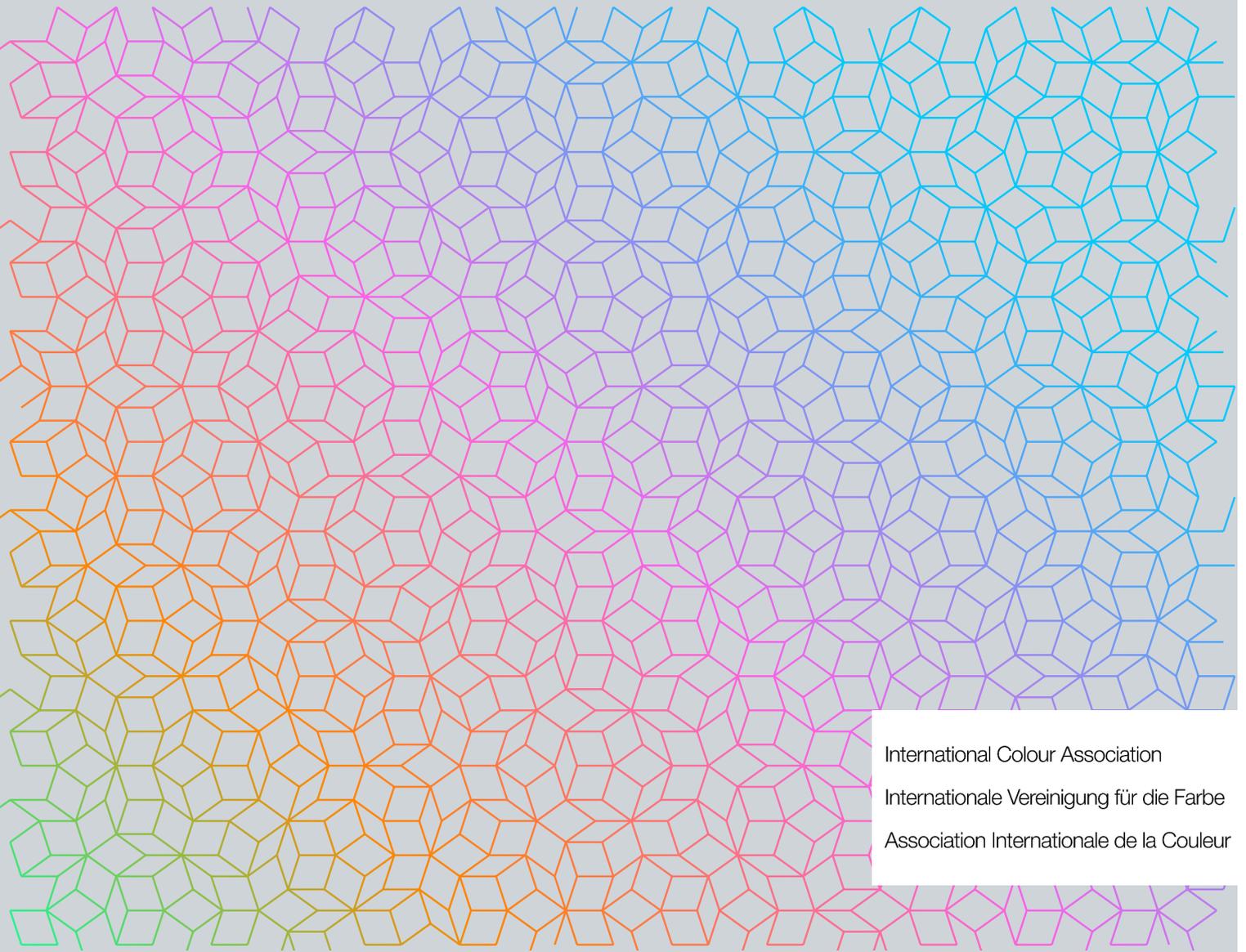




# 2019 ANNUAL REVIEW

Published July 2020



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

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AIC 2019 Meeting group photo



*We are the result of our hard work. Our passion for what we do makes us pioneers in our sector.*



# AIC 2019

## PRESIDENT'S REPORT

by Tien-Rein Lee

The Association Internationale de la Couleur (AIC) membership now stands at 28 regular members, 2 associate members and 9 individual members. We have worked hard to keep the quality of AIC events and operations at high levels, while constantly improving procedures and services by introducing innovative changes. In this regard, adapting the method of conducting online meetings has helped a lot to facilitate effective operations within the Executive Committee as well as efficient communications with the members.

### 2019 ACCOMPLISHMENTS

The Executive Committee has been conducting eight virtual meetings (six in 2018 and two in 2019). The main initiatives included: the CADE medal design and production, the guidelines on double-blind review process for AIC abstract submissions, AIC Statutes preparation and distribution, securing future conference proposals, and the continuous updating and upgrading of the AIC website. Also, the EC was concerned with the EC election process, procedures of the Judd and CADE Awards nomination, the AIC branding project, the Study Group on Colour Education proposal on a joint Colo(u)r Literacy Project with the Inter-Society Color Council, the ICD 10-year special report and new banking and organisation issues. The AIC 2018 Annual Review was completed in July 2019, four months ahead 2017. The new process of sharing workload between the EC members has enabled these results.

### ELECTIONS

The next AIC Executive Committee 2020-2021 has been elected and constituted at AIC 2019, Buenos Aires, with Tien-Rein Lee (Taiwan) as the Past President, Vien Cheung (UK) in the position of the President, and Leslie Harrington (USA) as the Vice-President. Secretary/Treasurer has become Ralf Weber (Germany). Ordinary Members of the AIC Executive Committee are: Paula Csillag (Brazil), Takahiko Horiuchi (Japan), Maurizio Rossi (Italy) and Robert Hirschler (Hungary). The current auditors Berit Bergström and Jose Caivano, both former Presidents of the AIC, will remain as the AIC Auditors for the 2020-2021 term.

### ICD

The International Colour Day 2019 was a first-time event in Japan and Denmark, with the Museum of Colours conducting the "Colour Days" exhibition. At the AIC website, there is now a new ICD section, and a special 10-year ICD Report is in preparation by Maria João Durão (AIC ICD coordinator), as a support document for UNESCO application.

### AIC 2019 MIDTERM MEETING

The AIC 2019 Midterm Meeting was held in Buenos Aires, Argentina, on 14-17 October 2019, under the brilliant topic: "Colour and Landscape". Of the total number of 136 abstracts being sent, 134 had been accepted. Altogether 102 papers and posters were presented: 49 oral papers and 46 posters. Seven invited lectures had been held, including two award lectures. There had also been two study group meetings and two additional exhibitions. Three posters have been honored with the Robert W G Hunt Poster Awards (sponsored by the Colour Group of Great Britain). With 144 registered participants, this AIC meeting showed as a modest, but smart and powerful event, keeping the excellent quality of AIC conferences at a high level, and offering the global colour communities a prestigious forum for professional exchange.

I want to express my deep thankfulness to the Organizing and Scientific Committees, the Grupo Argentino del Color (GAC) and the Universidad de Belgrano (UB), especially to Prof. María Paula Giglio, President of the GAC and head of the Organizing Committee; Prof. José L. Caivano as the Chairman of the AIC 2019 and the Scientific Committee, and Prof. Mónica Fernández, Dean of the Faculty of Architecture at the Universidad de Belgrano. You have spared no efforts to turn this conference into an unforgettable experience! Also, I want to thank everybody who has worked so hard to realise this Midterm Meeting: your commitment is highly appreciated!

### AWARDS

The AIC Deane B Judd Award had seen four nominations and there were nine members of the Award Committee of Past Presidents and/or former recipients. The Award has been presented to Prof. Hirohisa Yaguchi (Japan). Two nominations were entered for the 2019 AIC Award for Colour in Art, Design and Environment. Recipient of the Award was Mr. Roy Osborne (UK). There were seven members of the Award Committee of Past Presidents and/or former recipients.

### STUDY GROUPS

In 2019, the five AIC Study Groups have participated in important conferences: the Munsell Centennial Color Symposium (June 2019), the First Russian Congress on Color (September 2019), and our AIC Midterm Meeting (October 2019). Members of the Study Groups strongly engaged in presenting their works in different aspects, resulting in a range of high-profile presentations and publications.

### JAIC

The Journal of the International Colour Association (JAIC) published a special issue in March 2019 on the AIC Student Paper Awards 2018 with six extended version of the awarded student papers.

### FUTURE MEETINGS

Future meetings will be the AIC Interim Meeting in Avignon, France, on 6-9 October 2020, hosted by Centre Français de la Couleur and the AIC 14th Congress in Milan, Italy, on 30 August – 3 September 2021, hosted by Gruppo del Colore – Associazione Italiana Colore. Proposals for beyond 2021 have been received. We will have the Colour Research Society of Canada to host their first AIC conference in 2022. In 2023 and 2024, the AIC conferences will be presented by the Color Society of Thailand and the Associação ProCor do Brasil respectively.

This is my farewell as the President of the AIC colour community. From 1 January 2020, Prof. Vien Cheung has taken this position, and I have become the Immediate Past President. I want to thank all EC members for their true-hearted commitment to the work of the AIC: Thank you for your expert advice and professional engagement in supporting the AIC and the global colour communities. It has been a great honour and pleasure to work with you and our cooperation will be a beautiful, long-lasting memory for me.

Tien-Rein Lee  
President  
Association Internationale de la Couleur

*Vien Cheung was elected President and Tien-Rein Lee will become Past President for the 2020-21 term.*

## // GLOBAL MEMBERSHIP //

**AIC REGULAR MEMBERS****ARGENTINA**

GRUPO ARGENTINO DEL COLOR  
aike.fadu.uba.ar/sitios/sicyt/color/gac  
María Paula Giglio (President)  
María Eugenia Bravo (Secretary)

**AUSTRALIA**

COLOUR SOCIETY OF AUSTRALIA  
www.coloursociety.org.au  
Jean Pretorius (President)  
Glenys Thomson (Secretary)

**BELGIUM**

INTERDISCIPLINARY COLOUR ASSOCIATION  
https://ica-belgium.org/  
Janneke Hanenburg (President)  
Filip Roscam (Secretary)

**BRAZIL**

ASSOCIAÇÃO PRÓ-COR DO BRASIL  
www.procor.org.br  
Paula Csillag (President)  
Fabio Cuppo (Treasurer)

**BULGARIA**

COLOR GROUP BULGARIA  
www.bgcolorgroup.org  
Ralitza Gueleva-Tzvetkova (President)  
Sofia Anguelova (Secretary)

**CANADA**

COLOUR RESEARCH SOCIETY OF CANADA  
www.colourresearch.org  
Doreen Balabanoff (President)  
David Griffin (Vice President)

**CHILE**

ASOCIACIÓN CHILENA DEL COLOR  
www.asociaciondelcolor.cl  
Paz Cox Irrarrazaval (President)  
Ingrid Calvo Ivanovic (Outreach)

**CHINA**

COLOR ASSOCIATION OF CHINA  
www.fashioncolor.org.cn  
Haisong Xu (President)  
Yu Ma (Secretary)

**CROATIA**

HRVATSKA UDRUGA ZA BOJE  
www.hubo.hr  
Martinia Ira Glogar (President)  
Ivana Ziljak Stanimirovic (Secretary)

**FINLAND**

SUOMEN VÄRIYHDISTYS SVY RY  
www.svy.fi  
Sini Vihma (President)  
Harald Arnkil (Vice-president)

**FRANCE**

CENTRE FRANÇAIS DE LA COULEUR  
www.cf-couleur.fr  
Patrick Callet (President)  
Barbara Blin-Barrois (Vice-President)

**GERMANY**

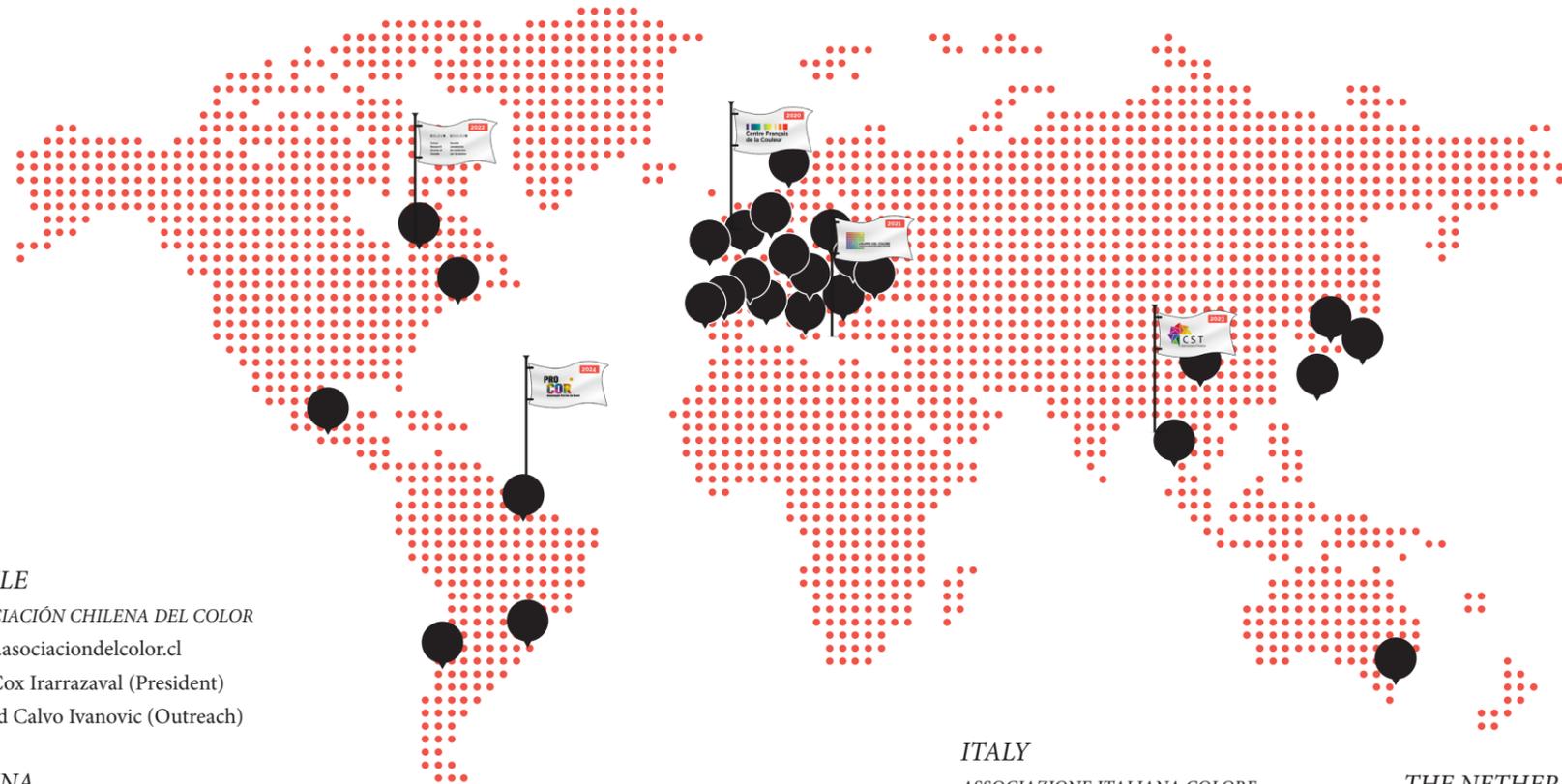
DEUTSCHER VERBAND FARBE  
www.dfwg.de  
Frank Rochow (Chairman)  
Axel Buether (Vice-Chairman)

**GREAT BRITAIN**

THE COLOUR GROUP (GREAT BRITAIN)  
www.colour.org.uk  
Marina Bloj (Chairman)  
Jenny Bosten (Secretary)

**HUNGARY**

HUNGARIAN NATIONAL COLOUR C'TEE  
http://mta.aic.mnb.uni-obuda.hu  
Ákos Nemcsics (President)  
Janos Zana (Secretary)



**Our members represent  
28 regular members  
representing 5 continents.**

**SPAIN**

COMITÉ ESPAÑOL DEL COLOR  
http://www.sedoptica.es/SEDO/color/index.htm  
Juan Luis Nieves (President)  
Esther Perales (Secretary)

**SWEDEN**

STIFTELSEN SVENSKT FÄRGCENTRUM  
www.colourspot.org  
Lena Anderson (Chairman)  
Berit Bergström (Secretary)

**SWITZERLAND**

PRO/COLORE  
www.procolore.ch  
Sabeth Tödtli (Geschäftsstelle)  
Verena M Schindler (Liaison)

**TAIWAN**

COLOR ASSOCIATION OF TAIWAN  
www.color.org.tw  
I-Ping Chen (President)  
Tracy Hsieh (Deputy Secretary)

**THAILAND**

THE COLOR GROUP OF THAILAND  
www.thaicolourgroup.org  
Aran Hansuebsai (Chairman)  
Uravis Tangkijiviat (Secretary)

**USA**

INTER-SOCIETY COLOR COUNCIL  
www.iscc.org  
John Conant (President)  
Paula Alessi (Liaison)

**ITALY**

ASSOCIAZIONE ITALIANA COLORE  
www.gruppodelcolore.it  
Maurizio Rossi (President)  
Veronica Marchiafava (Secretary)

**JAPAN**

COLOR SCIENCE ASSOCIATION OF JAPAN  
www.color-science.jp  
Shin'ya Takahashi (President)  
Katsunori Okajima (Liaison)

**KOREA**

KOREAN SOCIETY OF COLOR STUDIES  
www.color.or.kr  
Jinsook Lee (President)  
Hyeryeoun Kim (Secretary)

**MEXICO**

ASOCIACION MEXICANA de INVESTIGADORES del  
COLOR A.C.  
www.amexinc.mx  
Liliana Monroy Mendoza (President)  
Carlos Trillas Salazar (Secretary)

**THE NETHERLANDS**

STICHTING KLEURENVISIE  
www.kleurenvisie.nl  
Kim Van Savooyen (Director)  
Jan de Vletter (Secretary)

**NORWAY**

FORUM FARGE  
www.forumfarge.no  
Mette L'orange (President)  
Marius Pedersen (Secretary)

**PORTUGAL**

ASSOCIAÇÃO PORTUGUESA DA COR  
www.apcor.org  
Margarida Gamito (President)  
Maria Cristina Pinheiro (Secretary)

**SLOVENIA**

SLOVENSKO ZDRUŽENJE ZA BARVE  
www.szb.si  
Sabina Bračko (President)  
Jasmina Weiss (Secretary)

## AIC HISTORY

AIC was founded June 21, 1967, in Washington DC, USA, during the 16th Session of the CIE (Commission Internationale de l'Éclairage)

AIC Foundation Documents was signed in by these eight national color associations:

France - Centre d'Information de la Couleur  
(Yves LeGrand)

Great Britain - The Colour Group (Great Britain)  
(Robert W. G. Hunt)

Japan - Color Science Association of Japan  
(Tamotsu Fukuda)

Spain - Comité Español del Color  
(Lorenzo Plaza)

Sweden - Swedish Colour Group  
(Gunnar Tonnquist)

Switzerland - pro/colore  
(Ernst Ganz)

The Netherlands - Nederlandse Vereniging voor Kleuren-  
studie  
(J. L. Ouweltjes)

USA - Inter-Society Color Council  
(Deane B. Judd)

If you would like to learn more about AIC please read,  
The Early History of the Association Internationale de la  
Couleur (AIC) by Gunnar Tonnquist, published in AIC Color  
77, Proceedings of the Third Congress, Troy, New York, 10-15  
July 1977 (Bristol, England: Adam Hilger, 1978), 13-32.

// GLOBAL MEMBERSHIP //

### AIC ASSOCIATE & INDIVIDUAL MEMBERS

#### ASSOCIATE MEMBERS

Color Marketing Group - CMG, USA

International Association of Color  
Consultants/Designers, North America

#### INDIVIDUAL MEMBERS

Jacqueline Carron, France

Yulia Griber, Russia

Zena O'Connor, Australia

Kazim Hilmi Or, Turkey

Ines Klemm, Switzerland

Andrea Urland, Slovak Republic

Nozomu Yoshizawa, Japan

Pietro Zennaro, Italy

Lia Margarita, Colombia

// BEHIND THE SCENCE //

### 2019 AIC EXECUTIVE COMMITTEE



**President**  
*Tien-Rein Lee*  
TAIWAN



**Vice President**  
*Vien Cheung*  
UK



**Past President**  
*Nick Harkness*  
AUSTRALIA



**Secretary | Treasurer**  
*Leslie Harrington*  
USA



**Ordinary Member**  
*Paula Csillag*  
BRAZIL



**Ordinary Member**  
*Takahiko Horiuchi*  
JAPAN



**Ordinary Member**  
*Maurizio Rossi*  
ITALY



**Ordinary Member**  
*Ralf Weber*  
GERMANY

### 2019 Auditors



*Berit Bergström*  
SWEDEN



*Jose Luis Caivano*  
ARGENTINA

### AIC EXECUTIVE COMMITTEE 2020-2021

Elections were held in Buenos Aires for the 2020-2021 term.  
Election results:

Leslie Harrington - Vice President

Ralf Weber - Secretary | Treasurer

Robert Hirschler - Ordinary Member

Tien-Rein Lee will become Past President, Vien Cheung,  
President, Paula Csillag, Takahiko Horiuchi and Maurizio  
Rossi as Ordinary Members. Berit Bergström and  
Jose Luis Caivano will remain auditors.



**41 Countries**

**220 Participants**

**49 Oral Presentations**

**46 Poster Presentations**

**136 Abstracts**

**37 Reviewers**

# AIC MIDTERM MEETING

## BUENOS AIRES, AIRES, ARGENTINA

Hosted by Argentine Color Group (GAC)

### Color and Landscape

The AIC 2019 Conference, organized by the Argentine Color Group (GAC) under the theme “Color and Landscape”, was held in Buenos Aires, Argentina, on October 14-17, 2019, at the Universidad de Belgrano. The GAC had previously organized two other AIC conferences: AIC 1989, the 6th Congress, in Buenos Aires, and AIC 2010, the Interim Meeting “Color and Food”, in Mar del Plata.

José Luis Caivano chaired the scientific committee, composed of 37 members from more than 20 different countries. The local organizing committee was composed of María Paula Giglio (president of the Argentine Color Group), José Luis Caivano, Anahí López, Laura Quaintenne, Gabriela Nirino, María Luisa Musso, Cristina Vadj, María Inés Girelli, María M. Mariconde, Darío Suarez, Anahí López, Germán Díaz Colodrero, Germán Díaz Colodrero, Diana Moreno, Rosario Villalón, Lucía Maillo.

For AIC 2019, we received 136 abstracts, from which 134 were accepted by the scientific committee. From them, 102 works were

actually presented at the conference: 7 invited plenary lectures (including the Judd and CADE awards lectures), 49 oral papers, and 46 posters. Also, the conference hosted 2 AIC study group meetings (Environmental Color Design, and Color Education), and 2 exhibitions (Color exercises by graphic design students of Dutch art faculties, and The Biosphere Project).

From the posters exhibited, a steering committee set up at the conference selected the top 3, by assessing content, design, and relevance regarding the conference theme. The authors of these posters were presented with the Robert W G Hunt Poster Awards, provided by the Colour Group (Great Britain).

There were 144 participants, from 27 countries: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Colombia, France, Germany, Hungary, Iran, Italy, Japan, Korea, México, Norway, Peru, Portugal, Russia, Spain, Sweden, Switzerland, Taiwan, UK and USA. The percent of participation by country were: Argentina 35%, other

countries 65%, with the following distribution: Japan 11%, Brazil 7%, UK 6%, China 5%, Germany 4%, Portugal 4%, Colombia 3%, Italy 3%, USA 3%, remaining countries 19%.

The conference was preceded by the AIC executive committee meeting, a tour by Belgrano neighborhood and the Larreta Museum, and a welcome reception. After the conference sessions, the AIC assembly and the closing ceremony, a banquet and show was offered with tango music and dance at the Piazzolla Tango theater. The next day, a group of participants enjoyed the optional tour to Tigre, the delta of the Parana river.



### SEVEN PLENARY LECTURES

- Robert Hirschler: Colour theory and neo-impressionist landscapes
- Paula Csillag: Landscapes used in design and art: the work of Fred Jordan, the Brazilian master of color
- Zena O'Connor: Effective environmental visual literacy: pedestrian crossing design and the key roles of colour and contrast
- Ming Ronnier Luo: A summary of the parametric studies on colour difference evaluation
- Verena M. Schindler: Jean-Philippe Lenclos' methodology of “The Geography of Colour”: back to the origins and its international impact
- Hirohisa Yaguchi (Judd awardee): Individual color vision
- Roy Osborne (CADE awardee): Renaissance colour symbolism

The published Proceedings, available at <https://aic2019color.wordpress.com/proceedings>, collect 102 papers of the plenary lectures, oral and poster presentations, covering topics in various fields of color research in relation to landscape: arts, design, architecture, urban studies, linguistic and cultural studies, lighting, psychology, vision, psychophysics, and technology. The complete information about the conference will be kept permanently at <https://aic2019color.wordpress.com>



Buenos Aires city with jacarandas, during late Spring time.



Color palette of AIC 2019

OPENING CEREMONY



Opening session AIC 2019 organized by Argentine Color Group (GAC) under the theme "Color and Landscape", was held in Buenos Aires, Argentina, on October 14-17, 2019, at the Universidad de Belgrano.

ENTERTAINMENT



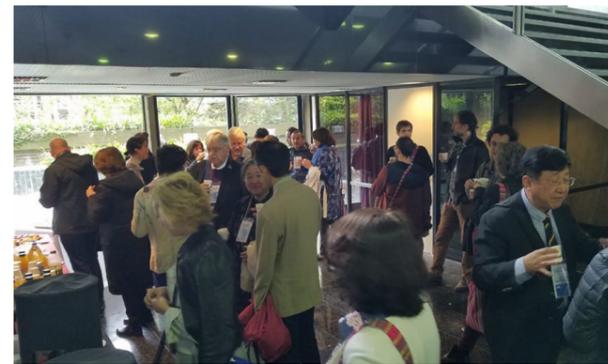
Tango performers

ADVENTURES



Some participants at Chinatown, in Belgrano

NETWORKING



Coffee break



Color exercises by graphic design students



Banquet at Piazzolla Tango theater



Some participants at the delta of the Parana river

AWARDS



CADE award lecture by Roy Osborne



Tien-Rein Lee (left) and Judd awardee Hirohisa Yaguchi (right)



Tango show and banquet



Gardens at Larreta museum



*"As two circles form the eye with equal half or rainbow of color and black representing light and darkness, day and night, everyone feast one's eye on International Colour Day"*

*Logo designed by Hosanna Yau, Hong Kong.*

# ICD 2019

## INTERNATIONAL COLOUR DAY

by Maria João Durão

The concept for an international day of colour was proposed to the AIC in Stockholm, 2008 by Prof Dr Maria João Durão, Honorary and Founding President to the Portuguese Colour Association (APCOR). It was adopted as International Colour Day (ICD) commemorated on the 21st March by the AIC Executive Committee in the AIC Congress held in Sydney, 2009. At the AIC2012 meeting in Taipei, designer Hosanna Yau, from Hong Kong was announced the winner of the international competition for the ICD logo design. 2019 marks the 10th year anniversary of the International Colour Day-ICD celebrations that have gradually increased in participation by the members. The AIC signals this anniversary with a publication on the 10 years of International Colour Day-ICD.



*Maria João Durão  
Honorary President, Associação  
Portuguesa da Cor - International Colour  
Day coordinator*

### ARGENTINA Argentine Color Group (ACG)

To celebrate the International Color Day, established by the AIC since 2009 for March 21, every year, and according to the proposal of the 2019 ICD Call, the GAC presented the open collective project of the year 2019, called: «Color and landscape» in our eyes.

For this project, all those interested in color were invited to participate for free, with the intention of recognizing us in our diversity through a series of photos that combine a variety of colors of our eyes, the multiple landscapes that surround us, the plurality of glances over these landscapes, and the mixture that is generated in the superposition of the colors themselves and reflected, through a game between light, observer, environment, space, color and cesia. In addition, an attempt was made to address the topic "color and landscape" of the AIC 2019 congress that took place from October 14 to 17 in the Autonomous City of Buenos Aires, Argentina.

All the photos received were published on the site created for this purpose (<http://diainternacionaldelcolor.blogspot.com/>), and on the GAC's social networks. In turn, it was presented through a poster at the AIC 2019.



### BRAZIL Associação ProCor do Brasil (ProCor)



On March 21 the International Colour Day was celebrated in an event held in an auditorium for 100 people, with the participation of paint manufacturers, color solution providers, architects, decorators, designers of interiors and specialists of the academic environment. Those present received an ecobag from the event, with sponsors' materials.

The event was sponsored by ProCor's affiliated companies: COLORMIX, LECHLER DO BRASIL SA, LUKSCOLOR PAINTS, RENNER SAYERLACK, SHERWIN WILLIAMS PAINTS and SINTEGLAS, which we honor very much! The event was supported by ProCor, ABA, ABEDESIGN, ABIHPEC, ABRAFATI, DESIGN | ESPM, FUTUREPRINT and SITIVESP.



The opening ceremony of the event was honored by the President of the Painters and Varnishes Industry Union of the State of São Paulo (SITIVESP), Mr. Narciso Moreira Preto. Following the opening, ProCor's President, Prof. Dr. Paula Csillag, presented the entity and the commemoration of the International Day of Color. According to her, this type of event potentiates synergies and partnerships, promoting interaction between academia and industry.



After the opening, there was the main lecture by PANTONE on "The Backstage of Color of the Year, Living Coral", given by the expert in Colors and Trends, Blanca Lliahnne. The company LECHLER offered a special gift to ProCor at this event, a wooden cube, painted with the color of the year Pantone!

After the lecture, there was a presentation on ProCor's participation in AIC2018 in Lisbon, through the presence of Anamaria Rezende, who received financial assistance from ProCor for registration at AIC Lisboa. Following, in the Panel "Academic Communications on Color", Karolline Abuchaim, presented her research "Study on the Use of Colors in Hospital Environments". Following, in the panel on Projects of Associates, the member Edna Prado presented his work on handmade paintings.

Following these, there was the Panel of Companies Sponsoring the Event. In this panel, each of the companies that sponsored the event, had 10 minutes to make a presentation telling news and trends offered by each company. In alphabetical order, representatives of the companies COLORMIX, LECHLER DO BRASIL S.A, LUKSCOLOR PAINTS, RENNER SAYERLACK, SHERWIN WILLIAMS PAINTS and SINTEGLAS made presentations.

## CANADA Colour Research Society of Canada (CRSC)

CRSC Annual General Meeting 6 pm / Lecture by Artist Tania Love 7:00 pm

Thursday, March 21, 2019 6:00 PM- 9:00 PM

Interface Carpet Showroom Toronto, Ontario, Canada 134 Peter Street Suite 1602

<https://www.interface.com/CA>

Colour Perspectives: Art practice through the lens of plant and mineral pigments

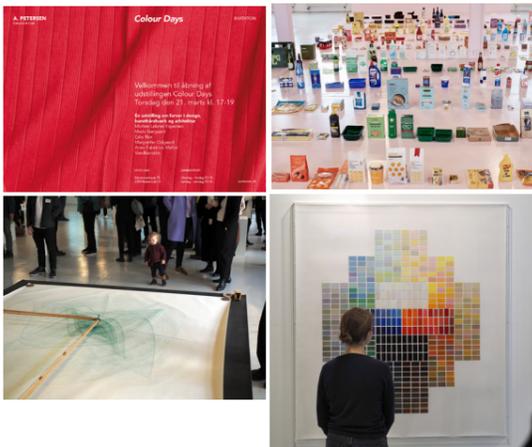
Tania Love presented her reflections on the impact of colour, historical uses of colour, recipes and preparations as well as her personal research and explorations of plant and mineral based colour on paper and textiles. A Toronto based visual artist, Love is interested in the intersection between traditional methods and innovative expressions. She explores a breadth of materials including plant-based inks and dyes, milk paint, salvaged wire, paper and textiles. Her work has been seen in public and commercial galleries in her native Toronto and Ontario as well as abroad, in New York, France, Poland, India and Japan.



Her upcoming solo exhibition, Pathways (Mississippi Valley Textile Museum in Almonte, Ontario, Canada, April 13-June 15, 2019), includes a site-specific installation of multiple kozo paper panels evoking a body of water, river patterns and topographical references.

The exhibition contemplates the museum's historical use as a textile mill, setting along the river and reshaping of the land through development. Drawing attention to the precious natural resource of flowing water that was instrumental in powering industrial growth, her work opens up reflection on our contemporary relationship with water. On the second floor gallery Love will present works created with plant-based inks and dyes. The relationship between the works in the two galleries will highlight aspects of colour history from the natural to synthetic as well as the intersection between the natural and industrial.

## DENMARK



In debates about colours and design, the main emphasis is often on fashion and colour trends. The Colour Days exhibition digs a little deeper in a strong professional field, driven by a profound curiosity about and respect for colours as beacons in our daily life.

The exhibitors show us that colour is an element that we can shape, delve into and explore. Show us colours as something we can wonder about when we encounter them in the local supermarket, colours and shapes as part of an artistic practice, colours we can play with, experiment with and use to alter our surroundings with.

'In Denmark we have so many great craft makers, designers and architects to whom colour plays a key role in their daily work. The designs that come from their hands and minds affect us all in our daily life, whether we think about it or not. That is why it's so important to take an interest in colours and examine how

colours are used in our surroundings. Not only as trends and fads but as a fundamental component in the way we understand and experience the world around us,' says the curator of the Colour Days exhibition, Anders Petersen.

The exhibition features fashion designer Mads Nørgaard, ceramicist Morten Løbner Espersen, colour and textile designer Margrethe Odgaard, the architect's firm Vandkunsten, textile designer and textile printer Anne Fabricius Møller and artist and designer Eske Rex.

With reflections and tangible products and objects from these six vantage points the exhibition offers an insight into design processes and inspiration for experiencing colours.

## FINDLAND The Croatian Colour Society (CroCoS)



The Finnish Colour Association (SVY) celebrated the International Colour Day by awarding the Iris Prize 2019 to cinematographer and colour grader Pentti Keskimäki. The jury of the award wants to draw attention to the fact that the ever greater role of the colour grader as a creative author of the visual appearance of a film remains without due recognition. As a pioneer of his field in Finland, Pentti Keskimäki has worked persistently and productively for over two decades towards raising the visual quality of Finnish films closer to an international level. He has collaborated with cinematographers and other film professionals in order to highlight the potential of colour grading as part of the creative process of film making. Keskimäki's professional portfolio includes over 80 film productions in which he has been involved as a cinematographer, colour grader or in other duties. Pentti Keskimäki has collaborated

closely in carrying out various tests and educational events, has actively guided both young and experienced film makers and has forged an impressive career of his own as a colour grader.

The Iris certificate was handed over to Pentti Keskimäki at the Colour, colour - seminar on Saturday 6th April in the National Audiovisual Institute's cinema, Kino Regina. The seminar was organised by the National Audiovisual Institute and the Department of Film and Scenography of Aalto University. The seminar's themes were the significance of colour and the development of colour techniques in cinema.

The Finnish Colour Association's Iris Prize is awarded annually on 21st March to a person or persons whose work or deed has created an outstanding colour experience or has noticeably improved the aesthetic appreciation, functionality or safety of people's daily lives or environment. The work can involve fine art, design, architecture or environmental design or for example colour technologies such as photography, colorimetry or the printing process.

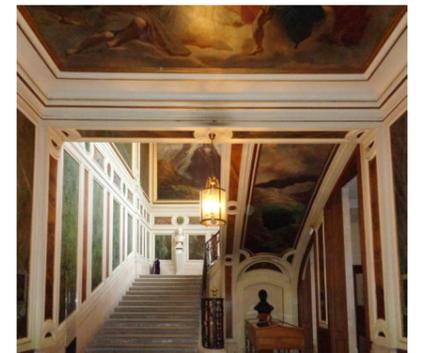
## FRANCE Center Francais de la Couleur (CFC)

The Centre Français de la Couleur participated to the German initiative lead by the Museum of Colours in Berlin and disseminated the idea of a « No black clothes day » on March 21st.

CFC organized a conference held in Paris at « Espace Pierre-Gilles de Gennes » on the double topic of the natural colour of the elements and the colours induced by their presence in minerals (ions, small particles or aggregates, atomic substitutions or absence,...

2019 was declared by UNESCO « International year of the periodic table » so we decided to focus on that scientific topic. For these reasons the event was called « Éléments-Terre » and was lead in partnership with the Museum of Mineralogy at Ecole des Mines de Paris (Mines-ParisTech, PSL, University). A guided tour on the thema of « The native elements and their chromatic effects on minerals » was closing the event when sunset was facing the large windows of the Gallery.

We then gathered natural colours and shapes views of minerals with the symbol of the sun light distribution over the whole world at that date ; it was only for knowledge and wonderment!



A lot of scientific questions were evoked by the examples offered by minerals. The dialectic of Nature and Structure of minerals founded the main interrogations about natural colours. We know for a long time the importance of the nano-micro-meso-macro scales of structuration of materials, in the natural or industrial worlds. One can think that colour is mainly depending on structure (how organized is the material) than on nature (chemical composition). Humans manipulate the two!

**GREAT BRITAIN** Colour Group (GB)



The Colour Group (GB) celebrated this year's International Colour Day with a brief guided tour of the National Gallery. Our guide was the art historian, lecturer and artist Gayna Pelham. She explored how colours had been used by artists across the centuries and spoke about the use of colours and pigments and changes in the artistic palette as well as in subject matter. Some samples of raw materials, such as a number of semi-precious stones, generally used in jewelry, were examined by the participants (top image).



The tour began in front of the San Pier Maggiore Altarpiece, by Jacopo di Cione and workshop, 1370-71 (middle image), and continued by examining further the mastery of Cione in another of his works, owned by the National Gallery, The Crucifixion, 1369-70 (bottom image).



Detailed examination of the collection continued with the analysis of the pictorial composition and the use of colours in the Annunciation, with St Emidius, by Carlo Crivelli, 1486, The Ambassadors by Hans Holbein the Younger, 1533, and Titian's Bacchus and Ariadne, 1520-3, and also explored also the light and fascinating details of the Arnolfini Portrait by Van Eyck, 1434. Discussion of the history, the artistic materials and the techniques involved in each picture was intermingled with an introduction to the story of the National Gallery, which helped the members to gain an understanding and appreciation of the significance of the collection. The audience being so absorbed by the presentation and the exhibits led to the tour exceeding the allotted time.

There are already plans in place to continue the exploration. Next year members will explore the use of colour and light in the work of some of the most extraordinary Western European artists of the seventeenth century from El Greco to Caravaggio and Rembrandt to Rubens.

**ITALY** Gruppo del Colore - Associazione Italiana Colore (GdC)

On 21 of March is in Italy the first day of Spring. So Lia Luzzatto and Renata Pompas, on the occasion of the 2019 International Color Day, celebrated this event focusing the students' attention on the chromatic language of nature, which show an inexhaustible collection of inspiration for their visual projects.

The students were able to compare the "attractive function", often with brilliant colors, and the "deterrent or defensive function", that minimize the differences with the environment, with the theory of chromatic contrasts. Color functions, which can be applied to product design.



**JAPAN** 日本色彩学会 (CSAJ)

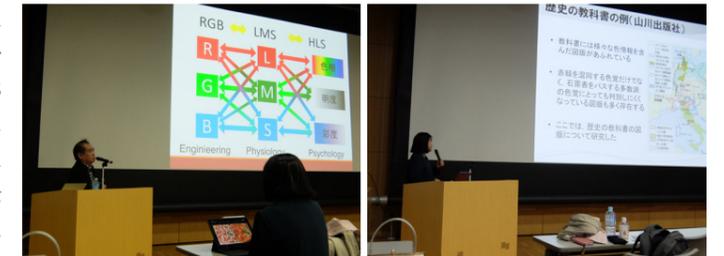
The first celebration of the 'International Colour Day' in Japan was held in 21st, March, 2019, at Tokyo Polytechnic University. The event was hosted by the Color Science Association of Japan (CSAJ) and supported by 18 societies and associations relating to color. Seventy people, including twenty-five non-members of the CSAJ, participated in the event.

After an inaugural address by Dr. Shin'ya Takahashi, the President of the CSAJ, and the presentation by Dr. Takahiko Horiuchi, EC member of the AIC, introducing a history of the ICD and various events having been held in other member countries of the AIC, special lectures and a panel discussion entitled 'The era of color universal design coming!' was held. First, Dr. Shoji Sunaga at Kyushu University gave a lecture 'Basics of the color universal design,' in which he explained physiological mechanisms yielding the variety of our color vision. Next, Dr. Yasuyo Ichihara at Kogakuin University gave a lecture 'Practice of the color universal design,' in which she introduced her own work of realizing color universal design on the maps in a textbook of history. Finally, a panel discussion among two lecturers and floor participants was held, presided by Dr. Kazuyuki Natori, the Vice President of the CSAJ. There was a lively discussion about proper names for the variety of color vision, a compatibility between color universal design and designability for people with major color vision type, an importance of spreading the color universal design over the world, and so on. After spending four hours, the historical event for the CSAJ was over with a great success. We hope to plan more experiential event in the ICD next year.



**KOREA** 한국색채학회 (KSCS)

To celebrate the International Color Day (ICD is on March 21) on March 22, KSCS hosted an ICD anniversary seminar at Dongseoul University on the theme "Living Color", KSCS members were able to communicate each other's living colors. Hyangran Kim, the Head of Samhwa Paints Color Design Center, presented a lecture on "2019-20 Future Consumer & CMF Trend", and Yeongjae Lee, Prof. at Hanyang University, gave a lecture on "The Effect of Fashion Luxury Brand Color Trend on Popular Fashion".



**NORWAY** Forum Farge Norway

FORUM FARGE, on the International Colour Day, Dr. Alexandra Loske, presented her new book, "Color. A visual History " in her talk "Pigments of the imagination – A Visual History of Color" at Oslo Academy of the Arts. Place: Main auditorium. Host: Forum Farge/Mette L'orange, professor of colour at Department of Design.

In addition to presenting her new book, Dr Alexandra Loske from Universitetet of Sussex, gave us a renewed insight in the history of pigment and colour traditions within art, science and architecture. The book was launched Friday March 8. It presents several colour systems, theories and standards from history, which often is made by men, but it emphasizes to highlight women's research and writings about colour theory and practice. Loske has a Ph.D on colours in historical interiors. Dr. Alexandra Loske is an Art historian at University of Sussex. <http://www.sussex.ac.uk/profiles/107019>

The secret history of color: «If you want to understand society, look at the way it talks about hue, suggests a new tome from art historian Alexandra Loske» <https://www.fastcompany.com/90310951/the-secret-history-of-color>.

110 people attended the event.



**PORTUGAL** Associação Portuguesa da Cor (APCOR)

APCor (Portuguese Colour Association) celebrated the International Colour Day and the World Poetry Day, 2019 by promoting an international Poetry Reading Encounter dedicated to Colour entitled “We can no longer live without poetry, colour, love”. We had a full house at O'Malta Bistro Bar, Lisbon, and a lively celebration. These six hours flew in the wings of poems, essays, song lyrics, recipes, testaments, and even prayers to colour, declaimed by 55 people in their original versions. Maria João Durão, Carlos Carrilho, Cristian Forte, Liomarevi and João Brehm brought to light their original works alongside the readings of renowned poets. It was a moment of pure joy in the hues, and expressions of each participant.

A special thanks to TUT - The Academic Theatre of the Lisbon University and interested people from India to Chile, who sent poems to be read.

It was a joint collaboration with members from APCor; the Colour and Light Research Group/ CIAUD – Research Centre in Architecture, Urban Planning and Design; and CEC – Centre for Comparative Studies (both from the University of Lisbon) in the name of Verónica Conte, Zélia Simões, Filipa Santos, Helena Soares, José Frutuoso; Penélope Patrix, Sandra Camacho, and Vanessa Montesi. The photography register was done by Artur Pontes.

**SWEDEN** Svenskt Färgcentrum (SSF)

A celebration to the blue colour!

This year we celebrated the international Colour Day on March 21st with almost 50 participants. Ogeborg, producer of textile carpets, welcomed us all in their showroom which for the day was decorated in blue carpets and textiles. We started the celebration with two interesting lectures and ended the evening with good food.



” What was the true colour of #the Dress?”

On the first talk on the International Colour Day, we could listen to the discussions and conclusions about “dressgate”: the color phenomenon that aroused on the social media: What colour actually had #The Dress and what factors are playing on digital colour images? Was the dress blue and black or white and gold? Bodil Karlsson, PhD of Psychology, Department of Psychology, University of Gothenburg has done research to explain the colors of the dress. We could also take part of Bodil’s own research on how we perceive the colours of the dress and why. Bodil could unfortunately not attend this meeting so the talk was presented by Johanna Årlemalm.



Frontiers | What Is the Correct Answer about The Dress’ Colors? Investigating the Relation between Optimism, Previous Experience, and Answerability | Psychology

The Blue Colour was the theme of Awarded Colour 2018. Traditionally the celebration of the International Colour Day also includes a lecture by the prize-winner of the Awarded Colour, which is a competition in colour design for students and graduates in design, architecture, visual communication and art. The theme of 2018 was “The Blue Colour” and the task was to create a colour design inspired by the blue colour. The Award ceremony was held in connection with the Stockholm Furniture & Light Fair, Greenhouse, 5 February, 2019. Linus Fridén University of Arts, Crafts and Design, Stockholm was awarded 1st prize for his proposal BLÅ (blo:). Linus presented this winning contribution “Blå” (Blue) during this ICD. His contribution takes the viewer out on a journey in a blue world.

**TAIWAN** 中華色彩學會 (CAT)

The Color Association of Taiwan (CAT) celebrated the International Colour Day at several events, including (1) Arts and Humanities course directed by Mr. Zhiwei Chen at Zhongshan Elementary School in Taoyuan city, Taiwan, (2) the practice of “Color Imagery” at School of Environmental Design in the Cultural University, (3) the meeting of Industry Professional Assessment System held by Industry Development Bureau, Ministry of Economic Affairs.

In the Arts and Humanities course, Mr. Zhiwei Chen taught the elementary school students how to use a single color to draw the 3D effect and how similar colors and contrasting colors create a clock face that is similar to color blindness.

In the practice of “Color Imagery”, nearly 130 students from different departments crossed 6 nationalities collected natural and artificial colors from daily life, observe each color and feel it.

The meeting of Industry Professional Assessment System was held at the National Taiwan University of Science and Technology and was attended by about 60 people. The talk was started from Raymond Wong from the HP Taiwan. It was followed by four more talks with topics ranging from the fields of Branding and Design (MSI), Printing technology (SUNSUI Print and Printing Technology Research Institute), Textile technology (Taiwan Textile Research Institute). The talks and presentations touched off many lively discussions, extending further the celebration of the enthusiasm for color.

**THE NETHERLAND** Stichting Kleurenvisie: Het Netherlands Platform voor Kleur

On 21 March ‘Stichting Kleurenvisie’, the Dutch foundation for Colour, celebrated the International Colour Day in the building of Circl, a circular hotspot in Amsterdam. New members of the board were colour-pitching and each of them had invited an expert for a lecture about colour and/or circularity. All involved were pleased to see each other again in the well-attended meeting. It was also a moment of official parting by one of the board members, Jan de Vletter, who had attended for over 20 years, first at “Kleur -Buiten” that had become part of SKV about five years ago. He was and is still very active for the preservation of the “Regenboogbuurt” in Almere, a neighbourhood designed with colour as a starting-point.

The moderator of the day was Clairette Gitz, architect/owner of Gitzarchitecten, publicist and guest-researcher (PhD) at the University of Delft, Faculty of Architecture.



Ir. Pi de Bruijn, Architect, Founding partner of Architecten Cie, Amsterdam chairman and architect of Circl welcomed the audience together with Kim van Savooyen, interior-colour designer and executive director of the foundation.

Speakers of the pitches and lectures:

Pitch: CircularStreetColours by ir. Clairette Gitz, architect/owner of Gitzarchitecten guest-researcher (PhD) at the University of Delft and also the moderator of the day.

Lecture: Thinking colour, construct identity by Dr. ir. Susanne Komossa Associate Professor of Architecture Chair of Architectural

Pitch: Color &Me by Sandy Spaan: CMFG lead Horizontal programs HealthTech Trend lab | Material Innovation Philips Design

Lecture: Colour & recycling within Philips, Marc Olof Dirksen, Project Leader Technology and Function Creation at Philips.

Pitch: Colour in the world by Dr. Marc Witbreuk, CFO/COO Scholz Benelux BV

Lecture: In Concreto Colorato! By by Giulio C.E.Tomaello Managing Director/Owner at Tomaello - Architectonic Concrete & Terrazzo

## UNITED STATES OF AMERICA Inter-Society Color Council (ISCC)

It has been an Inter-Society Color Council (ISCC) tradition to host an outstanding webinar in observance of the AIC International Color Day and 2019 was no exception. On March 21, 2019, Dr. Michael Webster of the University of Nevada, Reno captured the attention of 100 attendees during his presentation on Adaptation and Color. Participants from around the world tuned into this webinar. Visual perception is continuously regulated by adaptation processes that adjust sensitivity to match the current visual stimulus. These adaptations compensate for both changes in the environment and changes in the observer (e.g. as we age). This webinar provided an overview of how adaptation adjusts to both the average color and the gamut of colors in scenes, how these adjustments can be used to study the neural mechanisms of color vision, and some of the proposed consequences and benefits of these adjustments.



Attendees were very impressed with the imagery as Dr. Webster presented powerful depictions of a variety of adaptation experiences. ISCC members were familiar with the phenomenon of complementary after-image, in which an observer who stares intently at a colored image for 30 seconds or so will then see an image of the complementary color and same approximate shape when they then turn their gaze to a white field. Dr. Webster's presentation demonstrated that adaptation is not limited to color. When observers stare at an image of a compressed (distorted) face, then a normal image appears expanded and distorted. When observers stare at a fuzzy image of a face, then a normal image appears hyper-focused. The effects of adaptation are impactful and complex. Without getting inside each other's heads, maybe we really do see the same colors, thanks to adaptation.

ISCC thanks Dr. Michael Webster for enlightening our international audience on International Color Day!

## AIC STUDY GROUP ON ENVIRONMENTAL COLOUR DESIGN (SG ECD)

SWITZERLAND – RUSSIA

Celebrating 21 March International Colour Day

FRCC2019 Special Issue of Color Culture and Science Journal, Vol. 12, no. 1, (2020)

In times of social distancing policies, lockdown, self-isolation, and quarantine to fight the Covid-19 pandemic we celebrate 21 March International Colour Day with the announcement of the publication of Color Culture and Science Journal, Vol. 12, no. 1, (2020). This CCSJ special issue gathers together a selection of extended papers presented at the First Russian Congress on Color (FRCC2019) in Smolensk. We warmly thank Editor-in-Chief Prof. Maurizio Rossi and his editorial staff for giving us the opportunity to publish this special issue. We also express our gratitude to the authors and reviewers for their contributions.

Index & Editorial

Verena M. Schindler, Yulia A. Griber, pp. 01-08.

## PAPERS

- Three colour design proposals for the Market Square in Warsaw - Karolina Białobłocka, pp. 9-17;
- Color as a sign of urban transition in the city of Bordeaux - Aline Barlet, Audrey Bousigues, Alice Herbert, pp. 18-25;
- Colour design of textile architectural envelopes: an initial study - Alessandro Premier, pp. 25-31;
- Emerging colours: new trends, demands and challenges in contemporary urban environments - Beichen Yu, Simon Bell, pp. 32-39;
- Color analysis of birth space ambiances - Ichraf Aroua, Faten Hussein, pp. 40-47;
- An educational experience about color emotion and its design implications - Cristina Boeri, pp. 48-56;
- Color Lab IFRJ: practical color exercises for fashion courses - Milena Quattrer, Welton Fernando Zonatti, Anna Paula Silva Gouveia, pp. 57-62;
- Does chromatic lightness have an impact on the perceived odor of Brazilian perfumes? - Camila Assis Peres Silva, Clídice Toledo Sanjar Mazzilli, pp. 63-74;
- Ceramic products and their chromatic 'DNA' markers - Carla Lobo, pp. 75-81;
- Approaching ecological ambiguity through a non-divisionary understanding of colour in art - Yulia Kovanova, pp. 82-88.

## COLUMN

- COLUMN: BOOK REVIEWS  
Verena M. Schindler, pp. 89-92.

The column includes reviews of three books addressing colour in urban and architectural design:

1. Jean-Philippe Lenclos: Painter & Designer (2017);
2. Colour Strategies in Architecture (2015); and,
3. Farbraum Stadt: Farbkultur in Winterthur (2019).

The link to the journal is: <http://jcolore.gruppodelcolore.it/ojs/index.php/CCSJ/index>

We wish you an interesting, instructive and joyful time reading.

With colourful greetings,

Verena M. Schindler, Art and Architectural Historian, Zollikon, Switzerland

Yulia A. Griber, Smolensk State University, Smolensk, Russia

Co-Chairs of the Study Group on Environmental Colour Design

MICHAEL EDWARDS  
FRAGRANCES OF THE WORLD



Colours representing the olfactory families in the fragrance wheel by perfume historian and taxonomist Michael Edwards



The pedestrian bridge Luchtsingel in Rotterdam, 2015  
(Photo © Nanda Sluijsmans/Wikimedia Commons)



Portuguese ceramic colours: Portuguese plate, early 20th century, and tiles, 17th century (Photo: Carla Lobo)

## FUTURE CONFERENCES

### 2020 AIC Interim Meeting "Couleurs naturelles—Couleurs numériques"



**November 20, 26 & 27, 2020**

Venue: Online Meeting

Chair(s): Patrick Callet, Honorary Presidency: Dominique Cardon, Livio de Luca

Website [https://aic2020.org/?page\\_id=2478&lang=en](https://aic2020.org/?page_id=2478&lang=en)

Organized by Centre Français de la Couleur



### 2021 14th AIC Congress



**August 30–September 3, 2021 - Milan, ITALY**

Venue: Ca' Granda, Via Festa del Perdono, 7 Milan 20122 Italy

Chair(s): Maurizio Rossi, Alessandro Rizzi

Website: <https://www.aic2021.org/>

Organized by Gruppo del Colore



### 2022 AIC Midterm Meeting "Sensing Colour"



**June 13-16, 2022 - Toronto, CANADA**

Venue: OCAD - Ontario College of Art and Design University

Chair(s): Doreen Balabanoff, Robin Kingsburgh

Organized by Colour Research Society of Canada



2023 - Chiang-rai, Thailand

2024 - São Paulo, Brazil



Hosted by

Color Society of Thailand



Hosted by

Associação ProCor do Brasil

# 2019 AWARDS PRESENTED IN BUENOS ARIES

by Vien Cheung, *Chair of AIC Awards 2019 | AIC Vice President*

One of the AIC's missions has been to promote the study of colour and to assist the dissemination of colour knowledge in all its aspects. Founded in 1973, the AIC presents the Deane B. Judd Award (Judd Award) to recognise work of international importance in the fields of colour perception, colour measurement, and/or colour technology. In 2015, the AIC established the Colour in Art, Design and Environment Award (CADE Award) to recognise those who excel in the areas of design, art, architecture and humanities. Both awards are given every two years.

In 2019, Prof Hirohisa Yaguchi and Mr Roy Osborne were selected as the recipients of, respectively, the AIC Judd Award and the AIC CADE Award.

The selection of the awards is an arduous procedure that includes nominations by AIC regular members and analysis of antecedents of the nominees by a panel composed of past presidents and previous recipients of the award.

Many congratulations to Hiro and Roy for their well-deserved achievements. I would also like to take this opportunity to express my gratitude to all the nominators who put forward very strong nominations and to the two Award Selection Panels for their input and kind cooperation.

### AIC DEANE B. JUDD AWARD 2019

*Hirohisa Yaguchi*

Japan



Citation for  
Hirohisa Yaguchi  
by Ming Ronnier Luo  
Zhejiang University,  
China

Prof. Yaguchi had a distinguished academic career. He graduated at the department of Photographic Engineering at Chiba University in 1974 and received his Ph.D with a thesis title of study on additivity of brightness in luminous efficiency, at Tokyo Institute of Technology supervised by Prof. Mitsuo Ikeda in 1980. Based on his PhD thesis,

he published his most cited paper, "Subadditivity and superadditivity in heterochromatic brightness matching" in *Vision Research*. In 1982, he moved to National Research Council Canada in Ottawa and worked with the late Dr. Günter Wyszecki as a Research Associate from 1982 to 1986. At NRC, he researched the fundamental aspect of color vision such as color matching. He measured his own color matching functions, luminous efficiency and opponent-color response function using the NRC Stiles Trichromator. His work at NRC was presented at the Midterm Meeting of AIC "Wyszecki-Stiles Memorial Symposium on Color Vision Models", Florence, Italy, in 1987 and published paper entitled "Signal transformations from the cone stage to the neural coding stage", *die Farbe*. He then went back to Chiba University in 1986 as an Assistance Professor at Department of Information and Image Sciences. In 1995, he became a Professor. During the professor period, he also served as the head of Department.

He retired from Chiba University in 2017, at the same time he was honored as Professor Emeritus. He also served as an Associate Editor of Color Research and Application from 1999 to 2017.

He has published more than 150 scientific papers and 10 books in the field of color and imaging in his career. His major scientific achievements covered a large scope of topics including color vision, color discrimination, color deficiency, luminous efficiency, the HK effect investigation, colour appearance modelling, colour constancy, colour name rendering and skin colour. I am particularly impressed in his research on the investigation of the change of colour appearance under photopic, mesopic and scotopic vision, and finally make a model for mesopic vision.

He was also a great educator, taught modules of color vision, photometry, colorimetry, visual information processing, color reproduction, universal color design, fundamental colorimetry and its application to imaging science. He successfully supervised 15 Ph.D students. He also teaches part time at RMUTT, Thailand and National Taiwan University of Science and Technology, Taiwan.

He has been very active in color societies, particularly in CIE and AIC, and made great contribution as the Chairman of CIE Technical Committee TC1-90 to publish the Technical Report CIE 227:2017 CIE 2107 Color Fidelity Index for accurate scientific use. The index was the new color rendering evaluation methods. It is expected to replace the current CIE colour rendering index (CIE-Ra) in the near future. He was Past President of CIE-Japan. He was awarded the CIE Awards in 2009. He also made great contribution to the International Colour Association (AIC). The most important ones included to host two AIC meetings in Japan and made them great successes.

**ABOUT THE JUDD AWARD...** In 1973 Betty Judd proposed to establish an AIC award in memory of her husband, Deane Brewster Judd, to recognize outstanding work in the field of color science, the AIC has been carrying out the process of selection of the recipients for this award every two years. The selection is an arduous procedure that includes nominations by AIC members and analysis of antecedents of the nominees by a Committee composed of previous recipients of the award. The researchers who have received this award are presented below. The list of their most important publications is a solid collection of colour research that should be remembered and used.

## AIC CADE AWARD 2019 Roy Osborne

Great Britain



Citation for  
Roy Osborne  
by Vien Cheung  
University of Leeds, UK

Roy Osborne was born in Bristol, England, in 1948. He studied at the West of England College of Art, Bristol (1965-71), and Brighton College of Art, gaining a Bachelor of Arts degree in Fine Art Painting (1970) and a Postgraduate Diploma in Printmaking (1971). From 1970-1974 he taught printmaking (primarily lithography) at Brighton Polytechnic, Bradford College of Art and the Slade School of Fine Art, London. While living in Florida (1974-75) he began writing *Lights and Pigments: Colour Principles for Artists*, bringing the subject up-to-date with innovative references to colour vision and measurement, and linking traditional art media with plastics, film, television and holography. The book was published by John Murray in 1980 and Harper and Row in 1981.

From 1980 to 1986 he was a member of the Royal College of Art Library Advisory Committee, and in 1982 assisted Hans Brill in setting up a series of ten RCA colour symposia (1983-87). In 1985 he was the only European contributor to a colour conference at Pratt Institute, Brooklyn, organised by Nina Prantis. From 1994 to 1997 he served as AIC Committee Member and Newsletter Editor, contributing to AIC conferences in Sydney (1991), Cambridge (1994), Gothenburg (1996) and Boston (2018). He was twice Chairman of the Colour Group (Great Britain), 1995-97 and 2005-07, and in 2003 was awarded its first Turner Medal for contributions to colour in art and education.

He has worked as an artist since 1968, beginning (if not completing) over 700 paintings on canvas, mostly abstract but some pictorial, and most of which attempt to explore colour in relation to form by examining such elements as figure-ground ambiguity, colour harmony, contrast illusions and optical mixing, in works that typically integrate formal aspects of straight or curved divisions, symmetry and illusions of overlapping versus transparency. Since 1970 he has contributed to over 120 group exhibitions and seven solo shows, mostly in London (50 galleries) but elsewhere throughout England, and occasionally abroad.

In 1989 he was invited by Clywd County Council to curate a touring exhibition, *From Prism to Paintbox: Colour Theory and Practice*

in Modern British Painting, and assembled paintings by 70 prominent colourists working in Britain 1900-1990, collecting original statements from its living contributors. He then further studied at Chelsea College of Art, London (1990-91), gaining a Postgraduate Diploma in the Theory of Modern Art, and at the Institute of Education, London (1992-94), gaining a University of London Master of Arts degree in Art and Design in Education, following which he was invited by the Institute to publish a short summary of his thesis as *Teaching Colour in Art: Colour-Form Preference* (1995).

As an author he has published ten titles since 2004, starting with *Color Influencing Form: A Color Coursebook* (first drafted in 1984), proposing an exploration of colour in relation to form perception, as well as a definitive and detailed bibliography of colour, *Books on Colour 1500-2000: 2,500 Titles in English and Other European Languages* (2004), further augmented in 2012, and republished in 2015 as *Books on Colour 1495-2015: History & Bibliography*. He has also published original translations (from French and Italian) of early books on colour by Jean Courtois (1495), Gilles Corrozet (1527), Fulvio Morato (1535) and Gian Paolo Lomazzo (1584). He has recently published three illustrated books on his own artwork: *Pigments of the Imagination* (2016), reorganised as *Abstract Colour Paintings 2008-2015* (2017), and a full *Catalogue Raisonné 1968-2018* (2018). Between 2003 and 2012, he contributed significantly to six books by Don Pavey: *Colour and Humanism* (2003), *Thylessius, On Colour* (2003), *Don Pavey, His Life and Work on Aesthetics and Colour* (2009), *Colour Symbolism, from Prehistory to Modern Aesthetics* (2009), *Colour Engrained in the Mind: Character Profiling* (2010), and *Colour Concepts, Palettes and Pigments* (2012).

As a writer on colour he has also contributed to *The Color Compendium* (New York 1990), edited by Augustine Hope and Margaret

Walch, *Designing with Colour* (Cincinnati 1991), edited by Susan Berry and Judy Martin, *Colour for Architecture Today* (Abingdon 2009), edited by Tom Porter and Byron Mikellides, *Languages of Colour* (Lewes 2012), edited by Alexandra Loske, and *Colour Design* (Cambridge 2012 and Amsterdam 2017), edited by Janet Best, contributing chapters on the history of colour in art, science. He has contributed some 40 minor articles to journals including *Artists Newsletter* (1982-84), *The Artist* (1985 and 1989), *Color Research and Application* (1987 and 2002), *Journal of Art and Design Education* (1988), *Artists and Illustrators* (1993-94), *Journal of Photographic Science* (1994), *The Colour Group Newsletter* (1988-2008) *Journal of the Society of Dyers and Colourists* (1995 and 2000) *The Jackdaw* (2008 and 2015-18) and *Interalia Magazine* (2015).

As a part-time and visiting lecturer, 1978-2018, primarily on colour theory in art, design, science and fashion, and also on art history, he has presented over 2,000 lectures at over 200 institutions worldwide, including 44 colleges and universities in London and others throughout the UK. In Ohio (1986-97), at Akron University and Kent State University, he developed and taught practical colour courses that were extended and modified throughout the 1990s. In various other short tours abroad, he lectured at 26 other colleges and universities in the USA and Canada, and 21 during three visits to Australia and New Zealand.

**ABOUT THE CADE AWARD...** The AIC Award for Color in Art, Design and Environment (CADE) is established to recognize those who excel in the areas of design, art, architecture and humanities. The award is presented every two years, at AIC Congresses and Midterm Meetings. This award was established in 2015 and first given in 2017. The selection is an arduous procedure that includes nominations by AIC members and analysis of antecedents of the nominees by a Committee.

## BEHIND THE SCENE

The concept design the of AIC Award for Colour in Art, Design and Environment medal



“The RGB lines represent the rays of the 3 primary colors of the additive mixing theory, coalescing into the full spectrum of color lights. They are the source of all colors weaving out the eternal networks of nature, inspiring man-made environments. Through their infinite interaction, the displayable world hosting our lives is generated.

The medal reminds us of this wonder unfolding before our eyes: the circle begirding its limitless possibilities, solidified in silver - a shimmering piece of artwork signifying a formless masterpiece of colour creation that reaches out beyond imagination.”

- Colour Association of Taiwan,

2017



// ARGENTINA //

## GRUPO ARGENTINO DEL COLOR

ACG - Argentine Color Group

As part of the history that we have built together with the AIC, we want to remember that in 2019 it was 30 years since the AIC 1989 congress was held in Argentina.

In addition to the organization of the AIC 2019 from the GAC we have supported various events and institutions exchange scientific and academic training:



### COLOR INSTITUTE (FAUD-UNC) AND THE GAC

During 2019 and since its foundation in 1996, the Color Institute, which reports to the Research Secretariat of the Faculty of Architecture, Urbanism and Design of the National University of Córdoba, has been working closely with the Argentine Color Group, in addition of the permanent participation of its researchers in scientific conferences and events organized by the GAC.

Representatives of the Institute participate in the Executive Committee of the GAC, enabling and encouraging steps carried out at the Institute, which is dedicated to the promotion, coordination and

conducting research of the chromatic phenomenon and its application in teaching activities, tasks extension, transfer to society and dissemination in the scientific community.

The Institute's objectives are reinforced by the synergistic relationships achieved between both institutional spaces in a close relationship of collaboration and support for actions that are mutually established between the Color Institute and the GAC.

### 1st WORKSHOP OF ARCHITECTURAL MIXTURES

The GAC supported the "1st Architectural Mixes Workshop", held on May 21 and 28, 2019 at LEMIT, framed in activities for International Color Day.

This training workshop was led by Phd Anahí López, vice-president of the GAC, and was organized by the Multidisciplinary Training Laboratory for Technological Research (LEMIT-CICPBA), and the course "Industrial Design Technology (3A)" from the Industrial Design degree (FBA UNLP).

Students from Industrial Design and Art, Engineering and Architecture participated in it. The objective of the workshop was to train students on the materials used to make cement-based mixes, in the different mixes that can be run and to inform them of the properties and types of concrete; guide them to develop criteria for choosing molds and mixtures and thus achieve quality elements according to the shapes, colors and finishes imagined; and lastly, to stimulate the application of cement mixtures in designs that are simple to execute and easy to reproduce.

### ANAHI LOPEZ IN THE 1ST WORKSHOP OF ARCHITECTURAL MIXTURES

XIV CONFERENCE: Techniques of Restoration and Conservation of Heritage: October 22, 2019, La Plata

As an inter-institutional articulation, the GAC supported the realization of the XIV CONFERENCE: "Techniques for the Restoration and Conservation of Heritage", organized by the Multidisciplinary Training Laboratory for Technological Research under the Commission for Scientific Research (LEMIT - CICPBA), and coordinated by the vice president of the GAC, Dr. Ing. Anahí López. In turn, this event was sponsored by the Argentine Association for Concrete Technology and GIICMA of the Concordia Regional of the UTN.

Two GAC members were exhibitors: Darío Suárez and Carlos Zoppi.

This free event, of high academic level, was intended for professionals, technicians and advanced students of engineering, architecture, industrial design and art and professionals in the area related to color.



Anahí López in the 1st Workshop of Architectural Mixtures



// AUSTRALIA //

## Colour Society of Australia CSA

Our CSA state divisions continued in their coordination and presentation of interesting programmes for our membership throughout the year on the subject that unifies us all - colour.

QUEENSLAND members enjoyed cultural and symbolic associations with colour including an in-depth presentation on Heritage Conservation – Colour of Life in Old Phuket which discussed the vital role communities play in preserving local traditions; and the division continued their connections to local artists, their work, and their use of colour.



NSW ICD workshop  
with Resene Paints

SOUTHERN DIVISION members enjoyed a unique opportunity to visit the production centre of The Australian Ballet where we could see costumes dating back over the decades since 1960s, and also spent time in discussions on colours, fabrics, and trims with the designers.

WESTERN AUSTRALIAN division created a colour workshop titled 'Colour Naming' with games and quizzes. Members also spent the long

Easter weekend in an 'away-workshop' – 'Lighting the Landscape', with Eco walks for sunrise and midday photography opportunities. From these images, digital colour palettes were developed, and then used in creating designs for a fabric printing workshop.

NEW SOUTH WALES, our largest division, had another busy year with well attended meetings – which included being part of the Sydney Design Festival with a presentation by David Briggs, NSW Division Chair – 'Unlocking the Structure of Colour' which surveyed the historical development of colour theory from the Renaissance to the present day, utilising David's research into da Vinci's codices. Annamarie de Cara also presented her explanation of the NCS, including colour exercises for participants. The 500th anniversary of the death of Leonardo da Vinci saw another full NSW meeting, discussing his theories of Colour. Light and Vision. A further meeting on 'Aristotle and the Philosophy of Colour Perception' with Canadian Professor Mohan Matthen was also well attended. The America lighting designer Christopher Moulder traced his journey into the use of colour through his experimentation with light, including sound and coloured light as a material responsive to body movement in a synesthetic experience.

September 2019 saw us with the sad loss of our CSA National Treasurer and colourful friend Derek Grantham, who was a popular and friendly figure at colour conferences both here in Australia and across the world, usually wearing brightly coloured shirts. Originally from Derbyshire in the UK, Derek had spent his career in mechanical engineering, including the processing, fine grinding and classification of natural pigments. Derek was also

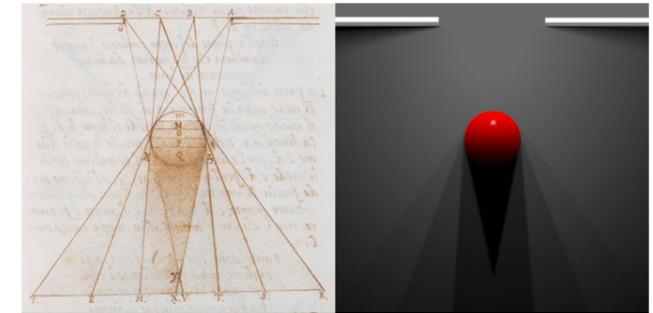
for many years CSA Southern Division chair and contributed in many ways.

Our online journal 'Spectrum' continues to be welcomed by members, with informative articles and updates from the world of colour. This year, in celebration of the anniversary of the influential Bauhaus design movement, a specific quiz was included. Prize was a copy of the Thames & Hudson publication 'Chromatopia', a wonderful book on colour pigments written by one of our members, Melbourne-based artists' colour manufacturer, David Coles.

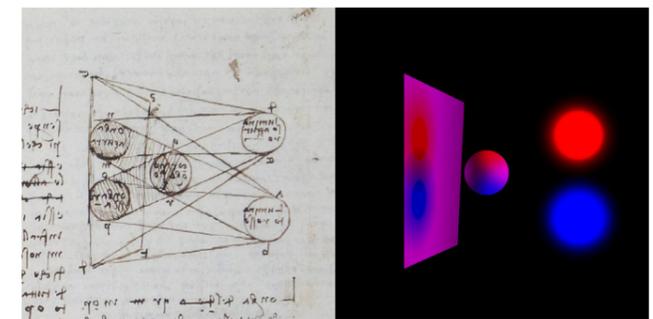
Two key CSA members, David Briggs and Paul Green-Armytage [WA] have been involved in the Inter-Society Color Council [USA] and AIC Colour Literacy Project, which aims to identify and address the most basic misconceptions and misinformation about colour.



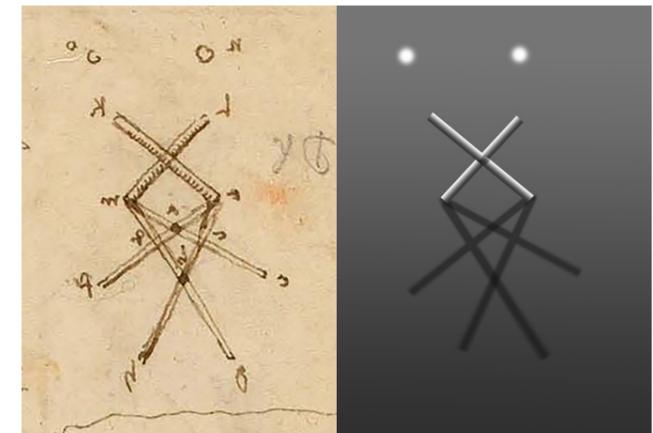
Relationship of oil paint colours (YCbCr space) depicting fabric in Leonardo's painting *La belle ferronnière*.



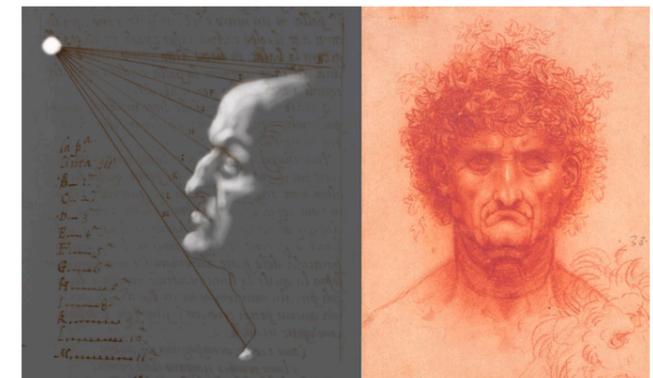
Illumination of a sphere by light passing through a large aperture. After Leonardo, Codex Urbinas 213r.



Illumination of a sphere by two coloured light sources. Leonardo, RCIN919419a.



Illumination of a pair of crossed sticks by two light sources. Leonardo, Codex Atlanticus 483r.



Illumination of a face in profile view. After Leonardo, Codex Urbinas 219r; with a comparable frontal drawing of a face by Leonardo.



// BELGIUM //

## Interdisciplinary Colour Association Belgium

### ICA

The year 2019 was a very exciting year for ICA-Belgium. We have exceeded our own expectations and stretched our small team to the very limit by organising a 3-day international symposium. We thank our members and supporters for their trust, cooperation, many valuable initiatives and lots of hard work. We couldn't have made it without you.

#### EVENTS OF 2019

ICA-Belgium COLOUR SYMPOSIUM 2019:  
Connecting Colour in Design, Art & Science  
23-25 May 2019, KU Leuven Ghent Technology  
Campus, Ghent  
<https://coloursymposium.org/>

ICA-Belgium's 3rd Symposium welcomed nearly 50 Belgian and international speakers and presenters from various disciplines in a 3-day event encompassing 2 days of oral and poster presentations, interactive colour exploration, film screening, tours of the Light Laboratory and a full day workshop on colour education.

Presentations of the first day spanned topics from colour perception and virtual reality to cinema colours and digital film restoration.

The Colour Explorer Room showed us the numerous ways to experience colour, such as hands-on explorations with affordable colour tools, learning about natural pigments derived from living organisms through the Colour Biolab and how a colour game can become a valuable design tool.

We experienced what light does to our perception of colour during a tour of the KU Leuven Light Laboratory. In the evening, at the KASK-cinema screening, we searched for the colour red in Antonioni's *Deserto Rosso*.

The second day saw presentations on colour in art, architecture and interiors, culture and psychology, challenges of colour education and finally invited participants to take part in an interactive group experiment on room brightness.

On the 3rd day the workshop "Dresden meets Ghent" showed us an intuitive approach to teaching colour to designers, architects and teachers.

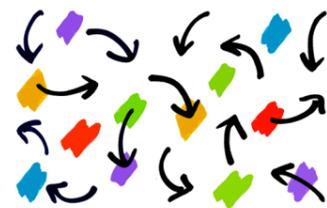
The event was hosted by KU Leuven Ghent Technology Campus and Light & Lighting Laboratory, with the support of Cinematek (Royal Belgian Film Archive), KASK Cinema, KASK Colour Biolab, RAL, BARCO and Stoopen & Meeûs. A big thanks goes to the support of many volunteers. The details of the Programme, Abstracts, Book of Papers, some of the Presentations and photos of the event are available on the website.

ICA-Belgium Museum Visits for members:

- Visit to the temporary exhibition: *Le Corbusier* 7 June 2019, MAS Museum, Anwerp
- Visit to exhibitions: *Labyrinthus* by Carlos Cruz-Diez and *Hyper-Minimal* by Gisela Colon
- 4 July 2019, La Patinoire Royale, Galerie Valérie Bach, Brussels

ICA-Belgium Meet the Artist:

Adrien Lucca 24 November 2019, GC Het Huys, Uccle (Brussels)



ICA-BELGIUM  
COLOUR SYMPOSIUM  
23-25 May 2019 Ghent

ICA-B Colour Symposium  
2019 Logo HR

Viewing of Adrien Lucca's artwork *Microkosmos* at Het Huys brought together around 20 art and colour lovers and led to interesting conversations and experience of colour under different light conditions.

MICROKOSMOS (2018) is a permanent installation in the courtyard of a socio-cultural centre by Adrien Lucca. It is a complex assembly made of a large mural of 170 m<sup>2</sup> and four special lights that light up evenings and nights. The centre has two periods of activity, a community centre during the day and a place hosting concerts and theatre plays in the evening.

Microkosmos refers to this dual identity. During the day the work is a wall painting and when the sun goes down, it becomes a social experience around the perception of light and colour, where an artificial light changes the colours painted on the wall, the colour of the eyes and the skin and clothes of the visitors. *Microkosmos* is the first work in which Adrien Lucca has developed such a special light, working at the very level of its spectrum.

#### UPCOMING EVENTS IN 2020/21

Colour is a Game: Celebrating International Colour Day 21 March 2020, House of Colours, Antwerp (postponed due to Covid-19 to a later date).

A networking event led by Inez Michiels that celebrates the International Colour Day by playing a Colour game and offering the possibility to colour professionals to get to know each other.

The Colour Game turns colour advice into fun by exploring the design possibilities of a playful colour tool. 64 colour shades are combined per two according to the mathematics of the DNA. This delivers surprisingly beautiful and meaningful combinations. In combination with the City of 8 colour personality test a tailored colour plan is gained, with wellbeing as a result.

ICA-Belgium Workshop: Who's Afraid of Red, Yellow and Blue? Perception, Interaction, Meaning 21 November 2020, House of Colours, Antwerp by Maja Kaurin, Jeannette Hanenburg and Inez Michiels. A workshop for creative professionals (designers in architecture, interior design, graphic design, advertising, branding, product development, illustration, gaming, fashion...) that explores the

relationship between colour, shape, texture and composition by discovering foundations of colour design.

Workshop: Time colour palette, KASK School of Arts, Ghent Date to be announced By María Boto-Ordóñez. Workshop inspired by the work of Colour Biolab research of new sustainable colour sources and applications using waste and living organisms to be applied in art and design practice.

Workshop: Colour principles for artists, designers and architects Date to be announced By Robert Hirschler. The workshop will address the common misunderstandings in colour theory and explore areas of colour communication, human colour perception and colour physics.



ICA-Belgium Meet the Artist\_ Adrien Lucca



ICA-B Colour Symposium 2019 Colour Explorer Room



ICA-B Colour Symposium 2019 Light Lab Tour



// BRAZIL //

## Associação ProCor do Brasil

PROCOR - Colour Association of Brazil

ProCor's members are very active, academically and professionally. Here are some news of members that had opportunity write for this report, in alphabetical order.

Professor Camila Assis led a research project entitled 'The color-black pigment and its meanings: an analysis of Brazilian packaging design' at the Academic Design Department of the Federal University of Campina Grande. The team, composed by professor Thamyres Clementino and students Thays Souto and Rebeca Leal, investigated the new approaches of the use of black color in the commercialized packaging in the current Brazilian market. Researchers analyzed the relationship between image and text on the packaging of food and personal hygiene products with predominance of black color. It was observed the existence of three new symbolic approaches in those packaging: health; self-acceptance; superior quality. The research also approached the visual rhetorical use of color as a marketing feature.

Ítalo Dantas, during 2019, developed a systematic bibliographic review on the field of Color Psychology, where he mapped 106 texts in all languages available and analyzed them following a series of variables. In addition, he also developed a research that identified and analyzed color preferences in fashion products among the inhabitants of a city in the Brazilian northeastern countryside and, finally, he sought to identify the relationship between the urban-spatial environment and color preferences in fashion products, all of this led by professors Livia Solino e Aline Freire with students Mariana Nunes and Heloisa Alves, at the Textile and Clothing Research Center of the Federal Institute of Education, Science and Technology of Rio Grande do Norte. In the Master degree, at the Federal University of Campina Grande, advised by the Prof. Dra. Camila Assis, he continues with his research in the area of colors and fashion design, researching how the delivery of chromatic messages occurs in fashion collections through the observer's point of view compared to the semiotically analyzed and the designers' claims.

Dr. Robert Hirschler, member of the ProCor Scientific Committee and Chair of the AIC Study Group on Colour Education gave two courses on colour science for non-scientists (architects, artists and designers) at the Barra da Tijuca (Rio de Janeiro, RJ) campus of SENAI/CETIQT. The course was based on the new initiative of the joint ISCC/AIC Colour Literacy Project whose primary aim is integrate experience based colour learning into STEAM (Science, Tech, Engineering, Art+Design, Math) activities.

And, also, in alphabetical order, news of two of ProCor's member companies: Colormix Especialidades, in partnership with Eckart, a

German company of the Altana group and the largest producer of effect pigments in the world, annually brings to Brazil the color trend information for the various segments, especially automobiles, plastics and cosmetics. Colormix Especialidades has other trading partners, where we operate in various local color groups to evaluate trends and influences in the Brazilian market, to guide our customers to always provide more attractive colors and effects, updated with market needs.

Colors reflect authenticity and are important for differentiating and customizing furniture and wood designs, RENNER SAYERLACK as a specialist in paints and varnishes for this substrate, invests in the development of new colors every year in addition to the more than 9 thousand colors present in the system called SayerSystem.

ProCor participated in a series of events in 2019. In March, ICD was celebrated (see ICD Report), in July, ProCor participated in FuturePrint, a major Graphic Arts and Printing Fair, with approximately 40 thousand visitors. ProCor gave a lecture about Color Communication, for an audience of about 80 people, organized by one of ProCor's member company, SINTEGLAS, and offered by ProCor's President, Prof. Dr. Paula Csillag. In September, ProCor celebrated the Brazilian Color Day, when there is the Spring Equinox for the Southern Hemisphere. This event was organized by SITIVESP, (São Paulo Owners of Paints Industries' Union) in partnership with 10 paints companies, where information and entertainment on color was offered to the public. In October, ProCor participated at ABRAFATI (Brazilian Coatings Manufacturers Association) Congress, with a lecture. President Paula Csillag talked about Color

Trends and Strategy for the Paints Industries, and Vice President, Patricia Fecci talked about Color Trends for 2020, according to Color Marketing Group.

For more details about ProCor's events, please visit [www.procor.org.br](http://www.procor.org.br).

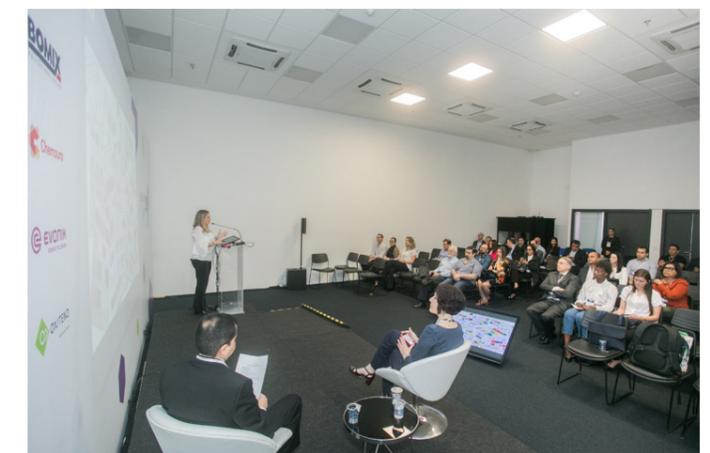


3D Model used by Prof. Dr. Gisela Monteiro.

Study of colour is one of the subjects at the Art Director's course of AIC Brasil (International Academy of Cinema). Gisela Monteiro, a member of ProCor Brasil, who gave the course, works with her students using a 3D model (Figure 1), inspired by the Munsell Tree, to arrange a pattern card in a three-dimensional space. This academic environment has been useful in explaining the relationships between colours. This model, called Colorcra, will be the subject of a presentation which has been submitted for the next AIC meeting.



Dr. Hirschler explaining partitive and subtractive colour stimulus mixing during the colour science for non-scientists course at SENAI/CETIQT.



Patricia Fecci talking about Color Trends for 2020, according to Color Marketing Group.

## COLOUR COULEUR

Colour Research Society of Canada  
Société canadienne de recherche sur la couleur

// CANADA //

## Colour Research Society of Canada CRSC

### REVIEW

The Colour Research Society of Canada (CRSC) had an active year, and we are pleased to have been accepted this year as the hosts for the AIC Conference in 2022. Our organization continued to develop our profile and programming in 2019, and announced our inaugural Colour Research



CRSC Board Members  
and Artist Tania Love  
March 21 2019

Student Award. Board Members included President Doreen Balabanoff; Vice President Vivian Lo; Secretary Judith Tinkl; Treasurer Sharyn Gitalis; and Members at Large Vicky Chung, Brian Funt, Candida Girling, and Robin Kingsburgh.

In January, a trio of members gave a presentation at the Interior Design Show (IDS), a major Canadian trade show presenting products, speakers and trends in the industry. (January 21-24, Metro Toronto Convention Centre). Inspired by the IDS 2019 theme of transformation and evolution, Doreen Balabanoff, Sharyn Gitalis, and Bob Hambly offered an interdisciplinary seminar, The Importance of Colour, Light and Darkness for Resonant Human Experience, grounded in the Goetheian concept of light-colour-darkness as emotive resonance, and Gernot Böhme's atmospheric aesthetic of the 'beautiful' as a person, object or place that contributes to 'intensifying our existence'.

Our Annual General Meeting was held on March 21, International Colour Day, at the Interface Carpet showroom in Toronto, with an invited speaker, artist

Tania Love, whose lecture "Colour Perspectives: Art Practice Through the Lens of Plant and Mineral Pigments" reflected on the impact and historical use of colour, and her personal practice-based research in plant and mineral-based colour – using traditional methods and innovative expressions, ranging from plant-based inks and dyes, milk paint, and salvaged wire, paper and textiles.

In June, CRSC Board member, Toronto-based artist, and educator Candida Girling led a Colour Collage night at Artbarn School in Toronto. Girling teaches art and design at OCAD University and Sheridan College, including colour courses. Her workshop offered an opportunity for a diverse group of artists and designers to further their knowledge of colour theory and principles of colour harmony, through an inspirational, hands-on and social evening of physical making.

Our "Kaleidoscope Lecture Series" event was held in November at the University of Toronto's Thomas Fisher Rare Book Library. The presenter, Erich Weidenhammer, PhD (Curator of the University of Toronto Scientific Instruments Collection, and Adjunct Curator at Ingenium: Canada's Museums



Tania Love at Interface

of Science & Innovation, Ottawa), provided an extraordinary array of books and scientific instruments for viewing alongside his lecture. The title of his talk was Aesthetics and Colour Research at the University of Toronto's Psychological Laboratory, and it showcased the work of German-born psychologist August Kirschmann (1860-1932), who ran the new psychology lab at U of T at the turn of the century. Trained by Wilhelm Wundt, the founder of experimental psychology, Kirschmann's main area of study was colour perception, and his work contributed to the advancing technologies of colour and illumination, and informed his views on a science of aesthetics. Items on display from the Rare Book Library included Newton's Opticks (1704); LeBlon's L'art d'imprimer les tableaux (1756), and many other publications and artifacts related to colour perception and analysis.

Also in November, we held our first Colour Social at a local pub, where we celebrated Red in an evening of discussion, reaching out to members and non-members across Toronto.

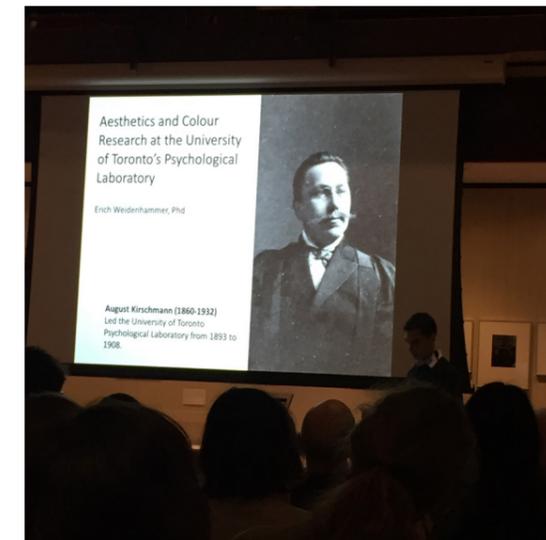
We look forward to an exciting year ahead in 2021 working with a wonderful creative team at Haft2 in Toronto, and colleague Ilene Sova, the Ada Slight Chair of Drawing and Painting at OCAD University, as we work towards development of our 2022 AIC Conference, with the theme of Sensing Colour.

COLOUR COULEUR  
Colour Research Society of Canada  
Société canadienne de recherche sur la couleur  
CRSC Student Award for Canadian Colour Research  
Prix étudiant pour la recherche sur la couleur

CRSC STUDENT AWARD FOR  
CANADIAN COLOUR RESEARCH  
CRSC PRIX ÉTUDIANT POUR LA  
RECHERCHE SUR LA COULEUR

Please visit our website to learn more!  
colourresearch.org

Student Award CRSC



Weidenhammer Lecture



Weidenhammer lecture at Rare Book Library Univ. of Toronto 2



// CHILE //

## Asociación Chilena del Color CCA - Chilean Color Association

The website of Universe in six colors is the synopsis of this treatise, the main idea was to show through its menus the structural order of the book. Each of these menus and submenus show the essence of how the Mapuche textile culture is linked to the forest, and how women have been protecting their ancestral techniques based on the forest and its various ecological niches that contemplate the territory (wallmapu). This is a project of the designer Paulina Olivares.  
<http://www.universoenseiscolores.cl/>



### RESCUE AND ANALYSIS OF THE AYMARA INDIGENOUS TRADITIONAL COLOR TEXTILES

This research, carried out by Macarena Cerda and Bernardita Brancoli of the Universidad del Desarrollo, focuses on the rescue and analysis of the colors used in the traditional-contemporary textiles of the Aymara indigenous people of the city of Pozo Almonte, northern Chile. It seeks to understand the chromatic decisions and the link that these could have with the territory,

its worldview and the raw material to which they have access. The low demand and lower production of some traditional fabrics has generated an impact at the chromatic level. Andean colors and designs have been lost and have been replaced by more commercial ones. A total of 42 pieces of tissue were cataloged from the point of view of iconography, raw material, design and colors. It was determined that the traditional-contemporary textiles found in Pozo Almonte use a range of 46 colors. From this, color proportions were formulated for each of the pieces. Finally, he related what the worldview and raw material implies with crafts.



*Andean colors: A colorimetric registration in pre-Columbian textiles from Northern Chile*

Andean colors: A colorimetric registration in pre-Columbian textiles from Northern Chile

This article, written by Soledad Hoces de la Guarda, Lina M. Cárdenas, Paulina Brugnoli and Paulina Jélvez of the Universidad Católica de Chile, shows the colorimetric data obtained from pre-Columbian northern Chilean textiles and their subsequent analysis for the construction of a color chart. As part of a more extensive study investigating the fundamental pillars of the textile language associated with pre-Columbian weaves, a registration of colorimetric data was carried out on 42 textile pieces with a total of 203 colors mostly provided by the Chilean Museum of Pre-Columbian Art. The results are presented in terms of CIELAB coordinates. The colors obtained showed a considerable percentage of reds and browns. The recorded values can contribute to the preservation of cultural heritage and the esthetics of current Chilean identity as they can be used in new industries, contexts, and applications. Subsequently, the colorimetric data obtained could be transferred to other color systems, so that users from different sectors might have access to this cultural legacy, understanding the limitations of color production in mixed media.

<https://onlinelibrary.wiley.com/doi/abs/10.1002/col.22424>

### COLOR AND MUSIC WITH FIRST YEAR STUDENTS OF DESIGN

The purpose of the 1st year Workshop, of the of the Design degree program at the Austral University of Chile (Valdivia), is for the student to define a formal proposal based on the discrimination of variables, to respond to a design problem. Music was taken as a starting point. Students listened to 4

contemporary pieces of music. From one of them, they made free graphic strokes. Then, they chose a complementary color palette, working at least 12 shades between one color and another. With both inputs, they made a composition in watercolor that expressed in a visual and abstract way, the given musical composition. The professor of this Workshop was Elisa Cordero-Jahr.



*Student project*



// CHINA //

## 中国颜色学会

CAC - Color Association of China

The Color Association of China (CAC) is one of the committees of the Chinese Optical Society (COS), specialized for color science and technology. As the National Color Association, it joined the AIC in 1986, together with the Division 1 (vision and color) of China Illuminating Engineering Society (CIES). Its objectives are to encourage the research of color science and its applications in different aspects, and through seminars to exchange information and new technology about color.

### ACTIVITIES in 2019

The biennial symposium on the topic of "Color Science and Imaging Technology" was held on 10-11 August 2019 at the University of Science and Technology of China, Hefei, Anhui Province, together with the annual conference of the Chinese Optical Society (COS). Coming from the academic institutions, including Zhejiang University, Beijing Institute of Technology, Donghua University, Yunnan Normal University, National Institute of Metrology, Hangzhou Dianzi University, Xi'an University of Technology, Tianjin University, University of Electronic Science and Technology of China, China University of Geosciences, Kunming University of Science and Technology, Hong Kong Polytechnic University, Xi'an Institute of Optics and Precision Mechanics of Chinese Academy of Science, Changchun University of Science and Technology, Huaqiao University, and so on. The participating experts, graduate students, and industry insiders presented 27 technical reports at this symposium through four oral sessions and one poster session. The oral sessions involved the sub-topics of Color Vision and Color Reproduction, Color Image and Color Analysis, Imaging System and Color Measurement Instrument, and LED Light Source and Lighting Spectrum, in each session

of which an invited talk was made. By academic communications, the attendees discussed and exchanged their related technical trends, research thoughts, and recent achievements in the fields of vision, color, image, colorimetry, LED, lighting, and etc.

Some speakers at the 2019 symposium of "Color Science and Imaging Technology" by the Color Association of China, along with the annual conference of Chinese Optical Society, on 10-11 August 2019 at the University of Science and Technology of China, Hefei Anhui.



2019 symposium of "Color Science and Imaging Technology" by the Color Association of China



A part of the CAC participants, from different academic institutions of China, at ACA2019 conference on 28 November - 3 December 2019 in Nagoya, Japan.

The Color Association of China gathered our 26 members to attend the 5th International Conference of the Asia Color Association (ACA2019), held on 28 November - 3 December 2019 in Meijo University, Nagoya, Japan, with the theme of "Color Communications". The Chinese participants gave the presentations respectively in the invited, oral and poster sessions, involving the topics of color vision, color psychology, color design, color application, color technology, color imaging, color in health and cosmetics, color in new fields, and so on. The ACA2019 conference provided the helpful chances for the Asian professionals, especially for the young color scientists in Asia, to share or exchange their academic understanding and research ideas about color science and technology.

Funded by China Association for Science and Technology, the study of color science development forecast and technology roadmap has been performed, in which the key topics include the two main modules of color measurement & evaluation and color reproduction & management. Meanwhile, to meet the industrial needs in the related areas of color technology, following the revision and approval by the National Technical Committee on Color (TC120) of the Standardization Administration of China (SAC), the China National Standards (GB) of "Method of measuring the color rendering properties of light sources" as well as "Names and colorimetric characteristics of Chinese common colors" have been officially implemented.

On 8-9 December 2019 the China Color Academic Annual Conference 2019 was successfully held in Shanghai with the theme of "Color · Change · Smart Life". Several expert speakers were invited from China, Japan and France to touch the various topics such as the design tendency of product color and material from home to intelligence, the application of fashion color in clothing, the modern application of Chinese and Japanese traditional colors, understanding the fashion trend of French interior color, thinking the contemporary fashion of Chinese traditional color, color and brand communication, and so on.



The officially implemented China National Standard (GB) "Method of measuring the color rendering properties of light sources".



The delegates attending at 2019 China Color Academic Annual Conference on 8-9 December 2019 in Shanghai.

// FINLAND //

## Suomen väriyhdistys

FCA - The Finnish Colour Association

### REVIEW

The Finnish Colour Association annually awards a special recognition, The Iris Prize, “to a person or persons whose work or deed has created an outstanding colour experience or has noticeably improved the aesthetic appreciation, functionality or safety of people’s daily lives or environment. The work can involve fine art, design, architecture or environmental design or for example colour technologies such as photography, colorimetry or the printing process”. The Iris Prize is usually given on the 21st of March as a way of celebrating the AIC’s International Colour Day. This year the FCA made an exception in order to collaborate with another event (see below). Instead and in a way of celebrating International Colour Day, FCA members Harald Arnkil and Kati Winterhalter gave talks on colour in urban contexts to audiences

which consisted of town planners and city council staff of the municipalities of Vantaa and Tuusula in the Helsinki Metropolitan area. The two seminars, which included several invited speakers, were held on the consecutive days of 20th and 21st March.

In 2019 FCA wanted to draw attention to a colour profession, whose work usually goes unnoticed, but is not unseen – on the contrary, many of us enjoy its results almost daily: the work of the colour grader in the production process of moving images. The association collaborated with Aalto University’s department of Film and Scenography in selecting the recipient of the award. The Prize was given to cinematographer and colour grader Pentti Keskimäki. Mr. Keskimäki has worked for over two decades towards raising the visual standard of Finnish films closer to an international level of

high quality. Mr. Keskimäki has also contributed significantly to training future film professionals. The collaboration extended to co-planning an event around colour in cinema together with the National Audiovisual Institute. The one-day seminar, Color Color, was held on 6th April at the Institute’s new cinema, Kino Regina, in the Helsinki City Central Library building Oodi. The theme of the event was the impact of the development of colour techniques and the role of colour in the art of cinema. Harald Arnkil participated with the talk “Colours creating atmosphere – some thoughts on the relationship between film and visual art”. As part of the event, The Iris Prize was handed over to Pentti Keskimäki, who gave an illustrated talk on the role of colour grading in the visual appearance of films.

The Association organized two excursions in 2019. In early June 20 members set off by hired bus from Helsinki to Noormarkku, near the west coast in Finland to see Villa Mairea (completed 1939), the famous private house designed by Alvar Aalto for Harry and Maire Gullichsen. The house is situated in an idyllic early industrial rural setting and it contains unique design objects as well as art works by Picasso, Leger, Braque, etc. The journey back to Helsinki went via the town of Pori and the Pori Art Museum, which houses the Maire Gullichsen Foundation’s collection of contemporary Finnish art. On display this time was an exhibition of selected works by contemporary Finnish artists from the impressive collection of art collector Arto Jurttila. In October, members were invited to take part in a guided visit to a retrospective exhibition of the Finnish pioneer of modernist and abstract art, Birger Carlstedt (1907–1975). The exhibition was held at the recently opened Amos Rex Museum in central Helsinki.



Members on an excursion to Villa Mairea by Alvar Aalto

Harald Arnkil participated as a keynote speaker in the ICA-Belgium Colour Symposium 2019, Belgium. The event took part during 23rd – 25th May at the KU Leuven University’s Technology Campus in Ghent. Unfortunately, no-one from the Finnish Colour Association was able to participate in the AIC interim meeting “Colour and Landscape” in Buenos Aires. However, the association participated by proxy in the voting of the general assembly.



The Iris Prize. Left: Pentti Keskimäki; right: Saara Pyykkö, president of the FCA



// FRANCE //

## Center Francais de la Couleur CFC - French Colour Center

### ACTIVITIES AT A GLANCE

2019 was mainly concerned by the AIC2020 Interim Meeting to be held in Avignon (Provence, France). Several meetings were organized on different topics to share new knowledge and to also collect funds and gathering people with very different fields of color activity.

- January 1st, Creation of a Research Group by CNRS dedicated to the Appearance of materials. The CFC is one of the founders. See <http://gdr-appamat.cnrs.fr/> for details (in French).
- January 12th, Natural Colours of Cities, a talk given by Larissa Noury (CFC, Executive Committee member) in Ecole des Mines de Paris.
- February 5th, « From a De la polychromie d'une sculpture médiévale à la reconstruction

3D d'une église abbatiale cisterciennemedieval (Polychrome sculpture to the 3D reconstitution of the Cistercian Abbey Church of Royaumont) » organized by Université Pour Tous, Château de Bouthéon (Loire).

- March 16th, meeting of the internal group: « Colour, ethics and digital restoration of works of art » restauration numérique des oeuvres d'art.
- March 21st, International Colour Day, « No Black Clothes Day », an initiative of Museum of Colours, followed by CFC.

2019 was declared by UNESCO « International Year of the Periodic Table ». We organized a meeting for the ICD on this topic in a famous place in the Quartier Latin, in Paris, at « Espace Pierre-Gilles de Gennes ». This opportunity permitted to present



Figure 1. The virtual while realistic periodic table spectrally computed in Photon mapping on [380;780] nm at a 5nm wavelength resolution with CIE D65 illuminants and a standard colorimetric observer. P. Callet 2019.

the last version of the computed Periodic Table. The spectrally rendered table of the element could not be computed for all the 118 elements. Some of them are transparent, exist in an insufficient amount on Earth, or no optical data (complex dielectric tensor) were available and no more macroscopic sample for measuring by spectroscopic ellispometry. The virtual, while more realistic periodic table than the classical array of chemical symbols, is presented in Fig. 1 using a 3D bust of the author!

- April 13th, « Leonardo da Vinci, the sfumato, a pictorial technique and its evolution », La Bonne Graine, Paris. By Jacques Franck, painter, art historian, international specialist of Leonardo da Vinci.
- June 4th, « Colour history of the red lipsticks by Chanel: 1960-2015 », by Hélène de Clermont Gallerande (Chanel Parfums Beauté), Anne Varichon and Barbara Blin-Barrois (Culture Couleur), La Bonne Graine, Paris. Fig. 2
- September 21st, « Colour evolution of facades and monuments in Paris since the XIIIth century », by Yves Charnay (CFC), European Days of Cultural Heritage, Town Hall of the 5th district, Paris.
- September 23-27th, CFC participation and communication in the Annual Congress of the Comité del Color in Linares (Spain), Patrick Callet and Jacqueline Boutin (CFC).
- October 19th, Leonardo da Vinci, « Last revelations about the genesis of the picture « Sainte Anne » exhibited in the Louvre Museum, by Jacques Franck, La Bonne Graine, Paris.
- October 19th, in Le Poët Laval (Drôme, Provence). Our Doyenne (born in 1920) organized a meeting « Colour and discoveries »

with the active participation of Yves Charnay (CFC Executive Committee member) and Marie-Pierre Servantie (CFC and chair of the Académie de la Couleur) Fig. 3.

Exhibitions of paintings by several CFC members in national or international fairs: Caroline Besse, Reine Mazoyer, Larissa Noury, Yves Charnay, François Bossière and Siméon Colin.

Books: « Les cahiers de couleur », Yves Charnay, 160 pages, ENSAD, February 2019, Paris.

AIC2020 website: [aic2020.org](http://aic2020.org) online on October 6th.



Figure 2. History of the red lipsticks of Chanel over the period 1960-2015.



Figure 3. The Meeting « Colour and discoveries », organized by our doyenne, Jacqueline Carron, in Le Poët Laval (Drôme, Provence).

// GERMANY //

## Deutscher Verband Farbe

**DfwG** - German Society of Color Science and Application

### DEUTSCHE FARBWISSENSCHAFTLICHE GESELLSCHAFT (DfwG)

A highlight in the work of the DfwG last year was the annual conference from 8th to 10th of October 2019. The conference was hosted by - Leipzig University of Applied Sciences- (HTWK), Leipzig.



Participants of the  
DfwG Conference in  
Leipzig 2019

Founded in 1974, the DfwG has been in existence for 45 years this year and can therefore look back on a long club history. The DfwG annual conferences have become a good tradition. This year's event was hosted by the Faculty of Computer Science and Media at the University of Applied Sciences Leipzig (HTWK). A team led by Prof. Frank Roch supported the organization and implementation of the event with great commitment. We would also like to thank the hosts for the exciting insights into their fields of activity through lectures and a tour of their premises.

48 participants from different disciplines came to the HTWK from October 8-10. Since the Festival of Lights: "Autumn '89 - Departure for Democracy" took place in Leipzig on October 9, the participants were able to experience the historically significant place Augustusplatz on their way to the

conference evening, which was the starting point for the peaceful revolution 30 years ago. The entire historical demonstration route was designed with light and became a ring of light and could thus be experienced. Image and video material overlay facades and rooms in multiple layers, supplemented with sound collages. That was a memorable experience in light and colour.

26 participants accepted the invitation to the previous evening's meeting. In the Goldene Krone Inn there was time for a cozy get-together and some interesting conversations.

The meetings of the working groups (AGs) were traditionally held in the run-up to the annual conference. In the AG Multigeometry Dr. Schirmacher on research content and first results in the EU project BiRD. What was new was the meeting of the AG Appearance, a new specialist group which, in addition to colour attributes, also considers aspects such as gloss, texture and translucency to be important for the description of the appearance of an object and thus wants to meet the requirements of the users. The group is led jointly by Christian Dietz and Felix Schmollgruber.



Prof. Frank Roch welcoming the DfwG Conference 2019

Professors Frank Roch and Lutz Engisch from the Institute iP<sup>3</sup> Leipzig (Institute for Printing, Processing and Packaging) welcomed as hosts. The Institute iP<sup>3</sup> Leipzig sees itself as a partner for industry and research in the joint processing of topics related to the overall process for the production of packaging and other graphic products. The entire workflow from prepress to packaging is covered, whereby technology as well as materials and quality control play a role. A tour of the Gutenberg building on Thursday gave an insight into the institute's exciting field of activity and brought to light some treasures, such as the Baumann colour cards.



Historic Ceramic Samples

The 16 lectures during the annual conference spanned the subject areas of colour in terms of appearance, display technology, measurement, perception and colour image processing. In addition, colour pigments in painting and their damage in the interdisciplinary context of colour were reported. An interesting mix and a successful program were completed.

In addition to the conference program, the general meeting also took place on Wednesday evening. The reports from the President, Treasurer, Auditors and Secretary are summarized in the minutes. The general meeting followed the proposal of the board and unanimously approved Frank Rochow's honor with the DfwG honorary membership. Frank Rochow, who has been a member of the DfwG since

1981, was honored for his many years of work on the association's board and for his commitment to the DfwG at national and international level. The reputation that the DfwG enjoys in specialist circles was significantly shaped by him.

The DfwG promotional prize for young scientists and students was awarded again this year. Works that deal with the colour rendering properties of light sources which influence the evaluation of the quality of colour reproductions were awarded. Carolin Breit was honored for her master's thesis: Establishing lighting quality characteristics of

LED lights for the sampling of colour-critical templates and Dr. Sebastian Babilon for his dissertation: On the Colour Rendering of white Light Sources in Relation to Memory Preference.

The Wednesday evening ended comfortably in the Ratskeller. The festival of lights on the occasion of the peaceful revolution 30 years ago provided an atmospheric setting in the center of Leipzig.

A special highlight was the final visit to the Museum of Printing Art. Hidden in an almost 100-year-old printing company, some treasures of the art of printing and printing technology could be admired and also experienced in action. 90 functional machines in the museum represent 550 years of printing culture. Different printing techniques, the casting of lead characters and typesetting were shown. Particularly impressed was the "Linotype" line typesetter, which was built in 1886, a forerunner of digitization in the printing industry. The wealth of ideas and the craftsmanship of type founders, typesetters and book printers were very fascinating. Those who no longer had time to be there can find out more about the museum and exhibition at <https://www.druckkunst-museum.de>. It made you want more. Many of us will definitely come back.

// GERMANY //

## Deutsches Farbenzentrum

DFZ - German Colour Association

### DEUTSCHES FARBENZENTRUM (DFZ)

In 2019 the Deutsche Farbenzentrum (DFZ) focussed its activities on two issues:

#### 1. DFZ Development Workshop on September 20/21, 2019

Venue: Hall in the family forum on the grounds of the Havelhoehe Community Hospital

Friday September 20, 2019 positions and workshop discussion

After the welcome a short presentation of the community hospital Havelhoehe was given by F. Schad. Followed by the presentation of new DFZ members and free exchange on current projects of the participants (1st block) with speakers: Olaf Müller, Thomas Ehret, Axel Venn, Klaus Richter, Nathalie Pagels, Gisela Braune, Pia Anna Buxbaum, Mirjam Martinovic, Petronella Sitsen, and Julia Hausmann.

After the lunch and a tour of the grounds / guided tour of the hospital, the exchange on current projects of participants (2nd block) continued with speakers: Jens Thasler, Margaret Ellis, Ariane Clermont, Ulrich Hoegg, Eva Lübbe, Jörg Niederberger, Lina Schmidt, Larissa Kirchmeier, Timo Rieke and Susanne Wied.

This was followed by lectures and plenary discussion:

- Holistic living space design - building for living areas: what is a healing environment in hospitals? by Egon Tietz.
- Results of the Hellios color and health study: "Assessment of the psychological and medical effects of the environmental factors color and light on patients and staff in the field of

intensive care medicine" by Axel Buether.

- Current status of the study "Color concept and architecture in the intensive care unit of the GK-Havelhoehe" by Egon Tietz, Fabrizio Esposito, Matthias Kröz.

The next day started with exchange of ongoing projects of the participants (3rd block) with speakers Franziska Kocks, Jörg Krenke, Konrad Scheurmann, Or Hilmi, and Bettina Duwentäster. The 4th block followed with speakers: Thierry Talon, Esther Hagenlocher, Rossi di Surabaya, Petra Ruhnau and Karsten Homann.

**In 2019 the following new standards have been published:**

**DIN 6175:2019-07**  
**"Tolerances for automotive coatings - Solid and effect coatings"**

**DIN EN ISO/CIE 11664-1:2019-04**  
**"Colorimetry - Part 1: CIE standard colorimetric observers"**

**DIN EN ISO/CIE 11664-3:2019-04**  
**"Colorimetry - Part 3: CIE tristimulus values"**

**DIN EN ISO/CIE 11664-4:2019-04**  
**"Colorimetry - Part 4: CIE 1976 L\* a\* b\* Colourspace"**



DFZ-Exhibition during a break



DFZ-Matthias Kröz presents his paper



DFZ-Vivid Discussions

### GENERAL MEETING of the DFZ

2. Expansion of the non-profit color education platform [www.colour.education](http://www.colour.education)

"colour.education" is a non-profit project of the University of Wuppertal and the German Color Center for the transfer of knowledge and experience from all research, theory and practice fields of "color". On the digital teaching and learning platform, teachers and learners have access to certified teaching and learning materials on all subject areas of color for educational purposes free of charge and free of advertising. The extensive list of key words and the thematic networking of all content via hyperlinks invite interdisciplinary browsing and stimulate holistic learning. The largest interdisciplinary color network in Europe is constantly looking for new knowledge, research results and successful practical examples from all areas of color, which is why we expressly encourage all interested parties to participate.

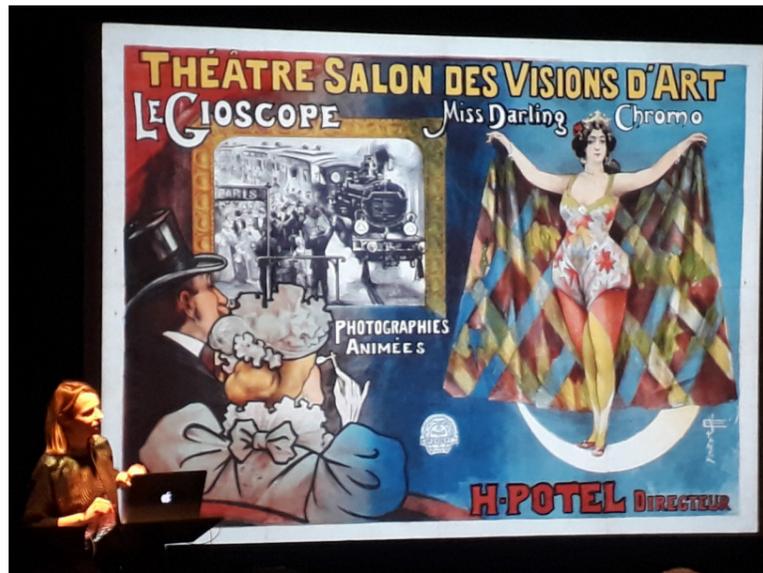


// GREAT BRITAIN //

## The Colour Group (Great Britain) CG(GB)

### REVIEW

In 2019 the Colour Group (GB) hosted 370 attendees at 9 events. At our regular 1-day January colour vision meeting, 10 speakers presented on diverse topics including colour statistics of natural scenes, colour constancy, colour naming and colour discrimination. Among them Karl Gegenfurtner gave the Palmer lecture on the dimensions of colour vision, and Jan Kremers gave the Cambridge Research Systems (CRS) lecture on cone-opponent signals in electroretinographical responses. In March the Colour Group (GB) hosted the Fourth International Colour in Film Conference which staged 20 speakers.



Marketa Uhlirova presenting at the Fourth International Colour in Film Conference.

Among them were Keynote speaker Tom Gunnings, and David Foster who was the 2019 Colour Group (GB) Keynote speaker. Screenings of restored films included Marcantonio e Cleopatra (Enrico Guazoni, Ita. 1913) and Images du monde visionnaire (Michaux and Duvivier, 1963). For International

Colour Day the Group hosted a tour of the National Gallery by Art Historian Gaynor Pelham. In April the group combined artistic and scientific approaches to colour at an event titled Neuroscience, Colour and the Visual Arts, where papers were presented on the neuroscience of the perception and appreciation of art, as well as the perception of art by observers with abnormal colour vision.

In May, after our Annual General Meeting where our new committee and chairperson (Marina Bloj) were confirmed, Elza Tantcheva-Burdge gave her valedictory talk entitled 'Royal Colours and Standards', and Michael Pointer presented a tribute to Professor Robert W G Hunt who died on 23rd October 2018. Professor Hunt was Chairman of the Colour Group (GB) between 1961 and 1963, after playing a leading role in establishing the Group as an independent body after its spilt from the Physical Society. He attended all the early meetings of the AIC and was President from 1981 to 1985. Professor Hunt wrote over a hundred papers on colour vision, colour reproduction, and colour measurement, and two books. The *Reproduction of Colour* is now in its sixth edition and *Measuring Colour* is now in its fourth edition (co-authored with Michael Pointer). The one-day symposium *Colour in Health and Employment* in July brought together 10 speakers on colour vision deficiency and its assessment for an audience of optometrists, academics and industry experts. Our October event *Colour in Art: Pigments from the Ground Up!* featured illustrated talks and demonstrations from speakers David Dobson and Onya McCausland on their work engaged with the properties of pigments.

The Colour Group (GB)'s Turner medal for 2019 was awarded to Professor Sarah Street for her ex-

ceptional work on the history of British colour cinema. Professor Street gave the Turner lecture in February 2019 titled *The Art of Film Colour*. One Palmer Award, five W. D. Wright awards and one Gruppo del Colore (GdC) award were presented to enable early career researchers Alice Skelton, Miranda Nixon, Jie Yang, Simon Saryazdi, Jing Lin, Daniel Garside and Benjamin Evans to attend conferences to present their work. Awardees presented their research at the Colour Group (GB) Student Awards meeting in November.

The future plans of the Colour Group (GB) include pursuing its core aims of delivering meetings that cover a wide range of topics within different fields of colour science, art and design, continuing to provide travel grants and student poster awards, and maintaining a student grant scheme to provide financial support for students and young researchers to attend events facilitating their professional development.



Gaynor Pelham providing a tour of the National Gallery to celebrate International Colour Day 2019.



Michael Pointer (left) presented a tribute to Professor Robert W G Hunt, with Chairman Elza Tantcheva-Burdge (right), at the Colour Group Annual General Meeting.

// HUNGARY //

## The Hungarian National Colour Committee ICCPH

### REVIEW

The Hungarian National Colour Committee was founded in 1969. It has maintained its activities until today and has produced numerous reports and organised exhibitions and series of scientific lectures for the general public in the colour fields of vision, environmental design, fine arts, measurement, colour and pattern harmony.

Here was a great loss of the Hungarian National Colour Committee and also the colour community on the world, because Prof. Antal Nemcsics died in his 92nd year on July 12, 2019. We will always remember his scientific work, his paintings, his contribution to the AIC. He was the founder of the AIC Study Group on Environmental Colour Design.

Antal Nemcsics was artist, researcher, colour scientist, and also professor on the University of Technology Budapest. He was Chair of the Hungarian National Colour Committee during the period 1969-2015. He obtained the International Giorgione painting award (in Venice) and the International Award for Colour in Environmental Design (Stuttgart) and also Judd award (Busan). He is author of the Coloroid System, conceived on harmony thresholds. His book *Colour Dynamics. Environmental Colour Design* is used as a textbook in several universities in worldwide. He had closed to 150 colour design realizations for buildings and interior spaces, including the colour design for the Ferenc Liszt Airport, the Metropolitan Railway, and the Castle District in Budapest and also several churches in Hungary. Antal Nemcsics will be greatly missed by the international colour community.

Exhibition entitled PERSPECTIVES - homage á



Antal Nemcsics in front of one of his paintings, Budapest, 2012.  
Photo: Verena M. Schindler



Antal Nemcsics with the CADE award in his atelier, 2017. Photo: Ákos Nemcsics

László Miskei, Béla Tilless opened 15 February 2019 in headquarters of Hungarian Fine Arts Association. The exhibition is greeted by Márta Simonffy and opened by Ákos Nemcsics Ákos.

On 25 February 2019, with title of Coloured city by Attila Koppány, Exhibition was opened at the Óbuda University.



Attila Koppány in front of his paints.



Opening ceremony PERSPECTIVES exhibition.



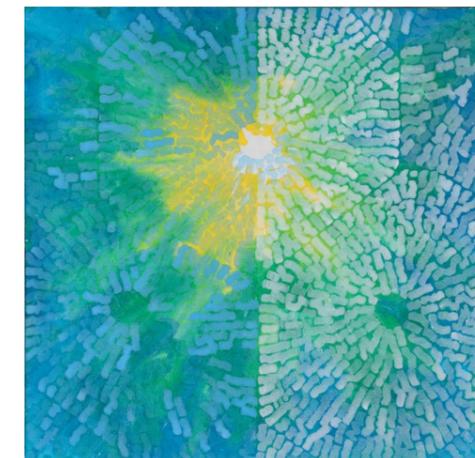
Antal Nemcsics: Memories I.; painting from PERSPECTIVES exhibition.



Antal Nemcsics: Memories II.; painting from PERSPECTIVES exhibition.

Coloured organism by Ákos Nemcsics, exhibition was opened on April 11, 2019, in the Gallery of Semmelweis University. The exhibition was opened by Attila Szabó vice rector and praised by Andrea Kárpáti professor of Visual Culture Department of Eötvös University.

Exhibition with the title of Synthesis was opened on October 12 2019 in the Arzezi Gallery. The exhibiting artists in alphabetical order István Ézsiás, Antal Kelle, Attila Koppán, András Mengyán, Antal Nemcsics +, Ákos Nemcsics, Géza Németh Géza, Zsigmond H. Serényi. Antal Nemcsics planned to attend the exhibition, but unfortunately, he could not make it. His exhibited paints were prepared directly for this occasion.



Ákos Nemcsics: Fragmentation from exhibition of Coloured organism.



Exhibition opening of Coloured organism.



// ITALY //

## Gruppo del Colore - Associazione Italiana Colore GdC - Color Group - Italian Color Association

The main event involving all members of the Gruppo del Colore - Associazione Italiana Colore is the annual Conference. The 2019 edition of the Conference took place at the Academy of Fine Arts in Macerata from 05 to 07 September in collaboration with the Associazione Italiana Colore and the Associação Portuguesa da Cor, Colour Group (GB), Colourspot (Swedish Colour Centre Foundation), Comité del Color (Sociedad Española de Óptica), Deutsche Farbwissenschaftliche Gesellschaft, and Uomen väriyhdistys (The Finnish colour association).

The day before the opening of the conference, at the Istituto Restauro Marche, in the suggestive setting of the village of Montecassiano, the seminar "Archeometry of color in pictorial restoration" was held.

The conference began with a series of tutorials on different topics related to colour with internationally renowned personalities, such as art historian Magnolia Scudieri, John Barbur (Professor of optics and visual sciences and Director of the Applied Vision Research Center at City University of London), and Tamara Lapucci (Test Manager at Clementoni spa). The oral presentations were accompanied by a poster section; the articles of the works presented were published in the open-access Conference proceedings after a peer revision.

On the first day of the conference, the ceremony of the fifth edition of the Color Award took place, which awarded Adolfo Guzzini, businessman and president of iGuzzini, who for years has been committed to spreading a new culture of light and training new professionals specialize in light design. Another important activity that involved our Asso-

ciation was the third edition of the Master in Color & Technology, which was characterized by the participation of students from Italy, the United States, Chile, Russia, Spain and France. The program was organized in three phases: Fundamentals, Project Works and Stage. The first phase consisted of lectures which gave students a basis of theory and technique, related to disciplines such as physics, optics, colorimetry, psychology and perception. The fundamentals provided all the basic knowledge that the students were therefore invited to integrate into their projects, which includes the five most common topics in the field of color: Communication, Fashion design, Interior design, Product design and Urban spaces. The students were therefore called to attend an internship that lasted at least 312 hours in a professional studio (studio, producer or other reality) to put into practice what they learned during their period in the classroom.

During 2019 the Association gave patronage to the "27th Color and Imaging Conference (CIC27)", which was held in Paris from 21 to 25 October, the "Spanish Color Conference" (XII Congreso Nacional del Color held in Linares since 23 to 27 September), the "Coloré" event at the EXPO of Piacenza and the "PoliEFUN - Architectural Coating. Materials, color and sustainability" workshop organized by the Department of Materials Chemistry and Chemical Engineering of the Politecnico di Milano. The Association gave also patronage to the workshop "Comfort and smart lighting management in the workplace" organized by our member Maurizio Rossi.



Image 1: The participants of the XV Color Conference at the Academy of Fine Arts of Macerata.



Image 2: Adolfo Guzzini, winner of the Premio Colore 2019, during the award ceremony.



Image 3: Some students of the Master in Color & Technology during a practical lesson.



// JAPAN //

## 日本色彩学会

CSAJ - Color Science Association of Japan

### THE 50TH ANNUAL MEETING 2019

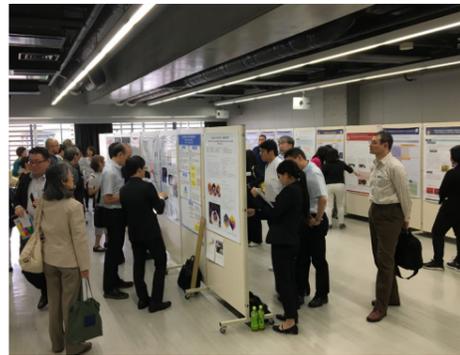
The 50th Annual Meeting of the Color Science Association of Japan (CSAJ) was held on 1-2 June at Tokyo Polytechnic University in Tokyo chaired by Dr. Yoshihiko Azuma. More than 260 participants attended and 73 contributed papers including 8 international session papers and 2 color design works were presented. Two special lectures "Create Tomorrow, Learn Future, and Connect the World by COLOR, KOUGEI Color Science and Art" by Dr. Ryuichiro Yoshie, the President of Tokyo Polytechnic University and "Relationship between Photography and Color" by Prof. Kisei Kobayashi at the Tokyo Polytechnic University, were held. The CSAJ Presentation Encouraging Prizes were given to two students: Suguru Tanaka (Chiba University) "Comparison of brightness perception of face by difference of skin color" and Sae Miyata (Doshisha Women's College of Liberal Arts) "Effects of light colour on naturalness of colour appearance of interior material". The The CSAJ Study Group Meeting 2019 was not held at the 50th Annual Meeting but at the Asia Color Conference (ACA) 2019 at Meijo University, Nagoya instead.



An oral session at the 50th Annual Meeting 2019.

### THE 5TH ASIA COLOR ASSOCIATION CONFERENCE (ACA 2019)

The 5th Asia Color Association Conference "ACA2019 Nagoya" was held on 29 November - 2 December at Meijo University in Nagoya under the theme "Color Communications". This first conference to be held in Japan was being co-sponsored by the CSAJ in cooperation with Aichi Prefectural Government and Nagoya Chamber of Commerce and Industry, organized by Mr. Teiji Tachibana and managed by the Steering Committee of ACA2019 Nagoya chaired by Dr. Mikiko Kawasumi. Around 140 abstracts from 11 countries were applied, and 263 participants, the largest number ever at an ACA conference, attended. The keynote speeches "Inside the Minds of Automotive Color Designers" by Mr. Scott Kanamaru, Toyota Motor Corporation and "Individual Colorimetry" by Prof. Dr. Hirohisa Yaguchi, Chiba University, were presented. Also 9 invited talks, 1 seminar series, 2 workshops, and some exciting exchange programs were held. ACA2020 will be held at Gadjah Mada University in Yogyakarta of Indonesia in October 2020.



Poster session at the 50th Annual Meeting 2019.

### AWARDS

11th CSAJ Paper Award: Shoji Sunaga, Kyoko Kido and Shigehito Katsura (Kyushu University) "A proposal of a color universal design method based on the viewpoint of dichromacy using categories of color name designation", Journal of the Color Science Association of Japan, 42 (5), 209-217, 2018.  
 21st CSAJ Research Encouraging Award: Shuhei Watanabe (Ricoh Institute of ICT) "Image Clarity Evaluation Method Considering Visual Characteristics", Journal of the Color Science Association of Japan, 42 (6), 255-264, 2018.  
 23rd CSAJ Award: Kazuo Jo, for his longtime contribution to the association and influential research on color recognition.

### PUBLICATIONS

The CSAJ published six issues of the Journal of the Color Science Association of Japan in 2019. Five original papers and three research notes were published.

### UPCOMING MEETINGS

The 51st Annual meeting of the CSAJ will be held on 27-28 June 2020 at Kyoto Institute of Technology. The Study Group meeting will be held on 12-13 December 2020 at Tokaigakuen University, Nagoya.

### LOCAL CHAPTERS

Three local chapters in the Kanto, Tokai and Kansai areas worked actively and organized several meetings throughout the year. CSAJ's newly elected executives started on 1st June 2019: Shin'ya Takahashi (President), Hiroyuki Shinoda (Vice President) and Yoshitsugu Manabe (Vice President) with 9 trustees. Currently, CSAJ has 1,158 members.



Seminar and workshop at ACA2019.



Banquet at ACA2019



// KOREA //

### 한국색채학회

KSCS - Korea Society of Color Studies

Established in 1988, the Korea Society of Color Studies (KSCS) joined the International Color Association (AIC) in 1995, and after leading the 2000 AIC Interim Meeting in Seoul, the organization successfully hosted the 13th AIC Congress in 2017 in Jeju Island, which is an official UNESCO World Heritage site. In the year 2019, KSCS has engaged in the following activities.

Regarding the Society's academic activities, KSCS published four journals, held two academic conferences, International Color Day (ICD) anniversary seminar. The KSCS' journals, which are registered in the National Research Foundation of Korea, were published on the last days of February, May, August and November as scheduled, and 29 papers in various fields such as color technology, design and education were published after a rigorous evaluation process.

KSCS also hosted academic conferences in which members gathered to discuss various topics, 43 papers were presented at the spring and autumn conferences. The spring academic conference was held at the Ewha Womans University with a theme "Color Name", on May 10, and there were lectures

titled "Wave of Nature" by Hanna Kim, the Senior Researcher of Noroo Paint, "Color and Historical Imagination" by Prof. Hangsik Shin at Hongik University. The autumn academic conference was held at Chungang University with a theme "Color Vision" on December 6, and Prof. of Incheon University, Hyejin Han presented a lecture on "Color and Face Perception". Additionally, Professor Seokhyun Lee of Cuungang University was elected as the 2020 President of KSCS at the 2019 KSCS general meeting.

Furthermore, the 17th Korea Color Awards which has contributed to enhancing the development of Korean color culture and expertise of the color industry were held this year and individuals, companies, institutions and local governments submitted many works in 8 sectors including urban environment, residential environment, architecture, interior, fashion and industrial product. 12 works were selected as grand prize winners including 'Ichoen Complex Inclusive Environmental Color Design' by SK Hynix as the prize of the minister of the Ministry of Trade, Industry and Energy, 'Woman Diver' by LIIE as the prize of the president of the Korea Institute of Design Promotion. Now



2019 ICD Celebratory Seminar.



We also celebrated International Color Day (ICD on March 21) on March 22, please see ICD report for details.

in its 12th year, the 2019 KSCS International Invitation Exhibition of Color Works was held with the theme of "We are Colors", gathering artists from Asia, Europe, and America. A total of 9 pieces were selected as award winners.



Award winner of 2019 KSCS International Invitation Exhibition of Color Works.



2019 KSCS International Invitation Exhibition of Color Works



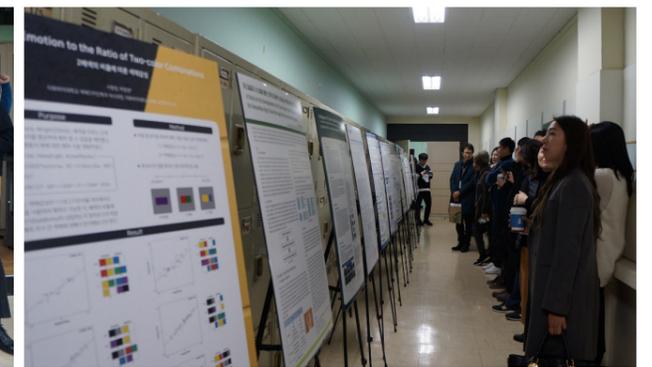
17th Korea Color Awards



2019 Spring Academic Conference.



2019 Autumn Academic Conference.



// THE NETHERLANDS //

## Stichting Kleurenvisie: Het Netherlands Platform voor Kleur

The Netherlands Platform for Color

Symposium on 28 June 2019, Tarkett at Waalwijk  
Colour in dementia and use of colour in education  
The number of people with dementia will increase explosively in the future to more than 75 million in 2030 as a result of an aging population. By 2050, the number of people with dementia will further increase to more than 131.5 million!

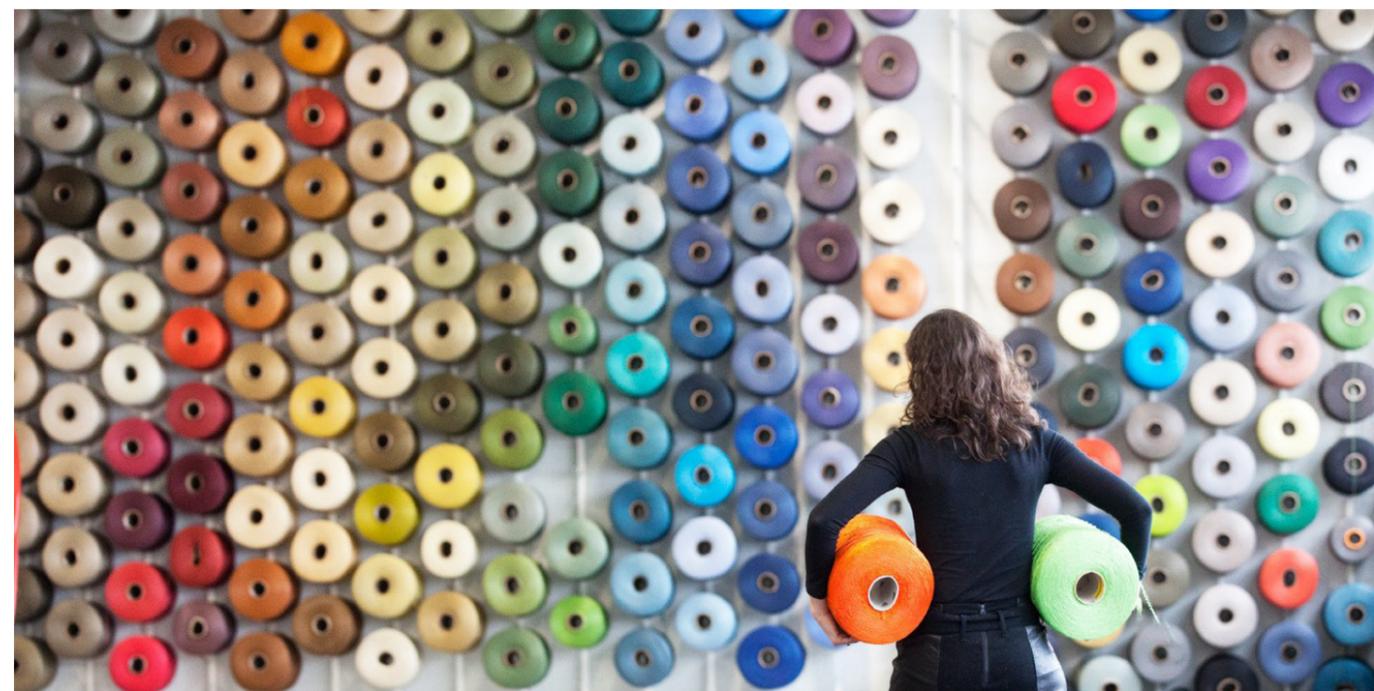
This was the reason to organize a symposium with attention to this subject which can be overwhelming, not only for the people who have it, but also for their carers and families. We were guests at the Tarkett headquarters. Tarkett, flooring manufacturer developed a virtual reality tool to help architects and designers to design living spaces for people with dementia. The VR-EP cutting edge immersive software help to improve the lives of people living

with dementia. During the talk of Dirk van Gestel surprisingly facts like easy recognizable objects, artworks are more effective as signage than color coded areas. With LRW difference of 30% between walls and floors older people can see their surroundings better. For height changes, such as stairs, this may require even 70%.

Good design for dementia is not about designing an attractive space but to create a reduction of anxiety and confusion by using enough contrast making it easier to navigate.

Participants all working in the field of color could all have a look through the VR glasses and it was very shocking to see the world to them consists mostly off shades of grey!!!

Yarns Tarkett



Regenboogbuurt\_Almere\_the Netherlands

Lecture by Etienne Trum on the influence of color and materials in learning environments. During the talk he discussed proposed color palettes for 5 age groups. Each of these palettes are suitable for the development of the visual skills of each target group, their emotional state and their need for stimulation and psychomotor development.

Coming in 2020 year subject to developments on the coronavirus.

11 June 2020, Symposium at museum Het Schip in Amsterdam, 15:00-18:00

The symposium will discuss the application of colour in current architecture and urban design. For building restorations, but also for new buildings.

After volume, size and material colour is the pre-eminent to increase recognisability in new residential areas. It seems as if Dutch urban planners nowadays forget colour as a valuable building element. Internationally, however, there are modern appealing construction projects that use a lot of colour. Keynote speaker is the architect Winfried Brenne about the use of colour by Bruno Taut, the restoration of his World Heritage districts in Berlin and Reform in Magdeburg.



// NORWAY //

## Forum Farge Norway

Forum Farge, the Norwegian Colour Association, was founded on the 10th of April 2013.

Board in 2019: President Mette Lorange. Members: Kine Angelo, Lisbeth Larsen, Kiyoshi Yamamoto, Tine Hegli, Rigmor Baraas, Heidi Pettersvold og Peter Nussbaum. Secretary has been Sarah Leszinski.

More information about Forum Farge can be found on [www.forumfarge.no](http://www.forumfarge.no) and <https://www.facebook.com/forumfarge/>

A new webside was designed in 2019 by graphic designer Anette Lorange

Forum Farge had 120 members by 01.01.2020

### ARRANGEMENTS

The annual conference Forum Farge 2019 Trondheim, 3 May 2019.

The title was "Colour as Material."

Arranged by NTNU/Faculty of Architecture and Design, The Light and Colour Centre and Akzo Nobel. Focus: building surfaces/colour for Architecture. 160 participants.

KeyNote speaker was Patrick Baty from UK: "Paint in a Nutshell". Book: The Anatomy of Colour. Other speakers were Per Nimér from Akzo Nobel, Svein Skipnes, Architect, Malersvennene as, Ingrid Grændsen/Agraff Architects, Arve Haugan, painter, Ulrich Hundhausen from Norwegian Wood Engineering Institute. Marte O. Valderaune represented the Cultural Heritage Management Office and Jean-Baptiste Thomas The Colour Laboratory at Gjøvik.

### Colour Talk 1

International Colour Day

Dr. Alexandra Loske, presented her new book, "Color. A Visual History " in her talk "Pigments of the Imagination – A Visual History of Color" at Oslo Academy of the Arts. Dr. Alexandra Loske is an Art historian at University of Sussex. 110 people attended the event.

<http://www.sussex.ac.uk/profiles/107019>

### Colour Talk 2

Lecture by Bent Erik Myrvoll: "Lime-based techniques, fresco, stucco lustro". 28 October 2019 at The University in Bergen/Faculty of Art, music and design.

### Some examples of members research activities

NTNU The Norwegian Colour and Visual Computing Laboratory (<http://www.colourlab.no>) is a research group within Department of Computer Science at the Norwegian University of Science and Technology (NTNU) in Gjøvik. Focus: «Colour imaging and visual computing»

UIB, Faculty of art, music and design: Professor Mette Lorange, has been engaged in research on Colour for Nursing homes/dementia/Red Cross Nursing Home. Projects execution in 2019-2020.

NTNU, Faculty of Architecture and Design: Associate professor Kine Angelo. Research: Colour and material gestalt strategies for the production of harmonious integrations in both restoration and the production of new buildings, with particular focus on maintaining regional, cultural and district identities.

USN. Department of Optometry, Radiography and Lighting Design

Campus Kongsberg: Professor Rigmor Baraas is a member of the director committee of International Colour Vision Society, <https://www.icvs.info>, and the Optical Society's Technical Group on Colour.

### Planned Activities Autumn 2020

"Color and Visual Computing Symposium 2020 (CVCS 2020)". Gjøvik 16.-17. September

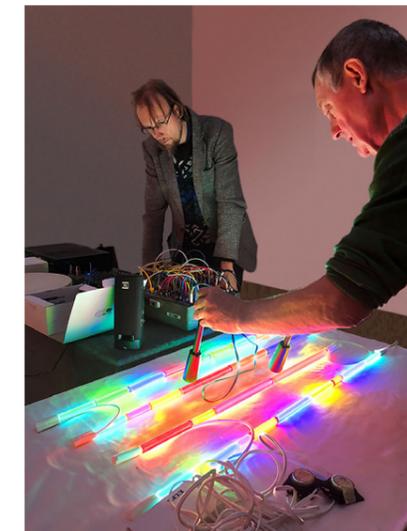
«Colour imaging and visual computing». One Keynote speaker is Dr. Giorgio Trunpy, (Institute of filmstudies, University of Zurich). More: [www.cvcs.no](http://www.cvcs.no)

Colour talks/performances. Dates to come.

- Per Hess and Risto Holopainen, artist: "Neonmeditations". Performance, light and sound. Bergen.
- Katrin Trautwein, ktcolor. Switzerland: "Colour and Space". Oslo.
- Professor Jack Werner. "Colour vision in elderly". Kongsberg.
- Kine Angelo og Alex Booker: Fra own research. Oslo.



Teaser Farger som materiale



Neonmed-forside



Colour Talk

// PORTUGAL //

## Associação Portuguesa da Cor APCOR - Portuguese Colour Association

In 2019 we focused on maintaining and establishing collaborations with other entities, researchers and people who share the interest on Colour as a research subject. We also promoted moments for science communication thanks to our members collaboration. See more at <https://pt-pt.facebook.com/apcor.org/>

### PUBLICATIONS

Resulting from the Poetry Reading Encounter (21st March), we compiled unpublished works in a publication entitled "POETRY COLOUR LOVE" (translated), which include the participations of APCor members, among other authors. It was done by collaboration between APCor and P'Arte / CEC / Faculty of Letters - University of Lisbon, and inaugurates a series of publications of this research group.

Pinheiro, Ana Paula & Duarte, Ana. 2019. "Chromatic Instant #1: Summertime (2019), in Série Instantes Cromáticos/ Chromatic Instants", in Pitagoras", in Pitagoras Group. Archinews #48, Setembro 2019.

Durão, Maria João. 2019. "Chromatic Instant #2: Flying 7 (2001), in Série Instantes Cromáticos/ Chromatic Instants", in Cristina", in Cristina Jorge de Carvalho. Archinews #49, Dezembro 2019.

### SCIENCE COMMUNICATIONS

The "Guided tour to the National Tiles Museum", by the expert and APCor member Carla Lobo (21st-22nd Sept) left ecstatic the 36 participants who asked for an event's repetition. This was a participation from APCor to the "Open House Lisboa 2019".

APCOR, alongside with Architecture Triennial, Lisbon, 2019 "The Poetics of Reason", and Frame Colectivo (atelier of architecture, urbanism and arts) organized the Workshop: "Colours and Tiles: Patterns, Harmonies, and other Illusions" at Culturgest - Fundação CGD (9th Nov.) Joana Perry and Verónica Conte, instructors and APCor members, challenged parents and children (15 participants) to play with their visual perception.

### CONFERENCES

Once more we collaborate in the XV Conferenza del Colore in Macerata, Italy 5th-7th Sep, a joined Meeting with the Gruppo del Colore - Associazione Italiana Colore and other associations.

"POESIA COR AMOR", in P'ARTE: recolhas poéticas #1, 2019. (ed.) Verónica Conte. Lisboa: P'Arte/ CEC/ Faculdade de Letras da Universidade de Lisboa (ISSN 2184-6480).

APCOR with The ArchiNews magazine invites the readers to temporarily shift the attention away from the reading to immerse their eyes in colour, through a series of records named - *Chromatic Instants* - made by collaborators and associates. The works of Ana Paula Pinheiro & Ana Duarte, and Maria João Durão were already published; we have more on the way.



Publication, P'arte recolhas poéticas

### APCOR MEMBERS

The Portuguese Colour Association continued to be represented by its members at the main forums of colour discussion throughout the world: Ana Paula Pinheiro, Carla Lobo, Carlos Alho, Cristina Caramelo Gomes, João Pernão, Margarida Gamito, Rui Barreiros Duarte, Vanda Matos, Verónica Conte and Zélia Simões are APCor members who disseminated their research, with participations in the following international congresses:

"I International Congress "Colonial and Postcolonial Landscapes: Architecture, Cities, Infrastructures", Lisbon, 16th-18th Jan; "Industry 4.0 Academia SMART AND SUSTAINABLE MANUFACTURING (S2M)", Manchester, 11th April; "International Evaluation of Foundation for Science and Technology (FCT) to Research Centre for Architecture, Urbanism and Design" Lisbon, 3rd-24th April; "World Heritage and Legacy XVII International Forum: Culture, Creativity, Contamination", Naples-Capri, 6th-8th Jun; "Textile Design Conference: D\_TEX 2019 Textiles, Identity and Innovation" Lisbon, 19th-21st Jun; "4th International Conference on Preservation, Maintenance and Rehabilitation of Historic Buildings and Structures" Guimarães, 17th-19th Jul; "First Russian Congress on Color", Smolensk, 18th-20th Sep; 5th International Multidisciplinary Congress PHI 2019: Intelligence, Creativity and Fantasy" 7th-9th Oct, Paris; "AIC 2019 Midterm Meeting Color and Landscape", Buenos Aires, 14th-17th Oct.

We also draw attention to three publications by João Pernão, Rui Barreiros Duarte and Verónica Conte:

Garcia-Fernandez, J., Medeiros, L., and Pernão, J.: Representation of Synthetic Shadows on 3d Digital Models for the Volumetric Interpretation on Concave-Convex Archaeological Artifacts, Int. Arch. Photogramm. Remote Sens. Spatial Inf. Sci., XLII-2/W9, 355-359, <https://doi.org/10.5194/isprs-archives-XLII-2-W9-355-2019>, 2019.

Duarte, R., (2019). A Iluminação da Cidade Histórica. In: J., Jorge, C., Ferreira, ed. 2019. Os

Caminhos da Noite - topografias e topologias da cidade nocturna. Casal de Cambra: Caleidoscópio, pp.133-143. ISBN: 978-989-658-584-6.

Conte, V. 2019. "A Cor em Acção". Lisboa: By the Book. At last but not least, the painter Ana Pais Oliveira, this year's 1st prize winner at the "XLIX Concurso Internacional de Pintura Homenaje a Rafael Zabaleta", Quesada, Jaén, Espanha, also had a solo exhibition "Para morar devagar", DaVinci Art Gallery, Porto. Natacha Antão together with Carlos Corais exhibit "acaso e caos", at Riscotudo, Faculty of Architecture, University of Porto.



Carla Lobo at National Tiles Museum



Participants on the workshop "Colours and Tiles"

// SLOVENIA //

## Slovenskemu združenju za barve

SSC - Slovenian Society for Colours

In 2019, members of the Slovenian Society for Colours took part in several research projects involving colour and colorants.

There is a growing interest in the market for intelligent textiles, which includes chromic textiles. Chromic materials are defined as materials that undergo reversible colour change triggered by external stimuli. Photochromic textiles, that are sensitive to UV light have been successfully created by microencapsulated photochromic dye (Itofinish UV blue, Magna Colours Ltd, UK) with and without the addition of optical brightener (Ultraphor CA, BASF, Germany) of different concentrations, applied

to cotton fabric using the pad-dry-cure process. The results of the research showed that the addition of optical brightener into the padding bath has no significant effect on physical properties of coated cotton fabric, such as mass per surface area, stiffness, breaking force and elongation and air permeability, but its influence was more pronounced in the photocolouration and photostability of coated fabric. The use of an

optical brightener reduces the photocolouration of the coated fabric and increases the photostability of the coated fabric after the sample has been exposed to a Xenotest apparatus for more than 12 hours (Authors: Mateja Kert, Vida Krkoč, Marija Gorjanc).

In December 2019, Barbara Blaznik (figure 2) had a successful defence of a doctoral dissertation Analysis of factors influencing photodegradation of ink jet prints at the University of Ljubljana, Faculty of Natural Sciences and Engineering, under the mentorship of associate professor dr. Sabina Bračko and co-mentorship of associate professor dr. Franci Kovač.



Figure 2: Barbara Blaznik, Ph.D.

The aim of the doctoral dissertation was a systematic analysis of the complex process of degradation of inkjet prints under medium-wave UV radiation, inert atmosphere and an atmosphere of oxygen. A systematic analysis of the printing ink and identification of components involved in the process of degradation in the solution and on the print was performed. The analytic study enabled thorough analysis of the degradation of individual components of prints that represents the interaction of many internal as well as external factors (figure 3).

The influence of basic colour parameters on the short-time colour memory was studied. The results showed that colour is not stored in our memories correctly and that it loses its basic parameters after 10 s. As the time delay increases, the accuracy of

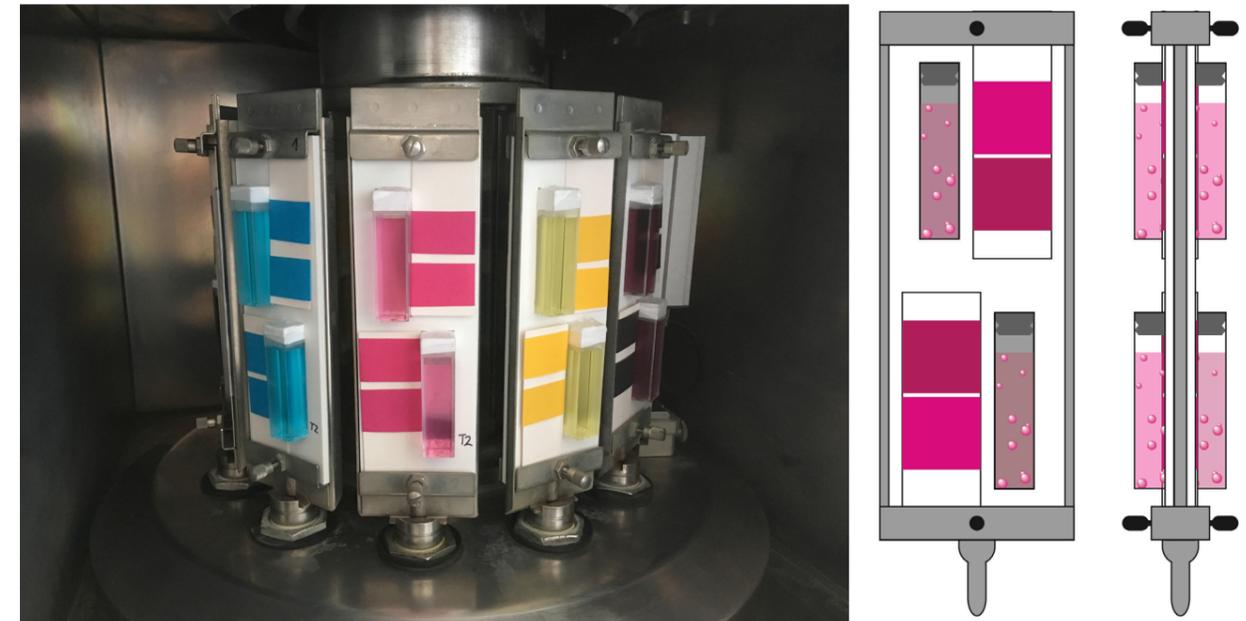


Figure 3: Inkjet ink preparation for analysis of degradation in the solution and on the print.

the colour impression in our memory diminishes (Car, Bračko, Tekstilec, 2019, 62(4), 232-241). An interesting experiment involving long-term colour memory was performed by the students of the Graphic and interactive communication, University of Ljubljana, Faculty of Natural Sciences and Engineering. The results of recalling the colour cyan are shown in Figure 4.

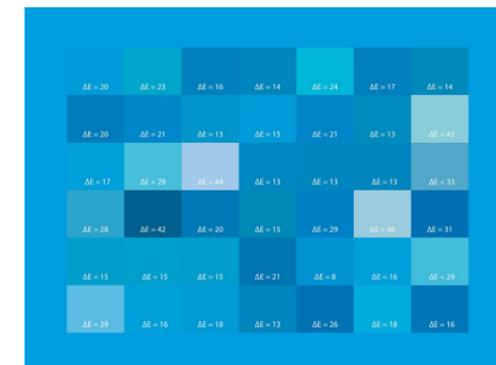


Figure 4: The colour cyan as recalled by different observers.



Figure 1: Coated cotton fabric after exposure to UV light with (a) and without (b) the addition of optical brightening agent.



Comité del Color  
Sociedad Española de Óptica

// SPAIN //

## Comité del Color Sociedad Española de Óptica

CEC - Color Committee Spanish Optical Society

In September 2019 the Comité del Color organized the XII Congreso Nacional del Color, one of its main activities, which took place in Linares (Jaen, Spain). Additionally, the committee maintained its customary activities participating in different events around color (conferences, workshops, courses, seminars and outreach activities) and preparing the upcoming events for 2020.

### EVENTS

The XII Congreso Nacional del Color was hosted in Linares, a beautiful city in Southern Spain, from 25th-29th of September 2019. This conference, where we meet periodically our Spanish colleagues, is the most important event organized by our committee and is celebrated every three years. This edition was organized by Prof. Dr. Ruperto Bermejo Román and his team from the University of Jaen, and chaired by our president Juan L. Nieves (University of Granada). Renowned scientists and professionals working in the field of color participated as plenary speakers with the following talks: Javier Romero (University of Granada) "Chromatic aspects of the optical and computational analysis of paintings", Jan Morovic (HP Inc.) "Color continuity along the journey from ideas to objects" and Gemma Contreras (Instituto Valenciano de Conservación

y restauración de Bienes Culturales) "The eardrum of the cover of the apostles. Arciprestal church of Santa Maria the Major of Morella. Virtual 3D replica of its original gothic polychrome". Moreover, numerous oral and poster presentations were presented in the following sessions: 1-Science, technology and perception of color, 2-Color in the industry and technology and applications of multispectral imaging, 3-Color in art and architecture, 4-Color in education, and 5-Color in food. Laura Rey, PhD student, received the SPIE Student Prize for the best contribution (The International Society for Optics and Photonics). The Young Area Committee of the Spanish Optical Society celebrated a Scientific Café in the framework of this congress with the participation of Gemma Contreras and Greta García from the Institut Valencià de Conservació, Restauració i Investigació (IVCR+i).



Laura Rey giving her talk in the XII Congreso Nacional del Color in Jaen (Spain).

Once more, the committee supported many other activities such as training courses organized by the University of Seville "Color and Applied Colorimetry" and "Colorimetry in Wine" and master's courses about color organized by the University of Granada "Master Erasmus+" "Colour in Science and Industry (COSI) and by the University of Alicante "Master in Color Technology for the Automotive Sector (CoITAS)". Additionally, other conferences, workshops and seminars were organized along 2019 about different

Welcome session of the XII Congreso Nacional del Color in Jaen (Spain)



aspects of color: color in food, color in materials, color appearance, color of light, color vision, color in biomedicine..., with the support of several members of our committee (Consejo Superior de Investigaciones Científicas, University of Valencia, and University of Alicante, Universitat Politècnica de Catalunya). It is also worth noting the activities organized in the framework of the International Day of Women and Girls in Science (February 2019).

The Committee member Francisco J. Burgos was given an Extraordinary Doctorate Award of the Technical University of Catalonia for his PhD entitled "Gonio-Hyperspectral Imaging System based on Light-Emitting Diodes for the Analysis of Automotive Coatings". As scientific outreach activities we would like to highlight the article "Why is the rainbow curved?" published in the national newspaper El País, authored by Dolores de Fez.

### RESEARCH HIGHLIGHTS

In the research section we would like to highlight several biomedical applications of color carried out by members of the committee. We would like to draw attention to projects launched by the VISPEC group (VISual optics and SPECTral Imaging Group) of the Center for Sensors, Instruments and Systems Development (CD6) of the Technical University (UPC), in which color and multispectral images taken in the visible and infrared ranges have been successfully used as a means of improving diagnosis of skin cancer lesions and of retinal diseases. Results of these projects were presented in the European Conferences on Biomedical Optics (Munich, June 2019) and the Color Imaging Conference (Paris, October 2019).

In January 2020, our committee will welcome its new executive board (President: Meritxell Vilaseca (Technical University of Catalonia), Vice-president: Esther Perales (University of Alicante), Secretary: Luis Gómez (University of Granada)). Past president Juan L. Nieves would like to thank the support of all AIC community and, especially, of the members of the Comité del Color, and welcomes the new board.



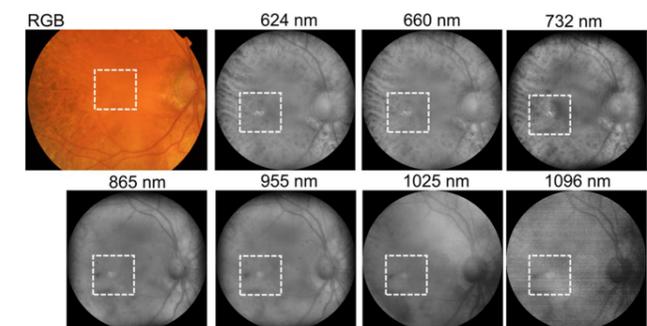
Members of the committee at the European Conferences on Biomedical Optics.



Participants of the XII Congreso Nacional del Color in Jaen (Spain).



Francisco J. Burgos receiving the Extraordinary Doctorate Award of the UPC.



Color and spectral retinal images taken in the visible and near infrared showing a lesion.



// SWEDEN //

## Svenskt Färgcentrum

SSF - Swedish Colour Centre Foundation

### PRISAD FÄRG/AWARDED COLOUR 2020

During 2019 we have announced Awarded Colour 2020 with the theme “Colour – Form – Future”,



The winners of Prasad Färg 2020 in the Stockholm Furniture & Light Fair.

Colour enriches form. How will form be coloured in the future? We luckily got a lot of interesting and high-quality entries and the jury met in December to select the three winners. The prize ceremony was held at the Stockholm Furniture Light Fair in February 2020. The winners were: First prize: Asta Westermark Florestedt with “Let’s talk Colour!”. Second prize: John Wattström with “Do not go gentle into that good night”. Third prize: Frida Navratil with “Colour for nature”.

### MEMBER’S MEETINGS

We have had three different lectures about the renovation of the National Museum of Stockholm from different colour perspectives. In this museum you can experience art, applied arts and design from the 16th Century until the present day. Nationalmuseum opened in a new light in October 2018. Stüler’s building dating back to the 1860s had undergone a wide-ranging renovation and refurbishment and been transformed from Stockholm’s rather dark Nationalmuseum into a world-class building bathed in light. The renovation was carried out by the National Property Board Sweden and took just over four years.

We started in November 2018 with a talk by Elisabet Jermsten, cultural heritage specialist from the National Property Board Sweden. She focused on the rooms where the original colour schemes were recreated.

In January we had a guided tour at the National Museum, and we were able to experience the different rooms/galleries with their specially selected colours, selected to enhance both paintings and art objects.

In February we could listen to a talk by Lars Sandberg, project manager for the painting contract at National Museum. He highlighted which paint materials were chosen and why. How did the practical painting work in this special reconstruction and consideration of the cultural-historical values? The golden roof rosettes that can be seen in the ceiling on the picture hide a sprinkler nozzle and a supply air diffuser in the middle of the bow.

In March we celebration International Colour Day.

In April we visited the exhibition “British – ever so Nordic” at Nordiska museet which is Sweden’s largest museum of cultural history. This exhibition was about Nordic fashion and lifestyle with influences from Britain.

In May a guided tour at the Strindberg Museum was arranged. The Swedish author August Strindberg (1849 1912) spent the last four years of his life in a building called The Blue Tower. The reconstructed apartment, consisting of three rooms, and his library of about 3,000 works are today the core of the Strindberg Museum.



National Museum of Stockholm Member’s meeting January and February.

In September Per Nimér gave an interesting trend presentation titled “Colour Futures 2020, by Akzo Nobel”.

In October we could experience Konserthuset Stockholm the Home to the Royal Stockholm Philharmonic Orchestra, the blue concert hall at Hötorget which is one of Stockholm’s most recognisable buildings. Konserthuset Stockholm was constructed between 1923 and 1926 and the architect was Ivar Tengbom. The building is one of Stockholm’s foremost examples of neoclassicism. Once a year, ever since 1926, the venue host the Nobel Prize Award Ceremony, December 10. Pic 3.

In November our annual meeting took place and we could also listen to a talk about “Swedish Research Project on Perceptual Metrics for Lighting Design” by Johanna Enger, Lecturer Lighting Design. The aim of the project is to develop basic definitions and concepts for perceived colour and light quality.



Konserthuset, member’s meeting in October.

// SWITZERLAND //

## pro/colore

Schweizerische Vereinigung für die Farbe

The pro/colore board warmly thanks the Association's 183 members (individual as well as patrons, firms, and institutions) for their long-term support, participation, and enthusiasm. In order to promote colour in Switzerland, Marius Guirard designed an advertisement poster and activated an Instagram profile. Also in 2019, pro/colore organized a total of six colour events.

### EVENTS 2019

The 28th pro/colore General Assembly was held on 1 March at Lascaux Colours & Restauro in Brüttsellen ZH. Board members Ralf Studer and Ulrich Bachmann were elected to assume the co-presidency, a position that had been vacant since 2015. Brigitte Pfister, Patrizia Kilburger, and Marius Guirard were re-elected as board members. It was also decided that Tanja Jacobsohn will support the board members as a collaborator. Afterwards Lascaux Colours & Restauro's owner Barbara Diethelm guided the participants through the production process, control, and fill facilities. She showed the fine pigments and also the indoor sustainable purification plant for cleaning water without using any chemicals. The owner also gave a talk about their products' applications in architecture, interior design, and artworks. Workshop leader Matthias Bülle introduced participants to the Lascaux Crystal colours, which stand out for their beautifully intense iridescent effects.



Visit to the colour and paint firm Lascaux Colours & Restauro. Photo: Marius Guirard.

On 12 April participants visited the Atelier Marco Ganz in Zurich. Artist, material experimenter, technology 'tinkerer', and specialist of colour systems Marco Ganz explained his approach, which is aimed to trigger an immediate and direct experience of colour in the spectator/user. Harmonious and disharmonious colour relationships can be observed in his artworks, e.g., Paintbox Deluxe (2009), Color Beauty Case (2012), Cibachrome (2015), and Colour Therapy (2017).

A two-day trip to the Romandy featuring the theme of colour and architecture took place on 24 and 25 May. During the first day participants discovered Chavannes-près-Renens (Canton of Vaud), where they visited the studio of artist and colour designer Claude Augsburger. The range of his work includes artworks, colour design for architecture, art for public space, and reverse glass painting. Afterwards participants had the opportunity to experience one of his completed architectural colour design projects in Lausanne's Rôtillon district.

On the second day architect Jean-Christophe Dunant welcomed the participants to the ancient mill of Le Vieux Moulin in Epesses. He recently restored the building applying the colour concept by Italian artist and architect Alberto Sartoris (1901-1998), who converted the mill to a modern club house for artists in 1933-35. In 2015, the building was listed as a historic monument. The trip ended with a visit to Le Corbusier's Villa Le Lac in Corseaux, which is located at the shore of Lake Geneva. Patrick Moser, Conservator at the Fondation Le Corbusier, explained the villa's history, architectural design, and colours. In the interior, the exhibition Colours and Correspondances displayed

monochrome paintings by Florence Cosnefroy, with extracts of letters written by Le Corbusier.

On 12 September, the focus was on colour in interior architecture and design for office space. In a slideshow presentation, Regina Jenny, firm bene, and Nicole Fry and Thomas Hohl of colour design hohl & fry described how the design of work space has changed over time. They pointed out how new demands and challenges have emerged in the digital era, particularly with respect to efficiency, health, and social interaction. A sample project was presented to show the impact of colour and material on the design of a work place.

On 4 October, participants had the chance to experience The Lichtspiel / cinémathèque Berne, one of the best places to visit concerning colour in film. It was founded in 2000 to collect and preserve anything related to the production and reproduction of moving images. Located in the former knitware factory Ryff, participants listened to an excellent and inspiring presentation by film scholar and conservator Prof. Dr. Barbara Flückiger in which she outlined the history of film colour technology and aesthetics and also presented her new research project on the development of a software for comparing the colours of films from different decades. After a demonstration of historic cinema projectors, different techniques for applying colours were portrayed.



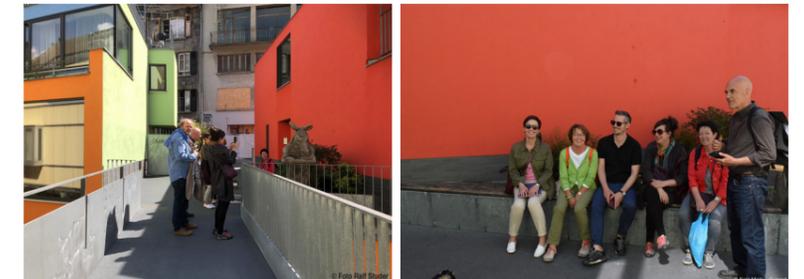
Jean-Christophe Dunant explains his renovation of Alberto Sartoris' Le Vieux Moulin (two left). Patrick Moser guides the participants through Le Corbusier's Villa Le Lac (two right). Photo: Ralf Studer



Barbara Flückiger talks about colour and film (centre). Colour-light show by vogtpartner (right). Photo: Ralf Studer, Marius Guirard

Held on 22 November, the last event of the year addressed colour in professional light design. Principal of vogtpartner Christian Vogt gave an interesting and informative presentation about the firm's approach and projects. Afterwards his collaborators produced an amazing colour-light show in an industrial hall that was built in 1929 for Sulzer industries in Winterthur and was formerly used for the production of diesel motors, and today is registered as a historic monument. Filled with the sound of cello music, the huge space changed from a mysterious dark void into a colourful, lively, and expanding universe.

Recently pro/colore has become one of the various associations endorsing the renowned scholarly journal Color Research and Application.



Claude Augsburger (far left) shows his recent architectural colour design. Photo: Ralf Studer, Marius Guirard



// TAIWAN //

### 中華色彩學會

CAT - Color Association of Taiwan

#### REVIEW

2019 was a very fulfilling year to the members of Color Association of Taiwan (CAT). In this year, we continued to collaborate with Taiwan government and industrial partners to promote the professional assessment system for Color Planner and Color Engineer, called "iPAS". This official certification for recognizing color profession has been successfully issued 4 times, twice a year. The color experts in CAT have been continuously involved in providing training courses and developing certification exams in the forms of written or operating.

CAT held an annual member gathering and a conference addressing the study field of Color and Health, entitled CAT2019: Color &Health, held at Tatung University, Taipei. After a very rigorous election process, we are honored to announce that Professor Lee, Tien-Rein has been elected as a CAT Fellow.

CAT also celebrated the International Color Day on 21 March, and participated AIC 2019 conference in Buenos Aries, Argentina. What a fruitful year!



Promoting events was held in the Taipei city



AIC 2019 conference in Buenos Aries, Argentina



Four promoting events was held in the Taipei, Taichung and Yunlin city.



Professor Lee, Tien-Rein has been elected as a CAT Fellow



Promoting events was held in the Taichung city



// THAILAND //

## Color Society of Thailand CST

### REVIEW

The Color Group of Thailand has been reformed to Color Society of Thailand in 2019 and the society became a member of AIC representing Thailand. Sometime in that year a discussion amongst Dr. Kitiroj, Dr. Boonchai, Dr. Phuangsuwan, Dr. Katemake, Dr. Uravis and Prof. Ikeda was held at Thanyaburi at the Color Research Center CRC of Rajamangala University of Technology Thanyaburi RMUTT about the reformation.

It became necessary as the President of the Color Group of Thailand, Dr. Aran Hansuebsai of Chulalongkorn University CU, to ask Dr. Pichayada Katemake of the same university to reorganize the group as he is retiring from CU soon. Then we selected Associate Prof. Dr. Katemake as the new President of CST and Assistant Prof. Dr. Chanprapha Phuangsuwan, Director of CRC, as the Secretary. It was decided that the CST to hold an annual conference and CST seminar on color measurement in 2020.



The handover of the ACA flag from Mr. Tachibana and Dr. Kawasumi (5th ACA representatives) to Prof. Adi and Prof. Wahyu (6th ACA representatives)

It is a good timing to restart the new society in Thailand as the education and research are becoming active these years as one consequence of the Asia Color Association (ACA) which started in 2013 to encourage young scientists in color science and design. Last year the 5th conference of ACA was held at Meijo University at Nagoya, Japan under leadership of Assoc. Prof. Dr. Mikiko Kawasumi, and over 27 Thai attended to present papers including one invited speaker and 17 students from four universities.

It is expected more people will join at the 6th ACA to be held at Gajamada University, Indonesia, being organized by Prof. Adi. The ACA flag was passed on to Prof. Adi by Mr. Tachibana, the Chairman of the Executive Board of Meijo University and Dr. Kawasumi. Many regions in the Southeast Asia color science is still under developing and we hope these places will become active AIC members and contribute to AIC in the near future. We are already inviting the AIC2023 to Chiang Rai, the most northern city in Thailand.

The CST office is placed at CRC of Rajmangala University of Technology Thanyaburi with e-mail: colorsocietythailand@gmail.com Ms Pappim, the technical assistant to Dr. Phuangsuwan will respond to your inquiries.



Thai attendants at the 5th ACA



Members in the CST discussion (left to right): Dr. Kitiroj, CRC, Dr. Boonchai, STOU, Dr. Phuangsuwan, CRC, Dr. Katemake, CU, Dr. Uravis, CRC and Prof. Ikeda, CRC.



Prof. Ikeda, a consultant to CST and former AIC President (left) and Prof. Adi (right)



President, Dr. Katemake (left) and Secretary, Dr. Phuangsuwan (right) of CST



// UNITED STATES //

## Inter-Society Color Council ISCC

### MEETINGS

The 2019 ISCC Annual Meeting was held as part of a joint meeting with the TAGA (Technical Association of the Graphic Arts) Annual Conference from March 17-20 in Minneapolis, Minnesota. The venue was the Millennium Hotel. The conference began with an afternoon of inspiring and innovative presentations from four keynote speakers:

- Jeff Gomez, "Immersive Media: The New Language of Enchantment"
- Dan Dennehy, "Imaging Cultural Heritage in 3D"
- Fritz Horstman, "Interacting with Color: The Art and Teaching of Josef Albers"
- Daniel Dejan, "This Is Your Brain On Paper"

The first technical sessions on March 18 covered print process, including such topics as measurement of lighting, recyclability of print, UV-LED curing, narrow web, and on-demand for corrugated. There were two sessions on color-related topics. First, TAGA speakers presented on a new color vision test, using Kubelka-Munk for fiber blends and the effect

of color temperature on young and older viewers. Second, ISCC speakers presented on digital textile printing: managing color, optimal ink selection, and on-demand printing applications. Afternoon



Fritz Horstman's keynote presentation at the 2019 joint ISCC/TAGA Conference

ISCC speakers explored color literacy in two unique presentations. John Seymour and Maggie Maggio enacted the challenges of communicating color between creative and technical teams, and Luanne Stovall and Maggie Maggio talked about their work on the 21st Century Color Literacy Project. The final sessions on March 18 were on Expanded Color Gamut (ECG), including optimal test charts and looking at color accuracy in expanded gamut process.

Also, Fritz Horstman gave a pre-conference workshop focused on the color exercises of artist and educator, Joseph Albers. Albers' technique with students was not to teach them about how colors interact, but rather to "lead students to their own discovery of color."

### COLOR LITERACY PROJECT

The recently approved ISCC Colour Literacy Project has expanded into an international joint project in collaboration with the AIC SGCE. For more information see the study group report.

### PUBLICATIONS

The ISCC News was published quarterly in 2019. Dr. Michael Brill's Hue Angle columns featured such fascinating topics as "The Mathematics of Flower Arrangement", "Reflection on Dark Spectrum, Part II", a dialog with Carl Jennings and "Black to the Future Redux". Carl Jennings from the University of Hawai'i continued his column entitled "Refractions" to pique our curiosity on such color topics as "The Dark Spectrum, Part II: Bands of Color". We also enjoy an entry from Ellen Carter who shares "In This Issue" for Color Research and Application. Another quarterly entry is "A Blast from the Past" written by Paula J. Alessi, which reminisces on valuable historic content from ISCC newsletters that were published 50 years ago. The winter issue was a special Part Two completing a summary of the very successful 2018 Joint ISCC-AIC Munsell Centennial Color Symposium. ISCC is pleased to offer our entire newsletter archive online at <https://iscc.org/Newsletter> from the years 1933-2018.

### WEBINARS

ISCC's very successful online seminar series continued in 2019. It began in February with a webinar given by Kristen Dettoni, the founder of Design Pool. In her presentation entitled "Print on Demand – Exploring the Market Opportunities" Kristen shared her experience and expertise regarding various "print on demand" solutions that are commercially available to professional or casual designers. The second webinar was given on International Color Day (March 21, 2019) by Mark Webster from the University of Nevada who discussed "Adaptation and Color". On July 9, 2019, the third webinar was given by Fritz Horstman, Artist Residency and Education Coordinator from the Josef and Anni Albers Foundation, who reprised his keynote presentation from the ISCC/TAGA Joint Conference. The fourth webinar was given on September 24, 2019 by Jodi Baker and Ann Laidlaw. The title of their presentation was "Introduction to CIELAB". The presentation included basic information about how we describe colors with numbers, and how we describe color difference between a sample color and a standard color. The October 22 webinar, "Color Management in the Graphic Arts", was given by Tony Stanton from Carnegie Mellon University. The webinar described the color characteristics of textiles, paints, and theatrical lighting, for example, all rely on precise management of color to maintain

consistency and predictability. Finally, the sixth webinar given on November 19 by Roland Connelly of the RoLyn Group was called "Comparison of LED Lighting Adopted by Retailers to Typical LED Spectra Adopted by the CIE". Roland analyzed current methods such as CRI and CCT as well as newer methods like TM30-18 to illustrate the variability among LED performance. All webinars were very successful attracting attendees from academia and industry, as well as across the United States, Europe, and Asia. These webinars are free and open to anyone around the world.



Luanne Stovall (left) and Maggie Maggio (right) conducting a meeting for the Color Literacy Project.

### AWARDS

The Godlove Award, for long-term outstanding achievements in the field of color was presented to Dr. Danny Rich at 2019 ISCC/TAGA Joint Conference. Among his many contributions, it is worthy to note that Dr. Rich developed the first uniform color difference space. This work was in conjunction with Dr. Ernst Rohner and was later adopted by DIN and became the German DIN 99 color space and color difference formula. His work on verifying the performance of Color-Measuring Instruments was very influential in the field. His activity with ASTM, especially his work on precision and accuracy evaluation making use of multivariate statistics, has helped all color practitioners. Dissemination of color knowledge through education has been so important to Dr. Rich, especially in the printing industry where he has produced publications answering questions relating to color science in various media formats. ISCC was proud to present its most prestigious 2019 Godlove Award to Dr. Danny Rich!



Dr. Danny Rich (left) receiving Godlove Award from Frank O'Donnell (right) ISCC Treasurer

Fun activities at the pre-conference ISCC Albers Workshop



of color temperature on young and older viewers. Second, ISCC speakers presented on digital textile printing: managing color, optimal ink selection, and on-demand printing applications. Afternoon



// UNITED STATES //

### Color Marketing Group CMG

#### BACKGROUND

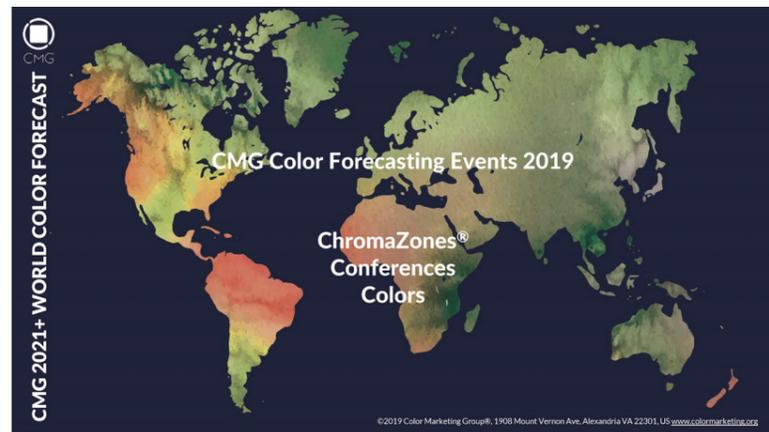
Founded in 1962, Color Marketing Group® (CMG), is the premier international association for color design professionals®. For over 50 years, CMG has provided color forecast information based on the contributions of color design professionals across the globe. Our mission is to create color forecast information for professionals who design and market with color. Each year CMG members, representing a broad spectrum of designers, marketers, color scientists, consultants, educators, and artists, analyze thousands of colors, attend numerous ChromaZone® Color Forecasting Workshops and regional Conferences, and travel the globe in search of the next color directions. In 2019, CMG held North American ChromaZones® in Ohio, Illinois, Pennsylvania, North Carolina, Tennessee, Minnesota, and Montreal, Toronto, and Vancouver, Canada. International events were held in Peru, China, Germany, and Italy. The information gathered

saguaro cactus, the signature plant of the desert and was the location for our 2019 International Summit. Our first International President, Judith van Vliet, Designer with Clariant ColorWorks invited attendees “to marvel in the mystic surroundings of the desert, but above all to awaken in radiant creativity for the year to come.”

At CMG events WE AWAKEN IN COLOR!, Radiant Mirage was the theme selected for the 2019 Summit. We live in a world where constant change and chaos are the new normal. These forces give rise to new perspectives on the world, often filtered by our very own or collective perceptions. What is true and what is false? Above all, what is your truth? Or is there no absolute truth? These questions emerge while we observe our lives, sometimes so very similar, to the mystic mirage effect of the desert. There are many views to the desert’s constant change of color from dusk to dawn. Whether these optical effects are noted as surreal illusions or simply the meandering, reflective rays of light created by a layer of heated air of varying density.

During our International Summit three of our CMG member futurists and visionaries presented their views on the future of the color forecasting industry, exploring what it will look like in 5-10 years and how it will change globally. The presented a vision on the direction that the color forecasting industry take and what the future will hold for color forecasting?

The color forecasting industry has been around for over 50 years. Businesses depend on industry color directions for their products and services. Having the right color at the right time is key to success. Color Marketing Group plays a key role in providing annual World Color Forecasts™ and color direction



during these global color forecasting events became part of our global World Color Forecast™ for 2021 which we revealed at the 2019 International Summit. Tucson, Arizona, also called Desierto de Altar, the Sonoran Desert is one of the most diverse of all the North American deserts with its characterizing



Color Workshops

reports to hundreds of global companies. Nowhere else can multi-industry scientists, artists, and businesses come together to collaborate on where color directions are going 2 years ahead. It is within the conversations and the exchange of knowledge that innovations occur.

We introduced a new Trend Spotting Seminar which cast light on the trend spotting process and new methods for color forecasters. Lead by Doty Horn, a long-time CMG member and trend spotter, and the SVP Design at Congoleum Corporation, the workshop was a big success.



Color Marketing Group introduced the organization’s 2021+ World Color Forecast™ Key Colors at the 2019 International Summit in Philadelphia, PA. CMG 2021+ Asia Pacific Forecast Key Color – Uni Coral CMG 2021+ European Forecast Key Color – Raison d'être CMG 2021+ North American Forecast Key Color – Mist CMG 2021+ Latin American Forecast Key Color – Renacer

Finally Summit attendees experienced a revamped Color Applications Workshop utilizing CMG’s 2021 World Color Forecast™. Attendees experienced how the Forecast is created and how to apply it directly to their industry-specific track of Contract, Lifestyle and Consumer, Residential, or CMF (Color, Materials & Finishes).

Attendees also connected with other outstanding color professionals and learned why this dynamic global Association with over 57 years of experience in forecasting color directions continues to create accurate and relevant color and trend forecast information.

During our 2019 International Summit we also held an NCS Colour Design Workshop to help our members extend and strengthen their color knowledge, language, and career skills. Attendees also participate in our Future Thinking workshop that focused on the big ideas driving our design decisions ten years from now. This workshop inspired us to think well beyond 2021 and travel farther into the future. Presenters included three CMG trend-watching experts, who shared their experiences in researching and forecasting trends, and how they analyze and apply them in their designs.





// UNITED STATES //

## International Association of Color Consultants/Designers IACC -NA

### REVIEW

2019 was an exciting transition year for IACC-NA with the election of a new board in September. Elected was Lindsay Thivierge (President), Sheri Peterson (Vice President), Suzi Kades (Secretary), and Laura Deubler Mercurio (Treasurer), with Jean Hoskin as the Past President.

The new board began with the undertaking of some large reorganization projects to reignite the flame into the IACC-NA in order to increase membership, provide better membership opportunities and benefits, and promote greater awareness of the association.

Key areas the board has undertaken:

1. Distributing a survey/questionnaire to current and past members asking for input on how the IACC-NA association could improve overall.
2. From the survey, creating action lists and forming member run committees in highlighted areas of interest.
3. Rewriting the association's Mission Statement.
4. Initiated update of all IACC-NA Statutes and outlining of 2021 changes and developments.
5. Updating all written correspondence that goes out to new members.
6. Continual updating of the website.
7. Partnered with ISCC to provide members with Webinars on various color topics.
8. The Vice President undertook the development of an IACC-NA CEU presentation that would be viable for members.
9. Reinvigorated relationship with IACC International Academies (Japan, Italy, and Austria) to align with similar strategies and future teaching/learning opportunities.
10. Conducted its first Virtual Annual Meeting.

### RECOGNITIONS

Three Members have undertaken the daunting and exciting task of completing their final thesis in 2019 and to becoming fully accredited as color consultants!

- Sheri Peterson - "Understanding the significance of interior colour: Colour impact on members and guests in a private club or hospitality setting. A comparison study of three hospitality environments"
- Ellen Divers - "Beyond Hue: Affective Response and the Value-Chroma Color Paradigm"
- Karen Collins - "Improving Firefighter Well-Being Utilizing Color in Fire Stations"

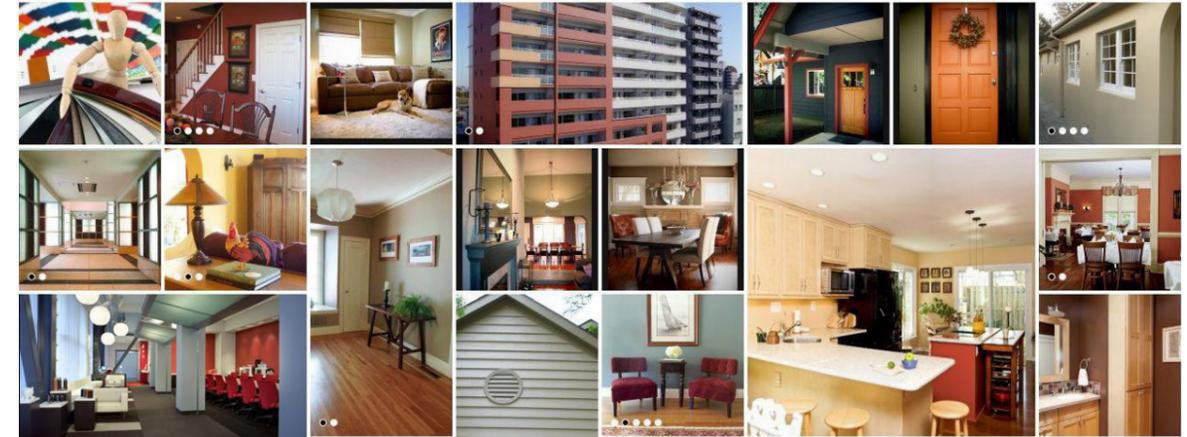
Their theses will be available for presentation and review at the 2021 conference.

Amy Krane Color was featured twice in an article in Houzz about when it's time to hire a Color Consultant. She was also voted Best of Houzz for the seventh year in a row.

Lori Sawaya advanced her online presence and developed an online color training program complete with transformative tools and resources for the interior space.

IACC-NA members and AICCE Administration met with IACC Italia, IACC Europe (the BEF), and IACC Japan to foster talks on future curriculum strategies and the IACC vision.

In a move to gain online exposure and a new learning platform, webinars were presented by IACC-NA members in anticipation of the Color Impact 2020 event. The three members that made webinar presentations on their studies of color were:



Multi project photo

- Ellen Divers presented "The Blind Spot in Architectural Color"
- Ruthanne Hanlon presented "Color and Culture"
- Jean Hoskin presented "Application of Alber's Interaction of Color to Color Evaluation"

Most notably, the IACC-NA was assisting in the organization and development of a joint color conference at Yale University, June 2020, with the Inter-Society Color Council (ISCC). The annual general meeting for 2020 was also to be conducted at this time. The three theses were to be presented at the conference along with a keynote presentation by member and accredited color consultant Jill Pilaroscia. A graduation ceremony and a recognition event were to take place for those completing their theses. This has now been pushed to June 2021 due to the Covid-19 crisis. This event was the culmination of a meeting in 2018 between passionate individuals in the color world. A great deal of planning and organizing was done to make the event possible and develop a continuing relationship between two color organizations opening the door to many more opportunities for current and future members.

### FUTURE EVENT

June 6-9, 2021 at Yale University "Color Impact 2021" an IACC-NA and ISCC co-sponsored event.



IACC Classes San Diego



Palettes



SG AD has  
50 members from  
25 countries



"Time" by Sarah Frances Dias,  
oil on canvas, 30cm x 40cm

# SG AD

## ARTS AND DESIGN

Chairman: Maria João Durão (Portugal)



Logo designed by Helena Soares

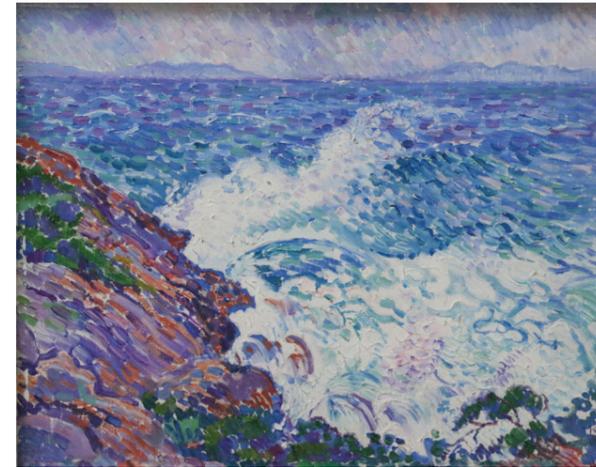
The AIC Study Group on Arts and Design-SGAD aims to bring together a plethora of areas that concern theory and practice in the domains of the 'Arts and Design'.



SGAD has over 50 members from 25 countries: Argentina, Australia, Austria, Brazil, Chile, Egypt, Finland, France, Germany, Hungary, Italy, Iran, Israel, Japan, Mexico, Norway, Portugal, Peru, Singapore, Slovenia, Sweden, Switzerland, Turkey, UK and the USA

"A Cor em Acção" (Colour in Action)  
by Verónica Conte

This Report begins with two highlights: a book in Colour and Design and a painting. Designer and Architect Verónica Conte published the book "A Cor em Acção" (Colour in Action) <https://www.bythebook.pt/livro/a-cor-em-accao/> with a focus on conceptual and methodological interactions implemented in the urban-rural contexts of Montemor and Ruinha. Participatory actions of design and painting were used by the author as source for research within her Post-doctoral programme in Design, carried out at The Lisbon University School of Architecture.



Gale from the East' by Theo Van Rysselberghe

Artist and architect Sarah Francis Dias used oil paints on canvas to depict the passage of time with brushstrokes of colour reminiscent of techniques used in the golden periods of oil painting.

At AIC 2019 organized by Grupo Argentino del Color (GAC), in Buenos Aires, a set of papers were categorized under 'Arts and Design' with a focus on the central theme: 'Colour and Landscape'. Robert Hirschler explained the optical phenomena underlying pointillist/divisionist techniques and colour impressions created by a selection of neo-impressionist paintings, in his 'Colour theory and neo-impressionist landscapes'. R. Aslanoglu & N. Olguntürk addressed the role of colour in 'visual complexity visual interest', and Alex Tron related evident and underlying colours through colour constancy.

Paula Csillag & Ana L. Lupinacci presented the use of landscape in the work of Fred Jordan, the 'Brazilian master of color' and F. Silva & L. Silveira also dealt with 'Color in Brazilian landscape painting in the beginning of the XXI century'. R. Aslanoglu, et

al chose wheat field colours of Vincent van Gogh to focus on seasonal transformations of colours, and M. Arrarte-Grau claimed 'timelessness and temporality' as features of landscape colours.



Left: Harald Sohlberg's painting Street in Røros in winter, oil on canvas 60.5 x 90.5 cm, National Gallery, Oslo (1903). Right: Røros by Google street view, 2010.

Alex Booker & Kine Angelo showed how Norwegian painter Harald Sohlberg captures the 'essence of colour and atmosphere that are particular to the interaction of northern light and landscape'.

Gabriela Nirino, et al. dealt with colour and landscape in textile design, and M. Mirian & F. Mahyar analysed how colours of clothing can influence the 'colourscape of cities'.

With Elisa Cordero-Jahr et al., aquarelle became a powerful tool for representing colours of landscape, and with Simone Maffei Simacek, et al. children's illustration colours unveiled an emotional analysis. Villaa & M. Páezb proposed a model for sustainable use of cultural values in graphic design, and L. Peries, et al. focused on colour as a landscape component in townscape catalogues.

G. Lee, et al. related 'Designers' experience and use of colour information', and A. Nassereldin, et al. dealt with the specifics of colour in creating a successful logo.

L. Walker treated colour as a mimetic agent 'between skin and landscape'; T. Villa & M. Páez devised a Design workshop for young people with down syndrome; S. Ribeiro offered a 'Bodygraphy' through complementary colours found in landscape; and P. Ramirez viewed the Universe in six colors in an atlas of natural dyes. 'Cesia'-a term introduced by José Luis Caivano was adopted by V. Jofre in 'Cesia in nature and in the representation of nature. Luminous cesia: a special case'.

In the field of cinema, Pedro P. Souza dealt with colour in the representation of homosexuality in the films 'A single man, Blue is the warmest color, and Moonlight', and L. Echagüe connected 'Painting, landscape, cinema and color'.

Finally, Roy Osborne received the AIC Colour in Art, Design and Environment Award, presenting a lecture on Renaissance Colour Symbolism.



SEQUENCE OF THE FILM WITH SATURATION INCREASING. © FRAMES OF A SINGLE MAN, TOM FORD, 2009 - PEDRO PINHO



*SG CE has  
210 members from  
39 countries*

*Prismatic Plates  
by Maggie Maggio*

# SG CE COLOUR EDUCATION

Chairman: Robert Hirschler (Hungary and Brazil)  
Co Chair: Maggie Maggio (USA)

In 2019 SG Members were again very active. In this year's report we'll focus on a new initiative of the SG which may have significant impact on the future course our SG may take.

Following the extremely successful ISCC/AIC Munsell 2018 Symposium in Boston a group of colour researchers started the ISCC/AIC Colour Literacy Project (CLP) with the purpose of identifying and addressing the most basic, current misconceptions and misinformation about colour while building a bridge between the art and science of 21st century colour education. The objective of the CLP is to develop a foundational colour education website to provide state-of-the-art, introductory, interdisciplinary information and materials on the art, science and industry of colour for use in classrooms.

The project was approved by the ISCC board in August of 2019, and the AIC Executive Committee approved the Joint ISCC/AIC Colour Literacy Project in January of 2020.

The first phase of the project, research on existing resources and teaching materials, concluded that the time is ripe to radically rethink basic colour education by introducing an experience-based colour learning model and recast colour as a collaborative arts and science subject at the elementary and secondary school level in STEAM programs and at the professional level across art, science, and industry.

The report on the findings of the first phase, and the launch of the second phase of the project, developing and testing prototype learning modules, will take place at the ISCC Virtual Symposium: A New Vision for Colour Education on June 6, 2020.

More information on the CLP will be available on a dedicated website to be launched in June of 2020.

At the last SG meeting in Buenos Aires three of the team members presented their first thoughts on colour theory, and their presentations were followed by a lively discussion.

Robert Hirschler discussed the concept colour theory, what it is and whether we need it at all. Traditional colour theory is loaded with misconceptions, even the very definition of colour theory (Figure 2) carries outdated notions, and in order to introduce 21st century colour theory we must re-think what we had learned and taught over the past centuries.

Maggie Maggio showed several illustrations of traditional colour theory (Figure 3) and explained the pitfalls of "rehash": theories repeated without critical review and presented as "rules" without taking developments in science and art into consideration. However, she emphasized that we must re-evaluate the foundational concepts of the traditional theory, recognize what is still valid and valuable in arts education, and not be too hasty to throw the baby out with the bathwater.

Stephen Westland discussed some of the common misconceptions of primary colours according to traditional colour theory. Even the definition of "primary" colours is often wrong. Children learn already in kindergarten that "primary colours are those which cannot be mixed from other colours and from which all other colours may be mixed". On the example of additive mixing illustrated on the CIE chromaticity diagram (Figure 4) Stephen explained where this definition fails.



Figure 1: The opening page of the future CLP web site.

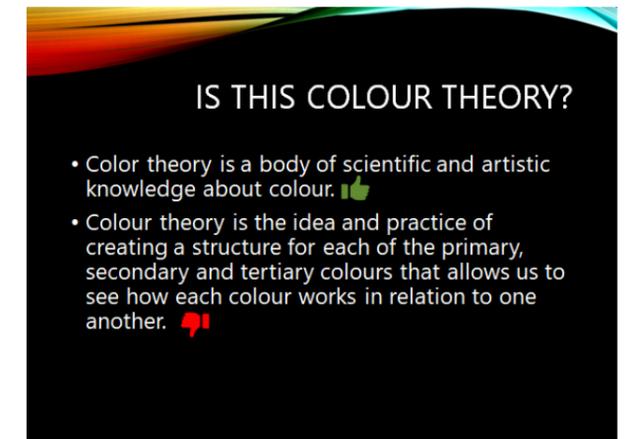


Figure 2: A valid and a mistaken definition of "colour theory".

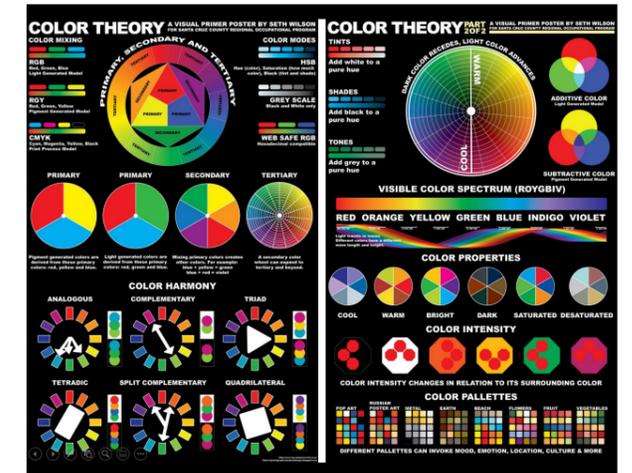


Figure 3: Illustrating some aspects of traditional colour theory.

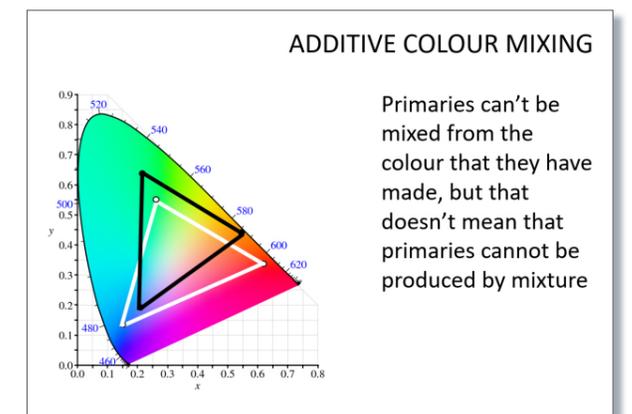


Figure 4: Additive colour stimulus mixing illustrated on the CIE chromaticity diagram.



**SG CVP has  
90 members from  
16 countries**

Figure 3: Coating drum showing white tablet cores sprayed by a yellow colorant. (University of Costa Rica).

# SG CVP

## COLOR VISION AND PSYCHOPHYSICS

Chairman: Katsunori Okajima (Japan)

Secretary: Manuel Melgosa (Spain)

The purpose of this Study Group (SG-CVP) is to discuss basic and practical studies on colour vision, colour appearance, colour discrimination, brightness perception of colours, colour preference and application tools for planning and testing universal colour designs, and to share useful information among the members. We deal with topics from colour vision model to universal colour design including colour perception of the elderly.

Activities:

1. Currently, the number of members of the SG is 94 from 16 countries.
2. We are planning to hold our meeting at AIC2021.
3. We are hosting the SG homepage using the following Internet site: "<http://www.okajima-lab.ynu.ac.jp/CVPSG/>".
4. SG members published/presented some related papers to the topics that SG CVP covers. Dr. Midori Tanaka and her colleague presented the paper entitled "Relationship between Faithfulness and Preference of Stars in a Planetarium" (Tanaka, M. et al., Journal of Perceptual Imaging, 2 (1): 010402-1-010402-11, 2019). They performed psychometric experiments to investigate the factors required to reproduce

faithful and preferred star-field images in a planetarium. They projected stars as experimental stimuli with different characteristics for three types of parameters (colour, luminance, and size). A total of 47 observers participated in the evaluation experiments for 9 types of star-image patterns projected on a dome screen in a planetarium. A snapshot image of the illuminated dome captured using a fish-eye lens is shown in Figure 1. The rating of faithfulness improved for the projection pattern with a smaller star size. For the preference evaluation, the projection pattern with low luminance significantly lowered the preference rating. They then analyzed the relationship between the faithful and preferable evaluations. For the male observers, there was no significant difference in any projection pattern. This suggested that the male observers expected planetariums with faithful reproduction as a preferable reproduction. In contrast, for the female observers, the evaluation was significantly different in the luminance variation patterns. They preferred a brighter reproduction rather than a faithful reproduction. In other words, they expected the planetarium to reproduce the most brilliant stars. These gender-difference results did not depend on the experience in astronomical observations.

Considering the nine LED white illuminants recently proposed by CIE (CIE 015:2018), a spectral colour-imaging procedure for detailed colorimetric study of real artworks has been proposed (Figure 2, Martínez-Domingo et al., Sensors, 19, 5400, 2019). This

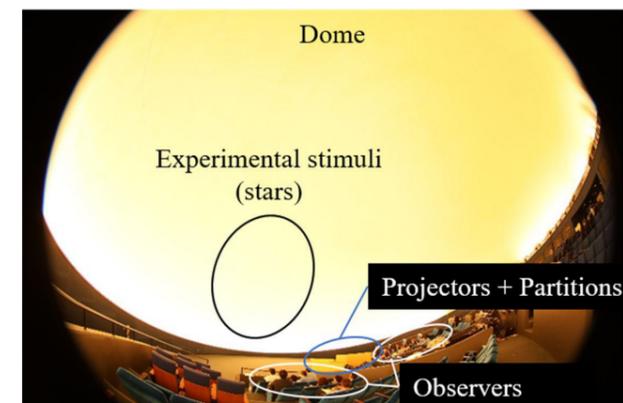


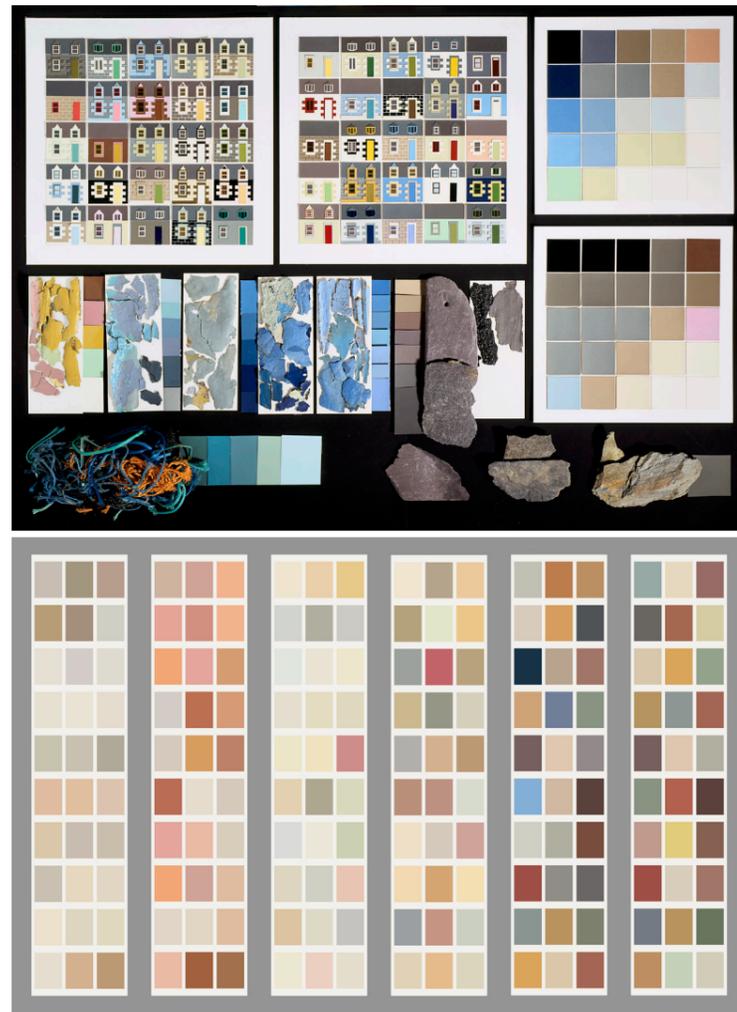
Figure 1: Snapshot of the experimental environment (captured at a bright dome).

approach seems a powerful tool for art and heritage professionals, when deciding which illumination to use in museums, or which conservation or restoration technique best maintain the colour appearance of an original piece under any illuminant. On the other hand, colorimetric evaluation of protective treatments applied to traditional Islamic plasterwork, under natural aging conditions have been also studied (Collado-Montero et al., Studies in Conservation, 64, 90-100, 2019). From analyses of the original pictorial plaster in the Courtyard of the Maidens of the Real Alcázar in Seville (Spain), 56 test specimens were prepared, using materials and techniques similar to the original ones: four pigments, two different binders, and five representative consolidants.

Colour image analyses and the CIEDE2000 colour-difference formula were used to study a coating process of pharmaceutical tablet cores by random spraying, employed in Costa Rica (Figure 3, Murillo et al., Color Research and Application, 44 (2), 160-167, 2019). The target of this research was the determination of optimal coating times, and advances toward a future non-invasive automatic control of this industrial procedure. In fact, the whole control of visual appearance is an important problem in many different industries. For example, orange peel textures have been studied for a set of 56 chromatic and achromatic automotive samples, proposing an accurate instrumental model in good agreement with average visual assessments performed by a panel of 28 observers (Mohammadalizadeh et al., Progress in Organic Coatings, 135, 148-155, 2019).



Figure 2: Illumination and image-capturing system for a Moorish epigraphic frieze of plasterwork and a tile skirting panel from the Nasrid period (Nasrid Kingdom of Granada, 1238-1492) in Museum of the Alhambra (Palace of Carlos V, Granada, Spain).



Jean-Philippe Lenclos: *The Geography of Colour, methodology*

**New SG ECD members joining in 2019 included:**

Sara Kenny (AR)  
 Imara Duarte (BR)  
 Luisa Martinez (PT)  
 Martin Huwiler (CH)  
 Guobin Xia (UK)  
 Jiangbo Wang (CN)  
 Maria Marta Mariconde (AR)  
 Carlos Mario Rodríguez Rodríguez (CO)  
 Pablo Ixtaina (AR)  
 Lilian Walker (BR)  
 Katia Godoi (BR)  
 Miriam García Páez (MX)  
 Mariana Noguera (PT)  
 Yacine Gouaich (AL)  
 Banu Manav (TR)  
 Susana Ribeiro (PT)  
 Jimena Vanina Odetti (MX)  
 Tania Eréndeni Fuentes Villa (MX)  
 Amy Li (CN)  
 Juana Gandino (AR)  
 Alberto Reyes González (MX)

Kine Angelo: *Colour synthesis of six European cities: (l.t.r.) Paris, Rome, Vienna, Graz, Copenhagen, Trondheim*

# SG ECD

## ENVIRONMENTAL COLOUR DESIGN

Co-Chair: Verena M. Schindler (Switzerland)

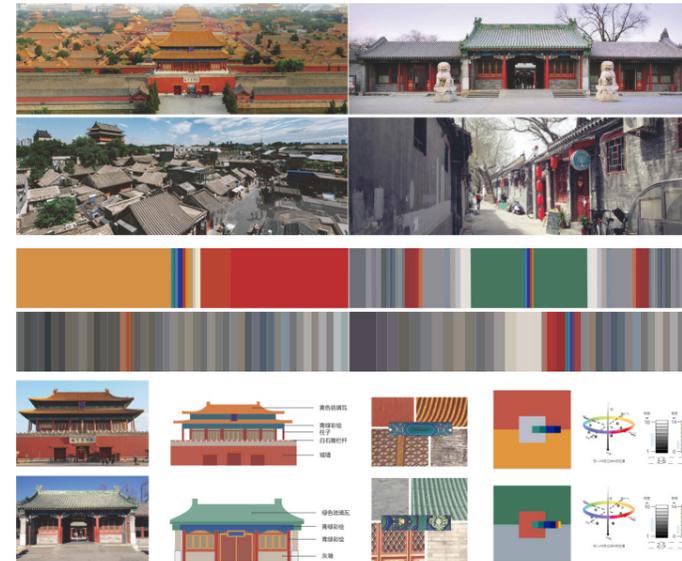
Co-Chair: Yulia A. Griber (Russia)

[http://www.ad-chroma.com/index.php?article\\_id=1&clang=2](http://www.ad-chroma.com/index.php?article_id=1&clang=2)



2019 was a year rich with AIC Study Group on Environmental Colour Design (SG ECD) events and activities for its members, and other interested persons.

On 18–20 September, the SG ECD co-organized the First Russian Congress on Color (FRCC2019), which was held in Smolensk, one of the oldest cities of European Russia. In total, more than 300 people from twenty different countries took part in this event. Over the three days of the conference, participants delivered sixty-eight presentations in Russian and English. A good way to sense the geographical expansiveness of the event were the Skype talks by Aline Barlet, Alice Herbert, and Audrey Bousigues (FR); Karolina Białobłocka (PL); Cristina Boeri (IT); Carla Lobo (PT); Verena M. Schindler (CH); Beichen Yu (UK); Alessandro Premier (NZ); Soichiro Tsukamoto and Kyoko Hidaka (JP); Elisa Cordero-Jahr (CL); Milena Quattrer (BR); and, Camila Assis Peres Silva (BR). In addition, there were posters from around the world such as from Pietro Zennaro (IT); Rui Duarte (PT); Ana Paula Pinheiro (PT); Carlos Prause (AR); and, Hwei-Lan Chang and Jian-Han Huang (TW). Some international contributors participated in the congress in person such as Ichraf Aroua (TN) and Yulia Kovanova (UK) and others with a paper such as Felix Telegin (UK) and Jianming Song (CN).



Jianming Song: *'Danyun Yinlyu' of imperial architecture and residential housing during the Ming and Qing Dynasties*



Glenn McArthur: *Local colour and patterns (the essence). First prize: Robert W. G. Hunt Poster Awards*

During the AIC 2019 Midterm Meeting on Colour and Landscape, which took place on 14–18 October in Buenos Aires, the SG ECD organized a seminar and study group meeting.

The Seminar on Ambiances featured the general topic ‘Towards a Theory of Colour and Light Ambiances in Built and Natural Environments’ and the aim was to explore and discuss ways of creating the character, mood, or atmosphere of interior and exterior space in built and natural landscapes. Inez Michiels (BE) presented the semantic colour space as a scientifically based method suitable for the analysis and creation of ambiances in built environments. Aiping Gou (CN) analysed the correlation of colour and function in architecture and urban planning in Shanghai. Jiangbo Wang (CN) explored the fragmentation of colour space in Shanghai’s historic areas. Imara Duarte (BR) investigated the perception of environmental colour in the hospital hemodialysis sector. And Kazim Hilmi Or (TR) discussed ideas about the beauty of colour and light ambiances during the day and at night.

The annual SG ECD Meeting focussed on ‘The Geography of Colour’, a methodology elaborated by French colour designer Jean-Philippe Lenclos. Participants discussed this pioneering concept, which addresses how geography, geology, climate, light conditions, socio-cultural beliefs, local traditions, and construction technologies uniquely shape the chromatic character of an urban landscape, a district, town, city, region, or country. Combining analysis and synthesis shed light on the role of colour in generating habitat palettes and cultural identity. Kine Angelo (NO) synthesized the colours of six European cities proposing a formula for a harmonic urban colour composition. In visually striking time lapse films, Alex Booker (NO) showed how light changes the colours of an urban landscape over the course of a day. Malvina Arrarte-Grau (PE) revealed how light has an impact on the colours of natural materials as seen under the conditions of the bright light of the Andes or the humid climate of Lima. Doreen Balabanoff (CA) analysed the natural colours of Lake Huron in Ontario. Elisa Cordero-Jahr (CL) studied the chromatic universes of Chile’s cultural heritage. Imara Duarte (BR) analysed the ‘Art Deco Sertanejo’ architectural ensemble of the 1930s in Campina Grande’s centre. Ana Rezende (BR) presented an experimental colour project that aims to improve a degenerated urban area in São Paulo. Xavière Ollier (FR), who once worked at Lenclos’ Atelier, founded her own agency Nacarat Color Design applying Lenclos’ approach in her projects in France. Aiping Gou (CN) discussed Shanghai’s colour identity. Carla Lobo (PT) introduced Portugal as a ‘country of pottery walls.’ As well, two books were presented: *Generalized Color Trilogy* (2019) by Jinghong Wang (CN) and *Farbraum Stadt: Farbkultur in Winterthur* (2019) by Andres Betschart et al. Furthermore, many other SG ECD members participated in the AIC 2019. And the three Robert W. G. Hunt Poster Awards were also given to SG ECD members: 1) Glenn McArthur (CA); 2) Yen-Ching Tseng, Yuh-Chang Wei, Monica Kuo, Ya-Ping Kuo, and Wen-Guey Kuo (TW); and, 3) Ana Torres-Barchino, Juan Serra-Lluch, and Anna Delcampo-Carda (ES).

Other exceptional outcomes of these events are a range of publications: the *Book of Abstracts* of the First Russian Congress on Color was released by the Soglasie publishing company; also stemming from this congress were Volume 1 of *The Scientific Notes of the Color Society of Russia* including the papers in English and Volume 30 of *Social Transformations* including the papers in Russian. As well, a FRCC2019 Report was published in *Color Research & Application* 2020 (45):183–185. And finally, the *Colour Culture and Science Journal* 2020:12(1) published ten papers related to FRCC2019.



FRCC2019 announcement



Figure 1. Colour & Poetry: A Symposium, Jo Volley, 2019.

SG LC has members 180  
from 45 countries

Twitter // @aic\_lc  
499 followers

Facebook // @languageofcolour  
847 follows

# SG LC

## LANGUAGE OF COLOR

Chairman: Dimitris Mylonas (UK)

Co-Chairman: Galina Paramei (UK)

<http://language-of-color.aic-color.org/>

The purpose of the AIC Study Group on the Language of Colour (SGLC) is to share information and discuss studies on psycholinguistics, semantics and semiotics of colour names and their relation cognitive (neuro)science of colour perception. Key topics are colour cognition, colour naming, categorisation, colour memory, colour semantics and semiotics, and cross-cultural differences in these functions. Currently the SGLC has 188 registered members from 45 countries. Social networking platforms of the SGLC in Twitter (@aic\_lc) and Facebook (@languageofcolour) have currently 525 and 858 followers respectively.

In 2019, members of the SGLC were active presenters at several international and national meetings.

- At the 25th Symposium of the International Colour Vision Society (5-9 July 2019, Riga, Latvia), members of SGLC had a vivid presence at the “Colour Cognition” session chaired by Galina Paramei, SGLC Co-Chair. Dimitris Mylonas, Chair of the SGLC, gave a presentation on his work, co-authored by Andrew Stockman, on mapping unconstrained colour names onto physiologically-based cone excitation space. Mari Uusküla and David Bimler presented a talk on the influence of achromatic modifiers on location of basic colour terms in colour space.



- At the AIC Midterm Meeting (14-17 October 2019, Buenos Aires, Argentina), although the SGLC did not host a session as such, a group member Yulia Griber presented her work, co-authored by two other SGLC members, on age-related variation in usage of “edible” Russian colour names.
- Victoria Bogushevskaya organized an International Workshop “Speaking and Writing about Colours” (28-29 November 2019, Milan, Italy) that addressed phenomenological representation of colour in linguistics, literature, philosophy, and arts.
- Jo Volley organised Symposium “Colour and Poetry” (20-21 March 2019, Slade School of Fine Art, University College London, UK) to celebrate, jointly, the International Colour Day and the World Poetry Day (see Figure 1). Among Symposium participants were several group members, including Chair of the SGLC Dimitris Mylonas, who presented his ongoing research on colour naming across languages, as well as Lindsay MacDonald, who participated in a panel discussion about material innovation through an interdisciplinary lens.
- Year 2019 has also seen several important publications – on theoretical, empirical and modelling aspects in colour cognition. Examples below are that in no way exhaustive.
- Yasmina Jraissati published an article on sensory categories [Jraissati, Y. (2019) Editorial: Sensory categories. *Review of Philosophy and Psychology*, 10, 419–439], in which she elaborates on whether (and how) research on colour naming can be generalized to other sensory modalities;
- Oswaldo da Pos co-authored a publication [Fiorentin, P., da Pos, O., Pedrotti, E., & Metellini, A. (2019). Semantic resonance to light sources of different correlated colour temperature. *Color Culture and Science Journal*, 11, 74-81] reporting a study on evaluating qualitative features of light sources by using subjective bipolar measures (e.g. calmagitated; passiveactive), with results showing that the qualities in question are independent from the correlated colour temperature of the lighting sources;
- Domicile Jonauskaitė and co-authors, among whom many are SGLC members, published a comprehensive study (2019) titled “The sun is no fun without rain: Natural environments affect how we feel about yellow across 55 countries” (*Journal of Environmental Psychology*, 66, 101350);
- Dimitris Mylonas published an open access paper, with Lewis D. Griffin (2019) “Categorical colour geometry.” [PLoS ONE, 14 (5): e0216296], in which they develop and describe a novel, categorical metric, based on colour-naming data, that estimates 27 categories fitting in the RGB cube (see Figure 2).

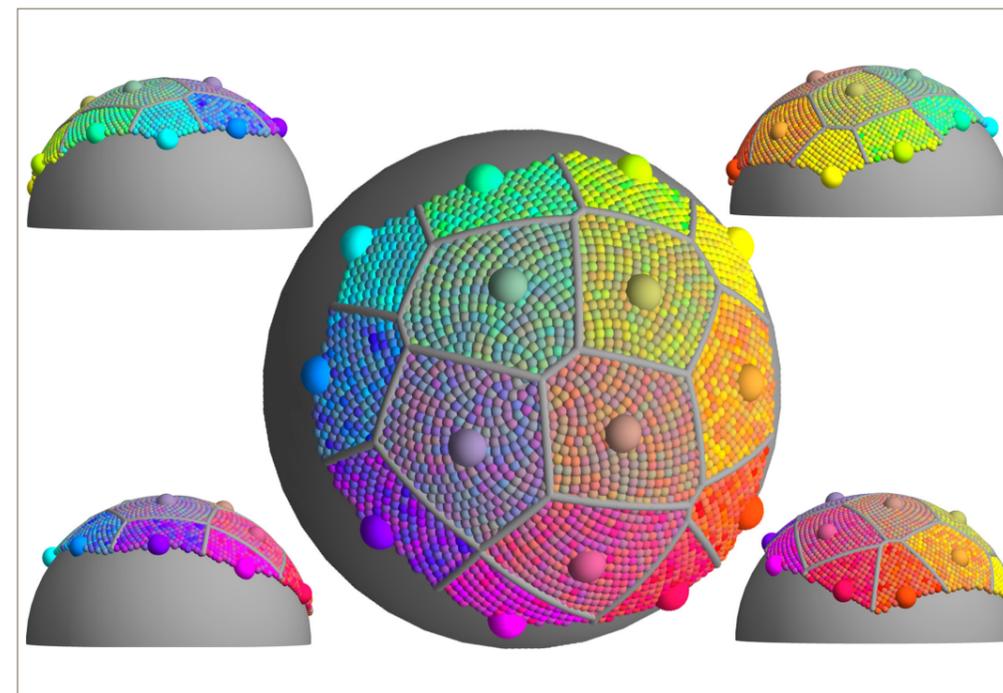


Figure 2. A Voronoi partition of the colour surface. All colours within a region are categorically similar to the region centre, and all region centres are categorically distinct (Griffin & Mylonas, 2019).

estimates 27 categories fitting in the RGB cube (see Figure 2).

We are planning to host next SGLC meeting at AIC 2021 in Milan, Italy. On our website, <http://www.language-of-color.aic-color.org/>, we share latest news on the development of research on the language of colour and the related resources. News related to the scope of SGLC are always welcome.

// REMEMBERING //

**IN  
MEMORIAM**

*Every year we remember those that we have lost but have left behind their contributions to the color world.*

*by Roy Osborne  
Robert Hirschler  
Colour Group (GB)*

**Josephine Simmonds  
(1940-2019)**

English painter and printmaker. Jo Simmonds was born in Bristol, where she studied at the West of England College of Art, and received a National Diploma in Design and an Art Teachers Diploma. Postgraduate studies continued at the Slade School of Fine Art, London (1964-65), working with Anthony Gross (a student of Stanley William Hayter), and notably producing a series of fine colour aquatints. Following awards of the Slade Painting Prize, the Slade Etching Prize, and an Abbey Travelling Scholarship to Italy and Greece, she received an Anglo-Brazilian Government Scholarship and Boise Travelling Scholarship to visit Brazil, Peru and Bolivia (1966-67), while based at the Gravure Studio of the Museu d'Arte Moderna in Rio de Janeiro. Thereafter she taught at a range of UK art schools – primarily at Leicester Polytechnic (1967-74), Middlesex Polytechnic (1975-81) and at Cheltenham (1980-91). A founder-member of the Printmakers Council, she served on its Committee, 1971-74. She continued to exhibit as an artist (combining colour with textiles, and as a 'colour-field' painter influenced by Richard Smith) and as a freelance designer. Jo Simmonds died at Malmesbury, Wiltshire, on 26th June, 2019.

**Carlos Cruz-Diez  
(1923-2019)**

Born in 1923, in Caracas (Venezuela), Carlos Cruz-Diez's career spans more than sixty years with his artistic enquiries revolving around colour phenomenon. He is one of the twentieth century's fundamental thinkers about colour. First of all a painter, Carlos Cruz-Diez's experimentation, scientific investigation and artistic realisations resulted in his unprecedented contribution to the history of painting.

In Carlos Cruz-Diez's work, colour is not an attribute, but rather colour is that perpetual presence that actively engages the observers in phenomenological exploration while progressing in space. Carlos Cruz-Diez's work is exhibited in permanent collections at the Museum of Modern Art, New York; the Tate Modern, London; the Centre Georges Pompidou, Paris; the Museum of Fine Arts, Houston and the Wallraf-Richartz Museum, Cologne. In 2014, Carlos Cruz-Diez's work in the UK was exhibited at the Liverpool Biennial, the Tate, the Royal Academy of Arts, the Beecroft Art Gallery, Christie's Mayfair, London and Maddox Art. To recognise his outstanding contribution to colours, Carlos Cruz-Diez was awarded the Turner Medal in 2015 by the Colour Group (Great Britain). He died in Paris on 27th July 2019.

Carlos Cruz-Diez obituary by Karen Rosenberg published in the New York Times:  
<https://www.nytimes.com/2019/08/02/obituaries/carlos-cruz-diez-dead.html>

**Antal Nemcsics  
(1927-2019)**

Hungarian artist, educator, and scientist. As a painter and designer he created tableau paintings, exhibited in various museums, murals, mosaic tile and wall paintings as well as colour glass windows for civic buildings and developed designs for public and industrial edifices, churches and residential areas of cities. As a scientist, he introduced the Coloroid Colour System, the index numbering system of Colour Preference, worked out the Complex Colour Harmony Theory. Published 16 books and 253 scholarly articles. As an educator, he lectured in Budapest University of Technology and Economics for 50 years and in the International Academy of Colour Science for 30 years. He received many accolades and honours: most recently Papa (his birthplace) opening a continuous exhibition for his life works in the Esterhazy Castle (2015) and the AIC (International Colour Association) Colour Award in Art, Design and Environment (2017). He died on the 12th July 2019.

**John Richard Aspland  
(1936-2019)**

British-North American chemist and Professor-Emeritus of Chemistry at Clemson University, South Carolina. A native of Leeds, Yorkshire, Richard (Dick) Aspland studied at the University of Leeds, where he received a BSc and MSc in Colour Chemistry. After gaining a PhD in Textile Chemistry at the University of Manchester, he taught the subject both at UMIST and the University of Salford. He subsequently travelled to the USA to study at Princeton University's Textile Research Institute. Though based in the Carolinas, he travelled worldwide throughout the 1970s as an authority on dyestuffs manufacturing and textile processing. Following 16 years of consultancy in industry, he was appointed Professor of Textile Chemistry at Clemson University (1982-2006). Commissioned by the American Association of Textile Chemists and Colorists to review his research, 24 of his papers, previously published in the Textile Chemist and Colorist, were included his Textile Dyeing and Coloration, of 1997; he also contributed to Kurt Nassau's Color for Art Science and Technology (1998). In 2013 he was awarded by the AATCC the Louis Atwell Olney Medal (its highest award) for outstanding achievements in the field of textile chemistry. Dr Richard Aspland died at Clemson, SC, on 8th September, 2019.

**Alessandro Mendini  
(1931-2019)**

Italian architect, design theorist, and author (with Rem Koolhaas and Norman Foster) of 'Colours' (2001, on modern design).

**Barry Stroud  
(1935-2019)**

Canadian philosopher and author of 'The Quest for Reality: Subjectivism and the Meta-physics of Colour' (1999).

**Mariano Aguilar Rico  
(1923-2019)**

Spanish physicist; Professor Emeritus of Optics at the University of Valencia. His publications on the eye, physiological optics and lighting include Zona de saturación del macanismo de bastones (1953), Apuntes de óptica fisiologica (1956), Óptica fisiológica (1993), Iluminación y color (1995, with Vicente Blanca Giménez), and Principos de óptica fisiológica (2008). Motivated by a desire to provide high-quality university education for opticians, in 1956 he established the Daza de Valdés School of Optics in Madrid, remaining its director until 1967, when he was invited to occupy the Chair of Optics at Valencia University. In 1971 he was appointed president of the commission responsible for establishing the National University of Distance Education (UNED), and also active in establishing another School of Optics in Alicante. He was a recipient of Medal of the Royal Spanish Society of Physics and Chemistry and the Gold Medal of the University of Alicante, and was a member of the Board of Trustees of the Colegio Mayor San Juan de Ribera and a member of the Unesco Science Committee. Dr Aguilar Rico died in Valencia on 23rd August, 2019.

**Robert Jackson Fletcher  
(1925-2019)**

English optometrist, optical physiologist and educator. Following war service (including the RAF), he trained as an optometrist at the Northampton College of Advanced Technology, London (now the City University). He gained a Masters degree in ophthalmic optics at Manchester University, and later became the first Professor and then Head of Department of Optometry at the City University. After 1957, he also lectured in the USA, extending clinical optometry into physics and physiological optics, and subsequently establishing and supporting optometry courses at institutions in a dozen other countries. He published over 150 texts, and 16 textbooks, including 'Ophthalmics in Industry' (1961) and 'Defective Colour Vision' (1985). With Norman Bier and Luigi Lupelli, he pioneered the use of contact lenses, and designed the Mastervision Screener and Mavis Vision Screen (1960), the City University Colour Vision Test (1980), and the Civilian Air Marine (CAM) Lantern and Vision Test (2002). Emeritus Professor Bob Fletcher died in London on 5th August, 2019, three weeks after his wife Muriel.

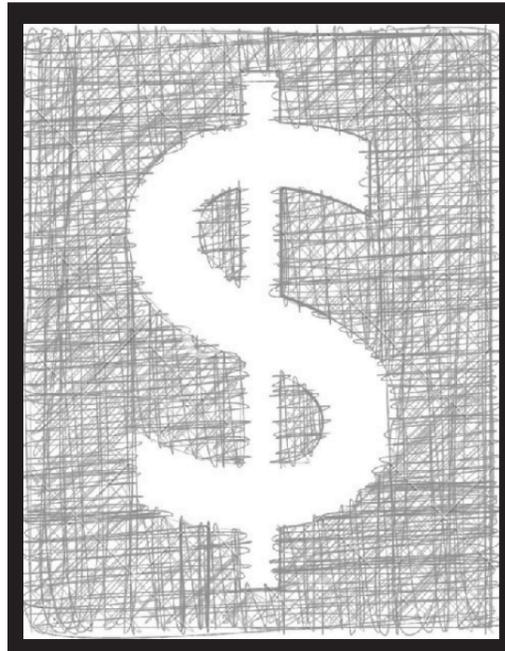
**Thomas George Windeknecht  
(1935-2019)**

North American artist and author (with Margaret Windeknecht) of 'Color and Weave' (1981) and 'Color and Weave II' (1987).

**Alfred Znamierowski  
(1940-2019)**

Polish vexillologist, heraldist, and author of 'The World Encyclopedia of Flags' (1999).

// FINANCIAL REPORT //

**FINANCIAL REVIEW  
FOR 2019**

Reconciliation statements of AIC bank  
and PayPal accounts for year  
1-Jan-2019 to 31-Dec-2019.

Prepared by the AIC 2018-19 Treasurer,  
Leslie Harrington.

All figures are in Australian dollars (AUD).

Approved by AIC 2018-19 Auditors,  
Berit Bergström and Jose Luis Caivano.

**2019 Financial Status**

AIC has three operating accounts: Business, Business Savings  
and PayPal.

**TOTAL FUNDS for 2019 // AUD 24,431.27**

**PayPal (Australia)**

Opening Balance on 1st January 2019	\$ 1,515.12
Income from members	+2,481.01
Service Fees	-90.82
Expenses	-722.60
Transfer	+2,000.00
Closing Balance on 31st December 2019	AUD \$ 1,182.51

Transaction fee 3%

563.35 site hosting, 159.25 refund  
over payment dues.

transfer to savings

**St. George Bank Freedom Business Current Account (Australia)**

Opening Balance on 1st January 2019	6,984.82
Income from members	+2,735.00
Transfer from PayPal Account	+2,000.00
Transfer from Savings	+2,500.00
Expenses	-12,369.30
Closing Balance on 31st December 2019	AUD \$1,850.52

see itemized expenses below

## ITEMIZED EXPENSES

Shipping	43.63
Accounting & Legal fees	5,032.00
Banking fees	120.00
CADE award	6,276.40
Operation Expenses	897.27
TOTAL	AUD \$12,369.30

Accounting fee 82.00  
Legal for GDPR compliance 4,950.00

CADE medal development 4,073.39  
CADE cash prize 2,203.01 (1,500 USD)

Printing and shipping AR 430.87  
Go-to-Meeting 323.40  
ISBN registration 143.00

**St George Bank Business Access Saver Account (Australia)**

Opening Balance on 1st January 2019	22,838.05
Transfer to Savings	-2,500.00
Interest	60.19
Closing Balance on 31st December 2019	AUD \$ 20,398.24



**AIC**

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