars, colour combinations previously unimagined come to light; a wide selection is necessary for the invention of new colours to get out of a rut. Colour is always used in the context of other things and not just in itself.

Colour television has considerable influence in showing a wide range of activities (e.g. discos for those who would never go to a disco). Deryck Healey went on to mention the punk scene and its influence on the fashion scene e.g. cosmetics, body-painting, hair-colouring (nobody wants to look old). The exhibition on the Thirties at the Haywood gallery has shown the tremendous influence of artists on design (textiles, carpets, furnishing). The situation is now more commercial, best sellers are important and much has been lost. There is a loss of innovation in that long runs are sought after. DHI sell colour design services and were awarded the Queen's Award for this work. They have 50 full-time staff and 200 free lance staff. The library is very useful on "what not to do" and there is a colour room.

Colour preferences change with time. Green was highly popular some while ago but is no longer sought after; purple is now in vogue despite its deathly connotation when used in carpets. Above all is required a sense of "what is right" and this applies not only to the colour but also the shape.

W.N.S

Reprinted from a report of The Color Group (Great Britain).

## PRODUCTS AND SERVICES

### Zelacolor International S.A.

Zelacolor International announces the world premiere demonstration of its semi-automatic indirect color separation and screening system, capable of making color separations from transparencies, reflection copy, and three dimensional objects.

The system has been designed and tested to produce top-quality color separations while yielding a high return on investment because of the following features:

1. Speed and ease of operation with automatic programming features.
2. Very low film requirements.
3. Accurate control of exposures and processing.
4. Moderate equipment costs.

Unique to the system is its ability to produce separations semi-automatically. Another unique option allows for the making of color separations from three dimensional objects or scenes without the need for a transparency intermediate, this is also possible on site, for example in a museum or in any showroom, thereby minimizing production time and costs. The system comes complete with the semi-automatic color separation unit, the programmable enlarger, and the self-contained film processor.

For any information please contact Zelaco S.A., rue St-Martin 22, 1003 Lausanne, Switzerland, phone 021/23 92 66 or 23 92 67, telex: 24 524 Zelco CH, Cables: ZELCO.

### CIBA-GEIGY Offers Colorimetry Seminar In Chicago

The Pigments Department of CIBA-GEIGY Corporation will offer a non-commercial, two-and-one-half day "Colorimetry and Optics of Pigmented Systems" seminar, June 3 - 5 at the Sheraton Hotel in Chicago.

Attendees, who range from division vice presidents to new technicians, receive practical information for objective evaluation of the optical behavior of pigments in various materials.

The course is beneficial to anyone who has had only moderate exposure in the application fields but not in the science of color.

The seminar places special emphasis on "how to" ways and methods for improving product quality, increasing productivity and decreasing costs. It deals with practical application experiences to pigment systems rather than textbook examples.

The course acquaints students with the application of the science of colorimetry and color measurement and the theories of colorant formulation and pigment dispersion to the solutions of typical problems encountered in the industry.

Course instructors are Dennis Osmer, Manager of the Colorimetry Lab in CIBA-GEIGY's Pigments Department, and Ruth Johnston-Feller, a consultant to CIBA-GEIGY Corporation.

Tuition for the two-and-one-half day seminar is \$185.00. The fee covers textbooks, notebooks, instruction and luncheons. Participants are responsible for hotel and travel arrangements and costs in addition to dinner expenses.

More information may be obtained by contacting Dennis Osmer, CIBA-GEIGY Corporation, Colorimetry Laboratory, Pigments Department, Ardsley, New York, 10502. Phone: (914) 478-3131.

### Color & Design Conference Day House & Garden Color Department Monday, May 19, 1980

#### The Guggenheim Museum

Partial Program:

- COLOR . . . LIVING — Editors of House & Garden.
- JAMES ROUSE, Urban Developer
  - PHILIP M. HAWLEY, Carter-Hawley-Hale
  - Special SURPRISE GUEST SPEAKER
  - NEW RESEARCH REPORT & 1981 COLORS
  - PROFESSIONAL PALETTE

### Color Technology 1980

Principles of Color Technology, June 2-6, 1980, June 9-13, 1980

Color Technology For Management, June 16-17, 1980

Advances in Color Technology, June 23-27, 1980

For more information write to:  
Office of Continuing Studies  
Rensselaer Polytechnic Institute  
Troy, New York 12181

**INSERT**

First circular of the 4th Congress of the Association  
Internationale de la Couleur.

**INSERT**

An insert in this issue of the ISCC Newsletter is a press sheet that was printed for the Council members attending the Graphic Arts Research Center's open house in conjunction with the Council's annual meeting. The Research Center was pleased to have the opportunity to show the members an example of the printing process in action. The entire process from original art, through photography, the making of separations, platemaking, and to the final printing on the press was witnessed by those attending. In addition to viewing the printing demonstration, a movie was shown illustrating the activities of the School for American Craftsmen at RIT. The art objects photographed by Stroebel were produced by the students from the School of American Craftsmen.

It is hoped that the open house demonstration and the enclosed press sheet will complement the theme of the annual meeting "Color in the Graphic Arts."

Milton Pearson  
Graphic Arts Research Center  
Rochester Institute of Technology

THIS SPACE RESERVED FOR NEWS CONTRIBUTIONS  
FROM ISCC MEMBER-BODIES.

### ISCC Annual Meetings

1980: April 21-22 – Rochester, N.Y.

### Williamsburg Conferences

1981: February 9-11

1983: February 7-10

### Dry Color Manufacturers Association

1980: The Greenbrier, White Sulpher Springs, WV, June 15-18

### Optical Society of America

1980: Sheraton Sandcastle, Sarasota, FL, April 30-May 3

### Society of Plastics Engineers, Color and Appearance Division

1980: RETEC, Baltimore Hilton, October 13-15

1981: RETEC, Chicago.

1981: ANTEC, Boston Sheraton, May 4-7

Deadlines for submitting items to be included in the Newsletter are: February 15, April 15, June 15, August 15, October 15, and December 15, in other words, the fifteenth of the even-numbered months.

Send Newsletter items to Editor:

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1. Any person interested in color and desirous of participating in the activities of the Council for the furtherance of its aims and purposes . . . shall be eligible for individual membership (By-Laws, Article I, Section 2). Application forms for individual membership may be obtained from the Secretary (address given above).
2. The Council re-affirms its community of interest and cooperation with the Munsell Color Foundation, an independent private foundation devoted solely to the advancement of color knowledge in science, art, and industry. It serves as Foundation Associate of the Inter-Society Color Council. The Council recommends and encourages contributions for the advancement of these purposes of the Munsell Color Foundation. For information, write to S. L. Davidson, NL Industries, P.O. Box 700, Hightstown, N.J. 08520.
3. The Council promotes color education by its association with the Cooper-Hewitt Museum. It recommends that intended gifts of historical significance, past or present, related to the artistic or scientific usage of color be brought to the attention of Christian Rohlfing, Cooper-Hewitt Museum, 9 East 90th Street, New York, New York 10028.