



AIC Logo in the Colours of the Japanese Flag & the Imperial Seal

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

NEWS  
Q4|21

## EDITORIAL

色彩に魅了される皆様へ\*

The featured member organisation of the last newsletter of 2021 will be the COLOR SCIENCE ASSOCIATION OF JAPAN | 日本色彩学会 . A country with a long tradition in colour permeating all levels of society and the arts, Japan has produced a great variety of colour schemes reaching from the 7<sup>th</sup> century dress code using the "Twelve Level Cap and Rank System" based on merit and achievement, all the way to traditional colour cords for red-violet, green-blue-green or yellow-green series that we find in arts and crafts and in the beautiful textiles of the Kimonos or the colors in woodcut prints.

Many of the traditional colour schemes have found their way into modern Japanese graphic art and design as well. Beautiful examples are the posters by Ikko Tanaka (1930-2002), who carried the tradition of Japanese proportional and colour ordering schemes over into modernity, and produced beautiful designs for Issey Miyake and the MUJI Stores.



Detail from Ikko Tanaka, Poster Nippon 1955 - 72, 1972. MoMA

As usual we will base the colour themes of our "tweaked" logo and/or page backgrounds on some of these colors, for example the red and white of the Japanese flag, the chrysanthemum yellow of the imperial seal, but also the colour of the Emblem of the Olympic and Paralympic Games Tokyo 2020 and several colors from the Twelve Level Cap and Rank System [https://en.wikipedia.org/wiki/Twelve\\_Level\\_Cap\\_and\\_Rank\\_System](https://en.wikipedia.org/wiki/Twelve_Level_Cap_and_Rank_System).

In this issue, our personal focus will feature Robert Hirschler, who for many decades has been active in AIC and who can look back at an illustrious career in colour science and application on several continents, and who now focuses his energy on an international project aiming at developing a reformed colour pedagogy.

As always, I have relied on Verena M. Schindler for her tireless help in supplying me with news for this issue and for having a final read through of the text before the presses roll.

Please note the deadline for submission for the 2022 1<sup>st</sup> quarter newsletter on February 20<sup>th</sup>, 2022.

I wish all of you a colourful new year when we hopefully will have many opportunities for personal meetings.

Ralf Weber | Editor [newsletter@aic-color.org](mailto:newsletter@aic-color.org)

*\*Dear Color Enthusiasts*

*The COLOR SCIENCE ASSOCIATION OF JAPAN and AIC*



Next year will mark the 74th anniversary of the founding of the Color Science Association of Japan (CSAJ) in 1948, only three years after World War II and in the midst of postwar reconstruction. Establishing an academic society during such a tumultuous time was a significant undertaking, and it is difficult to imagine the challenges faced by the founding members back then.

The CSAJ was also involved in the establishment of the AIC in 1967 and had two AIC presidents: Dr. Tarow Indow (1974-1977) and Dr. Mitsuo Ikeda (1998-2001). In addition to these two scientists, Dr. Yoshinobu Nayatani and Dr. Hirohisa Yaguchi received the Judd Award in 2003 and 2019 respectively, making a total of four CSAJ scientists thus to be honoured. The CSAJ hosted the AIC Midterm Meeting in Tokyo in 1979, the AIC Congress in Kyoto in 1997, and the AIC Midterm Meeting in Tokyo in 2015; the latter is still fresh in our minds.

### ***Expansion to Asia***

In addition to Japan, China, Korea, Taiwan, and Thailand are also members of the AIC. The 1st Asia Color Association (ACA) Conference was held in Thailand in 2013 at the initiative of Dr. Mitsuo Ikeda to promote the development of colour science in Asia in general, as well as for the benefit of students and communities who are unable to attend AIC conferences because of financial constraints. Since then, the ACA has been held in AIC member countries and regions in the years when AIC conferences are not held in Asia. The 6th conference was held online in November of this year. For the first time, Indonesia, a non-AIC member country, was the host country, and many presentations, including those by students, were made from Japan.

### ***COVID-19 and Color***

Due to COVID-19, various activities in Japan have been restricted, and the activities of academic societies have been curtailed without exception. However, we were able to reconfirm that, in any situation, colors can solve new problems and unfold a new future. Even before the outbreak of the virus, Japan had a culture of wearing masks as a preventive measure. Because we know that masks prevent the spread of infection, we have gone beyond function to explore coloured masks from a fashion and emotional perspective.

## AIC MEMBER SPOTLIGHT – JAPAN



In the field of science and technology, practical applications of technology to reproduce the colour of the face or a diseased area of the body with high accuracy in order to conduct online telemedicine without face-to-face contact were advanced. In addition, new themes specific to COVID-19 appeared sequentially, such as the relationship between lighting and colour reproduction, and visual first impressions created by participants in online meetings.

A competition titled "Color and Design in Slide Creation" was held at the national conference of the CSAJ. COVID-19 has led to a remarkable increase in online meetings and other events, and thus opportunities to see and create slides have also increased. However, sometimes various slides are difficult to read, or there are some problems with them, despite the fact that they are designed for good readability. Therefore, we held a competition to design slides that are easy to read and held a discussion from the perspective of "colour".

### *Tokyo 2020 Olympic and Paralympic Games*

In 2021, Tokyo hosted the Olympic and Paralympic Games, which were postponed for a year from 2020 and then held without spectators due to the spread of COVID-19. Color science has contributed in various ways to the history of these two games.

The National Stadium, which was the main venue for the previous Tokyo Olympics and Paralympics held in 1964, was illuminated by a mixture of iodine bulbs (halogen bulbs), mercury lamps, and incandescent light sources (floodlights). The average horizontal illuminance of the entire playing surface with these lights was approximately 200 lx during renovation. In 1979, the National Stadium was renovated to use mainly a mixture of metal-halide lamps and high-pressure sodium lamps. It achieved an average illuminance of approximately 900 lx, exceeding the recommended illuminance of 500 lx for athletics, soccer, and rugby, as specified in the Japanese Industrial Standards (JIS).



The next turning point was the hosting of the Japan–Korea World Cup soccer tournament and the spread of high-definition television (HDTV) broadcasting, when the average colour rendering index (Ra) of lighting sources required for HDTV broadcasting was set to 80 or higher, and many stadiums were upgraded to metal-halide lamps with high colour rendering. The lighting for the 2019 Rugby World Cup and Tokyo Olympics and Paralympics in Japan is now compatible with ultra-high-definition television (UHDTV), which commenced in 2018. UHDTV not only has a higher resolution than HDTV but also a wider colour reproduction range.

In 2021, the lighting in each stadium is LED based, and  $Ra \geq 90$  and  $R9 \geq 80$  are required for the lighting to make it easier for athletes to compete. In addition to this colour rendering property, the lighting for national stadiums was designed with various strict requirements for brightness, unevenness, and glare, such as a horizontal illuminance of 2000 lx or more for soccer.

### *Future Activities*

Currently, there are twelve study groups in the CSAJ. These study groups are broadly classified into scientific groups, such as visual information and colorimetry; design groups, such as colour design and personal colour; educational groups, such as colour teaching materials; and environmental groups, such as environmental colour and colour in daily life. The themes covered by these study groups have expanded to include not only colour but also shapes and textures, and they have been developed in a multimodal manner that includes not only vision but also other senses. In Japan, the post-corona disaster is called "after corona" or "with corona." However, to respond to the changes in society caused by COVID-19, it is time for us to make a major update to the "colors" that we target in the CSAJ.

*Takahiko Horiuchi*



## NEWS FROM OUR MEMBER ORGANISATIONS - ICA BELGIUM

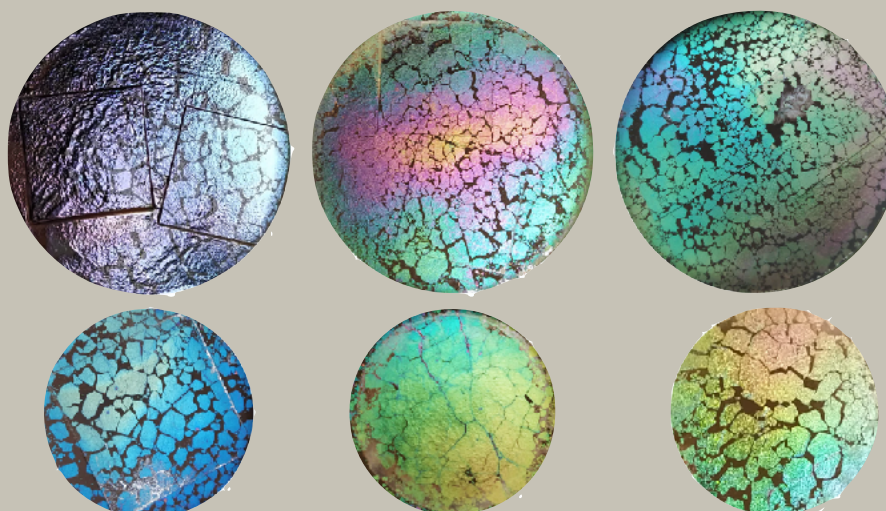


### *Ecology of Colour*

Research project by Laboratorium, KASK / School of Arts Ghent

<http://www.laboratorium.bio/>

<https://henryvandevelde.be/en/awards/22/ecology-of-colour>



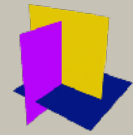
We are honoured to report that the research project Ecology of Colour, led by María Boto Ordóñez and her team at Laboratorium, won a prestigious Henry van de Velde Award in the category of Design Research. The Henry van de Velde Award stands for innovation and corporate social responsibility and is the most important design award in Belgium.

At the crossroads between art, design and biotechnology, this research identifies the environmental impact of the colour industry and creates a shift towards a sustainable approach to colour. The research focuses on new applications and techniques in traditional colour production. Ecology of colour develops ecological inks with pigments from micro-algae as well as a sustainable colour palette of structural colours.

The widespread use of colour in our daily environment can give an idea of the size of the colour industry. In order to generate this colourful world from nature, exploitation of the matter is needed. Laboratorium, an experimental bio laboratory for art, design and biotechnology of KASK & Conservatorium, questions environmental issues and contextualises colour in contemporary art and design. This research identifies the environmental impact of the colour industry and creates a shift towards a sustainable approach to colour.

The Ecology of Colour research by scientist María Boto Ordóñez and designer Heleen Sintobin focuses on new applications and techniques in traditional colour production. On the one hand, Ecology of Colour develops sustainable pigments from micro-algae and applies them to different materials (paper, textiles, bioplastic) and via different techniques (screen printing, digital printing, painting, 3D printing). On the other hand, Ecology of Colour analyses structural colours found in nature. Structural colours are obtained from biological nano-structures that can interfere with light. These structures are often constructed from simple biological building blocks, such as cellulose, chitin, keratin and melanin. They are biomaterials that are common in nature, biodegradable and non-toxic. Using nanotechnology, Laboratorium cultivates an ecological and sustainable colour palette of structural colours.

## NEWS FROM OUR MEMBER ORGANISATIONS - ICA BELGIUM



### *ICA-Belgium's Visit to Philippe Leblanc's Art Studio*

Philippe Leblanc is a Belgian artist sensitive to rationality, the purity of forms and to the changing qualities of light. Philippe finds inspiration in mathematics, famous number series like Fibonacci, conical shapes and emblematic numbers such as the golden number, Pi, and the square root of two.

His works include wall sculptures, light boxes, hanging mobiles, motorised tops or raised puzzles, all sharing the same geometric language. The colours, the minimality of white, the non-materiality of mirrors, cut-outs and translucent pieces, reinforce a play with light as well as a notion of spectrum or series while evoking the memory of the underlying writing. Philippe Leblanc spoke about the process and ideas behind his mysterious, enigmatic work. You can find his presentation on the YouTube channel of ICA-Belgium – ColourDay2021.

After the Colour Talk, an invitation to visit Philippe in his studio in Brussels followed. There we were able to see his artwork on display and he explained how the artwork was created. Philippe was a wonderful host. It was great to finally be able to see his art in person.



Puzzle Pi BYR, 2020

His work "Year 2080 Calendar" (2014) is impressive and represents the calendar of the year 2080, a leap year for which January 1 is a Monday. At a height of 24 meters, a steel circle 60 cm in diameter features 12 holes, just like a clock. Months are represented by cables threaded through each hole, together creating a cylinder. Stainless-steel ellipses stand for days, a mirror finish on one side, lacquer on the other. The ellipses are 12 x 24 cm, recalling the duration of the day as the Earth turns on its axis. Colours are assigned to each day of the week: yellow for Mondays, yellow-orange for Tuesdays, orange for Wednesdays, and so on, till Sundays which are purple.

Find out more about his work on <https://www.philippeleblanc.net/>



### *ICA-Belgium's Sunday morning Online Colour Talk with Inez Michiels*

On Sunday, November 28 our guest was our ICA-Belgium colleague and Belgian design semantics expert, Inez Michiels. She took us on a tour through her innovative Design Semantics Database (DSD), an online application developed for the creative professions. This free, extensive database helps designers to create meaningful and psychologically appealing designs and analyse whether the values, identity or emotions targeted by those specific designs are adequately conjured up.

For the video recording check our ICA-Belgium YouTube channel.



Design Semantics Database (DSD)

Inez Michiels is a director at CITY OF 8 design semantics research association and co-founding board member of the ICA-Belgium Interdisciplinary Colour Association. She obtained a Master of Arts from the Artesis-Plantijn Hogeschool in Antwerp. In cooperation with the Academy of Fine Arts Antwerp and the University of Antwerp, Department of Communication Sciences, she did research into the link between art and emotion. She published a series of papers and books on design semantics. She is a guest lecturer at the University of Antwerp, department of interior architecture and at the Maryland Institute College of Art, Baltimore US, department of graphic design. She is a member of the AIC Study Group on Environmental Colour Design.

The DSD is a scientifically based design tool and the result of years of study and research, offering feedback on the meaning and the emotional effect of keywords, colours, colour combinations, shapes and compositions, textures, tastes, and postures. A logical data structure wherein colour functions as a classification system forms the framework in which the keywords and design elements are classified and connected. As such the DSD offers a unique source of design information bringing intuition to the surface and enhancing it:

Try the Design Semantics Database, it's free! [DSD](#)

## NEWS FROM OUR MEMBER ORGANISATIONS - AUSTRALIA



### WEBINAR SERIES

The series of free webinars presented by our NSW Division continued on September 25 with "Concerning the Shape of Colour", presented by Marcia R. Cohen, Professor Emerita SCAD Atlanta (USA) and hosted by CSA AIC Representative Annamaria di Cara FDIA. Marcia gave a fascinating overview of her non-traditional approach to teaching colour theory, which involved critical and hands-on engagement with the ideas and investigations of historical theorists ranging from Goethe and Chevreul to Rood and the Bauhaus masters, including Kandinsky's supposed colour-shape associations. This overview was intertwined with insights into the impact of this exploration on her own studio practice.



Marcia R. Cohen

Another very special event was "A Conversation about Colour" on October 31 with eminent Australian sculptor, painter and educator Ron Robertson-Swann, hosted by artist and CSA NSW Division Secretary Aly Indermühle. Ron shared a wealth of fascinating anecdotes and insights, some of which drew quite passionate agreement from the audience. In the words of two participants, Ron, came across as "a talented, humble, good-humoured person" who "conveys his love and work with colour so well".

Our final free webinar for the year was "Colours of Light: An Emotive Exploration" with Melbourne-based designer Ilan El, on Sunday, December 5. The webinar examined Ilan's journey from practicing architecture overseas, through his academic research at RMIT, to his current creative practice and artistic expression.



Ron Robertson-Swann

Our Western Australian Division has continued its series of live events with a viewing on Saturday, October 30 of the 'Castaway Sculpture' event at Rockingham, in which WA Division Secretary Sean Adams had a sculpture, and an end-of-year event with a colour theme at Perth Zoo on Friday, November 26.

### PUBLIC COURSES AND WORKSHOPS BY CSA MEMBERS:

This is a listing of colour-related classes conducted by CSA members that are available to the general public. If you are a current CSA member and you would like to see your public colour-related classes listed here, please let us know! Please use the links to check current availability.

Colour Made Simple (online, on call). Seven courses on colour theory for manufacturing with former AIC President Nick Harkness in association with Professor Stephen Westland, and Dr. Vien Cheung, School of Design, University of Leeds. <https://colour-theory-for-manufacturing.thinkific.com/>

Understanding and Applying Colour (National Art School, online, 4 times/year). Eight 3-hour sessions on: what is a colour?; attributes of colour; colour vision; artists' paints; digital colour; mixing processes; colour and light; and history of colour theories. With CSA President Dr David Briggs. <https://sites.google.com/site/djcbiggs/tmct>



Ilan El

Colour Theory Lecture Series: Beyond "Red, Yellow, Blue" (Sydney Art School, Hornsby). Series of three sessions per term with Dr Jean Pretorius. Check website for updates regarding next dates. <https://sydneyartschool.com.au/painting-classes/art-theory-history-professional-practice#Colour-Theory>

Painting classes (Hamley Studio, Mt Kuring-Gai, Sydney). Various live painting classes and workshops with CSA member Sally Ryan. Resuming soon. <https://www.hamleystudio.com.au/classes-and-workshops>

CPD sessions and webinars (Colour Collective, Sydney). CPD sessions and webinars with CSA member Dr Zena O'Connor including Demystifying Colour, Colour Psychology and Perceived vs Specified Colour. <https://the-colour-collective.com/home#events-workshops>

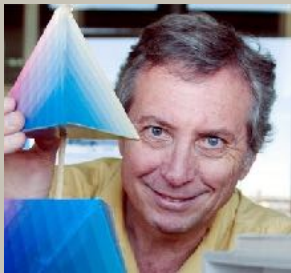
Colourplay workshops and retreats (Sydney and regional NSW). 1- and 2-day colour-focused painting workshops and longer retreats with CSA member Kristine Ballard. <https://www.kristineballard.com/%20workshops/>

Colour & Design Psychology online courses including a five-day mini course, one-day workshops and masterclasses through to a six-month professional colour mentoring programme with CSA Associate Member Karen Haller. <https://karenhaller.com/>

### **David Briggs, *The Dimensions of Colour***

In colour education, colour is usually described as having three attributes or dimensions, most commonly synonyms, more or less, of hue, lightness and chroma. Just three attributes suffice to describe colour as long as we only consider a single mode of colour appearance, such as colours of objects, but other attributes come into play when we must also consider colours of light. The CIE defines six attributes of perceived colour, and their definitions, based on work published in the late 1970's by R. W. G. Hunt, have been essentially stable in the International Lighting Vocabulary from its 1987 edition through to the current edition, published late last year. But despite this very long period of stability of the standard scientific nomenclature, I've observed that the distinctions between these six CIE-defined attributes are often poorly understood even by very experienced colour educators, and so I'd like to share a selection of the illustrations and explanations that I've found useful in communicating these concepts in my courses. <http://www.huevaluechroma.com/1111.php>

## **NEWS FROM OUR MEMBER ORGANISATIONS - MEXICO -- AWARDS**



José Luis Caivano  
Recipient of Premio Mexicano del  
Color AMEXINC 2021

### ***AMEXINC Second International Congress and Fifth Mexican Colour Congress held 24-26 November 2021 Chairs: Georgina Ortiz Hernández, Mónica Cuvelier García***

AIC regular member AMEXINC - Asociación Mexicana de Investigadores del Color (Mexican Association of Colour Researchers) organised online its Second International Congress and Fifth Mexican Colour Congress from 24-26 November 2021. It was the very first time that a colour congress or meeting was held on the theme "Sexo, Color y Erotismo" (Gender, Color and Eroticism).

Actually, as in other Latin languages, the Spanish word "sexo" means both "gender" and "sex". At first, people were completely disconcerted by this specific theme. The technical programme, however, showed that the theme is topical: colour research on skin colour, racism, gender identity, gender expressions, hair colour preferences, cloth colour preferences, attractive colours, colour symbolism, colour and eroticism in literature, film, art, architecture, and interior architecture are just a few subjects dealt with during the congress. <https://amexinc.mx/congreso-en-vivo/>

During the closing ceremony of the congress, José Luis Caivano was awarded the "Premio Mexicano del Color AMEXINC 2021" in recognition of his seminal work as a colour researcher and educator and a promotor of colour research at the international level, and Latin America in particular. ¡ Felicidades José ! Un premio muy merecido que hace honor a tu trayectoria, talento y dedicación de tantos años.

### ***AMEXINC Founding Member and First President Georgina Ortiz Hernández***

Dr. Georgina Ortiz Hernández, born in Mexico City, with Bachelor's, Master's and Doctorate degrees from the Faculty of Psychology of the Universidad Nacional Autónoma de México (UNAM) and a specialisation in communication from the Bologna University in Italy, founded AMEXINC in 2005. In 2007 AMEXINC was accepted as an AIC regular member, and organised the 2014 Interim Meeting "Colors, Culture and Identity: Past, Present and Future" Oaxaca, Mexico. At the AMEXINC General Assembly on November 25, 2021, she handed over the presidency to M.D.H. Mónica Cuvelier García, Professor at Universidad Autónoma de Ciudad Juárez, with Dr. Manuel Elías López Monroy becoming Vice President. Dr. Georgina Ortiz Hernández is now an Honorary Member of the Mexican association. This year she is celebrating 53 years of teaching. Our warmest congratulations on your achievements Georgina and our very best wishes for a bright and colourful future!

*Verena M. Schindler*



Georgina Ortiz Hernández  
celebrates 50 years of teaching in  
2018



## NEWS FROM THE STUDY GROUP ON ENVIRONMENTAL COLOUR DESIGN



The AIC Study Group on Environmental Colour Design (SG ECD) organized a workshop during the 14th AIC Congress in Milan (Italy). We had a wonderful time discussing the theme "The variability of colour in natural, built and sociocultural environments." The programme consisted of nine presentations by SG ECD members:

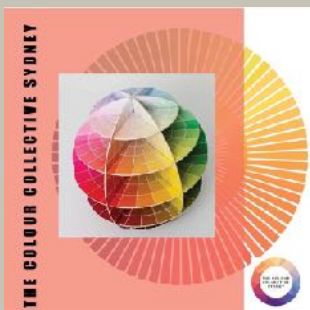
- Zena O'Connor (Sydney, Australia), Identifying and managing the factors that impact variability between specified and perceived colour;
- Monica Kuo (Taipei, Taiwan), East vs. West: How colour is perceived differently in psychological and physical environments of different cultures;
- Pablo Manyé (Brazil), Variability of sociocultural colour associations related to the environment in northeastern Brazil;
- Kazim Hilmi Or (Hamburg, Germany), Colours of face masks used during the Covid-19 pandemic and social messaging;
- Stig Evans (Brighton, United Kingdom), London's largest painting;
- Beichen Yu (Edinburgh, Scotland), The urbanism of colour: A perspective to re-evaluate the use of saturated colours in urban and landscape design;
- Jimena Vanina Odetti (Puerto Vallarta, Mexico), Study of the colors of a tourist city, from the urban cultural construction perspective: The case study of Puerto Vallarta, Jalisco, Mexico;
- Francesca Valan (Milan, Italy), Environmental harmony: new relationships between space and colour;
- Doreen Balabanoff (Toronto, Canada), Observations about the phenomenology of colour in Nature.

A Meeting Report is published in *Color Research and Application*.

Citation:

Verena M. Schindler, Yulia A. Griber (2021) "Meeting report of the Study Group on Environmental Colour Design of the International Colour Association." In: *Color Research and Application*. First published: 12 November 2021, <https://doi.org/10.1002/col.22751>

## INDIVIDUAL MEMBERS - THE COLOR COLLECTIVE SYDNEY (VIA OUR MEMBER ZENA O'CONNER)



### *The Colour Collective Sydney sponsors 2021 DCE Graduate Colour Awards*

The Colour Collective Sydney were proud sponsors of the 2021 DCE (Design Centre Enmore) Graduate Colour Awards. This sponsorship represents an ongoing Colour Collective Sydney initiative of sponsoring colour awards across education and industry, including the Sydney Design School and the Master Painters Association (NSW).

### *Warming Stripes Project, Darlinghurst, Sydney, AUSTRALIA*

Colour Collective Sydney (Zena O'Connor, Geoffrey Gifford and Naomi Shaw) are currently working on a new colour intervention project. This project features Prof. Ed Hawkins 'Warming Stripes' which highlight the impact of climate change and global warming.

<https://zenaoconnor.com.au/colour-interventions-with-purpose/>

## NEWS FROM OUR MEMBER ORGANISATIONS - NORWAY



### *FARGEDAGEN 2021*

Fargedagen 2021 was hosted by the Oslo Planning Department, Norway, and focused on colour in the built environment. Speakers included AIC regulars Kine Angelo (Associate Professor, NTNU Norwegian University of Science and Technology) and Zena O'Connor (The Colour Collective Sydney and Design Research associates) as well as UK artist Stig Evans.

## NEWS FROM OUR MEMBER ORGANISATIONS - INTERNATIONAL ASSOCIATION OF COLOR CONSULTANTS/DESIGNERS (IACC-NA)



The IACC-NA had an eventful year in 2021! We experienced continued online activity with the hope of returning to in-person meetings very soon. The highlight of our year was Color Impact 2021 in June. We were the collaborating association (along with ISCC) in helping to make this conference possible. Below are noted highlights of our year:

### Color Impact 2021-For the Built Environment

- Members Jean Hoskin, Amy Woolf, Ellen Divers, Laura Mercurio, Lindsay Thivierge, and Karen Collins worked hard to represent and contribute to the success of the conference.
- 2020 IACC-NA thesis candidates, Ellen Divers, Sheri Petersen, Karen Collins each presented a short synopsis of their work during the conference.
- Ellen Divers also contributed as a main presenter. Her paper, "Beyond Hue: The Effective Response to Value and Chroma" was also published in *The International Scientific Conference of the Color Society of Russia: Selected Papers. 2021*, pp. 154-159, [http://color-lab.org/files/283/bop\\_rucolor2020\\_with0.pdf](http://color-lab.org/files/283/bop_rucolor2020_with0.pdf)
- In the final session, Jill Pilaroscia provided many thoughtful, scientific examples of perception applied to design. She said she is not just creating a colour design, but "answering a question, solving a problem."

Webinar presentation by Lori Sawaya in February 2021, "The Pieces to the Color Puzzle" was a great overview of the understanding of colour theories and the science behind them.

### Association updates include:

- Two more students completed all four online education seminars this year, with a number of other students working through the program;
- Publishing our quarterly newsletter;
- Research articles to be added to the member's section of our website as are completed;
- A different member is featured on the website every quarter;
- Member profiles with portfolios in the website's "Find a Consultant" section is one of the most important benefits of membership with us;
- Blog posts are available on the website;
- October 15, 2021 launched our first ongoing monthly Zoom social.

## PUBLICATIONS



Ellen C. Carter  
Editor-in-Chief (1990–2021) of the Journal *Color Research and Application*, John Wiley & Sons, Inc., New York, NY.

### *Color Research and Application*

For the 31 years from 1990 until the end of 2021, Ellen C. Carter served as Editor-in-Chief of *Color Research and Application*, previously being a member of the Editorial Board from 1984 to 1989. Founded in 1975, the ISCC announcement of the new journal summarised the objectives of the new journal as follows: "*Color Research and Application* is devoted to the dissemination of knowledge concerning all branches of the science, technology, and practical application of colour in business, art, design, education, and industry." With the first issue appearing in spring 1976, it was initially published four times a year, increasing to six times a year in 1987, and is now the primary journal for papers on colour issues. Congratulations Ellen for your excellent work!

Journal History:

[https://onlinelibrary.wiley.com/page/journal/15206378/homepage/history\\_of\\_cra](https://onlinelibrary.wiley.com/page/journal/15206378/homepage/history_of_cra)

Ellen Campbell Carter holds a PhD in Chemistry from the Rensselaer Polytechnic Institute, Troy, NY, US. She has been a colour science consultant in industry (Konica-Minolta, IBM, Sherwin Williams Company, Kodak, etc.). She has been a member of the Board of Counsellors for the Program of Color Science (PoCS) & Munsell Color Science Laboratory (MCSL), Rochester Institute of Technology's College of Science, since 2014; of the Optical Society of America (OSA), since 1978; of the Detroit Colour Council, since 1997; of the Society for Applied Spectroscopy, since 1998; and of the Society of Sigma Xi, since 1970.

As well, she has been an active member of the Inter-Society Color Council (ISCC) since 1969: ISCC President (1996-98), Vice President (1994-96), Director (1991-94, 2012-2014), and Chairman of Materials for Instrument Calibration Committee (1974-80).

She has been honoured with the ISCC Nickerson Service Award 2003, the ASTM E-12 Fred W. Billmeyer Jr. Award 2009, the ISCC Honorary Membership in 2016, and the Inter-Society Color Council I.H. Godlove Award 2017.

*Verena M. Schindler*

### **CAIVANO José Luis, LOPEZ Mabel Amanda (Eds.).**

#### **2021. *Perspectivas del Color*.**

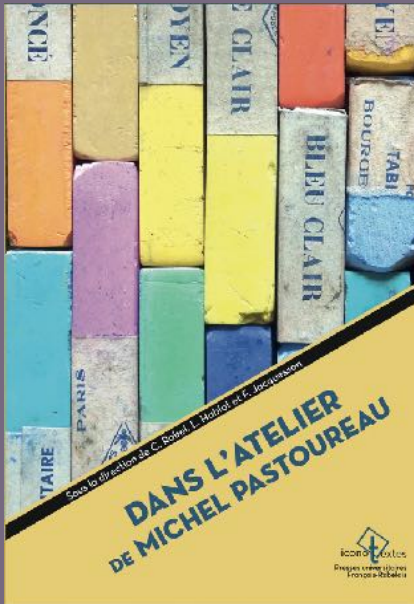
Florida (Buenos Aires Province): Wolkowicz Editores; Buenos Aires: Grupo Argentino del Color (GAC). ISBN 978-987-4117-72-4 (Spanish), 406 pages, <https://wolkowiczeditores.mitiendanube.com/productos/perspectivas-del-color/>

The book brings together original research papers, didactic experiences, applications and analytical essays in various fields of color study: urban and architectural morphology, landscape, graphic design, visual communication, signage, painting, ceramics, the arts in general, teaching, restoration, food technology, chemistry and engineering.

Authors from Argentina, Brazil, Mexico and Italy share their investigations on colour from different, often interdisciplinary, points of view.



## PUBLICATIONS

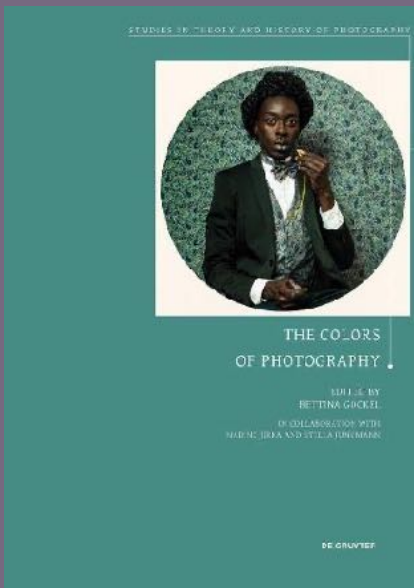


**RABEL Claudia, HABLLOT Laurent, JACQUESSON François (Eds.). 2021. *Dans l'atelier de Michel Pastoureau*.**

Tours: Presses universitaires François-Rabelais (Collection Iconotextes). ISBN 978-2-86906-788-2 (French), 416 pages, <https://pufr-editions.fr>.

Michel Pastoureau is an historian and a specialist in heraldry and medieval emblems. He is also a renowned authority on the history of colour and has published beautifully illustrated books on the history of Black, Blue, Red, Green, and Yellow, which have been translated into many languages.

This book is a tribute to Michel Pastoureau (born 1947) by some of his friends, colleagues and students. Each of them selected an image and wrote a short text. The result is a kaleidoscope of eighty-four contributions and a fascinating "cabinet of curiosities" that reflects the extraordinary variety of subjects related to Michel Pastoureau's fields of research (coats of arms, emblems, illuminations, seals, colours, animals, and other even more surprising themes).



**GOCKEL Bettina (Ed.) 2020. *The Colors of Photography***  
**In collaboration with: Nadine Jirka and Stella Jungmann**

Berlin, Boston: Walter De Gruyter (Volume 10 in the series Studies in Theory and History of Photography). ISBN 978-3-11-065028-0 ; e-ISBN (PDF) 978-3-11-066148-4 (English), 333 pages  
<https://doi.org/10.1515/9783110661484>

The Colors of Photography aims to provide a deeper understanding of what colour is in the field of photography. Until today, colour photography has marked the "here and now," while black and white photographs have been linked to our image of history and have formed our collective memory. However, such general dichotomies start to crumble when considering the aesthetic, cultural, and political complexity of colour in photography.

With essays by Charlotte Cotton, Bettina Gockel, Tanya Sheehan, Blake Stimson, Kim Timby, Kelley Wilder, Deborah Willis. Photographic contributions by Hans Danuser and Raymond Meier.



## EXHIBITIONS



***Kristina Schuldt Brutal Paradise***  
***Drents Museum, Assen, Netherlands***  
***October 8, 2021 – February 13, 2022***

In the current solo exhibition *Brutal Paradise*, Drents Museum Assen presents thirty paintings by Kristina Schuldt. This is her first museum survey exhibition abroad. Schuldt's works are placed in dialogue with a series of five presentations of strong artists such as Frida Kahlo: *Viva la Frida! – Life and Art of Frida Kahlo* can be seen from October 8, 2021 to March 27, 2022.

Kristina Schuldt (born 1982, in Moscow, lives and works in Leipzig) is one of the most important artists of her generation. Her paintings are colourful and dynamic, full of people and plants that look round and shiny like metal pipes. They show women in flowing poses, strongly reminiscent of cubism or surrealism of the last century. It is therefore not surprising that Fernand Léger is an artistic model for her. At the same time, her work has something playful. For example, platform boots, vintage miniskirts and smartphones, among other things, can be found in Schuldt's paintings, bringing her work into her own time. "I like it when these objects from different areas collide," the artist says.

<https://drentsmuseum.nl/en/exhibitions>



***Heard Museum, Phoenix, Arizona***  
***Toward the Morning Sun: Navajo Pictorial Textiles from the Jean-Paul and Rebecca Valette Collection, through February 13, 2022***

Jean-Paul and Rebecca M. Valette spent nearly forty years collecting and researching the origins and history of the Navajo pictorial textiles including valuable biographical information about the weavers. This exhibition exemplifies their acclaimed collection of textiles, a 2018 gift to the museum, primarily woven during the first three decades of the 20th century.

<https://heard.org/exhibits/toward-the-morning-sun/>



***Fowler Museum at UCLA, Los Angeles, California***  
***Aboriginal Screen-Printed Textiles from Australia's Top End***  
***December 5, 2021 – June 19, 2022***

This exhibition journeys around northern Australia, known as the "Top End," exploring more than 60 distinctive, screen-printed textiles made by 39 contemporary artists at five Aboriginal-owned art centres. Over the past 50 years, these textiles have become a vibrant medium for Indigenous expression, continuing traditional knowledge and reinvigorating its visual manifestations, all while providing artists with a sustainable livelihood. The exhibition pays tribute to the resilience and beauty of Aboriginal Australia and reminds us of the enduring connections between peoples and their lands.

<https://www.fowler.ucla.edu/exhibitions/aboriginal-screen-printed/>

## EXHIBITIONS



### **MoMA Sophie Taeuber-Arp: Living Abstraction** **November 21, 2021 - March 12, 2022**

The Museum of Modern Art announces Sophie Taeuber-Arp: Living Abstraction, the first major US exhibition in 40 years to survey this multifaceted abstract artist's innovative and wide-ranging body of work. The exhibition explores the artist's interdisciplinary approach to abstraction through some 300 works assembled from over 50 public and private collections in Europe and the US, including textiles, beadwork, polychrome marionettes, architectural and interior designs, stained glass windows, works on paper, paintings, and relief sculptures. Prior to its presentation at MoMA, the exhibition was shown at the Kunstmuseum Basel (March 19 - June 20, 2021) in Taeuber-Arp's native Switzerland, and at Tate Modern in London (July 13 - October 17, 2021), where it was the first-ever retrospective of the artist in the United Kingdom.

<https://www.moma.org>



### **MoMA Joseph E. Yoakum: What I Saw** **November 21, 2021 - March 19, 2022**

The Museum of Modern Art announces Joseph E. Yoakum: What I Saw, the first major museum exhibition of the artist's work in over 25 years. At age 71, Joseph Yoakum (1891-1972) began making idiosyncratic, poetic landscape drawings of the places he had traveled over the course of his life, creating some 2,000 extraordinary works that bear little resemblance to the world we know. This exhibition is composed of over 100 of those works, predominantly from the collections of the artists in Chicago who knew him and admired and supported his work.



### **The Art Institute of Chicago** **Morris and Company: The Business of Beauty** **December 18, 2021 - June 13, 2022**

Artist, designer, and writer William Morris (1838-1896) founded Morris & Co. in 1861, with deep philosophical objectives to elevate handmade objects over mass-produced goods and to bring art into the everyday. By doing so, he could bring beauty back into the lives of consumers through thoughtful designs inspired from the natural world. The company quickly became regarded for the objects it designed and made for home interiors—handmade wallpapers, textiles, and furniture. Accordingly, they experimented with natural dye recipes, revived hand-printing methods, and reintroduced hand weaving for woven wool and silk textiles as well as pictorial tapestries. This exhibition explores Morris & Co's design tenets and techniques as well as Chicago area sites where the work of Morris and his contemporaries appeared.

<https://www.artic.edu/exhibitions/9325/morris-and-company-the-business-of-beauty>



## EXHIBITIONS

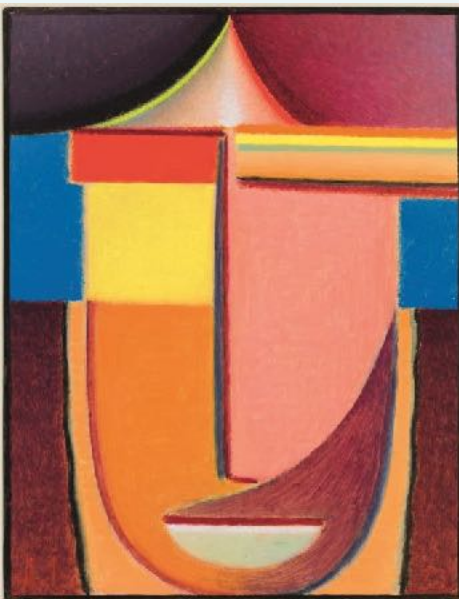


**SWISS NATIONAL MUSEUM in ZURICH Colours revealed by light:  
Stained glass from the 13th century to the 21st century  
July 16, 2021 – April 3, 2022**

The profusion of motifs and radiant luminosity of stained glass has captivated viewers for centuries. The Swiss National Museum in Zurich, Switzerland, owns one of the world's largest collections of stained glass works. The exhibition in the Hall of Fame showcases the art of stained glasswork in Switzerland in all its richly hued facets, from its origins in the Middle Ages through the Renaissance to the modern stained-glass art of the present day. Photos and old tools from the Halter stained-glass studio in Bern give an insight into the elaborate technique involved in this handcraft, which has remained almost unchanged for around 800 years.

Caption: A halberdier in mi-parti and an elegantly dressed lady with a bag and a cutlery case on a cord support the coat of arms of Peter Mutarda. Heraldic panel, around 1554. Origin: Council Hall of the Town Hall in Le Landeron, painted coloured glass, © Swiss National Museum.

<https://www.landesmuseum.ch/en>



**LA PISCINE in ROUBAIX Alexej von Jawlensky (1864–1941):  
La promesse du visage November 21, 2021 – February 6, 2022**

La Piscine – Musée d'art et d'industrie André Diligent, Roubaix, France

<https://www.roubaix-lapiscine.com/en/exhibitions/coming-up/alexej-jawlensky-1864-1941-the-promise-of-the-face/>

Alexej von Jawlensky was a Russian painter and a companion of Wassily Kandinsky in Munich during the first decade of the twentieth century. As an artist he explores the boundaries between expressionism and fauvism, between figuration and abstraction. Scientific curator: Itzhak Golderg; General Curator: Bruno Gaudichon; Scenography: Cédric Guerlus - Going Design; Catalog published on the occasion of the exhibition by Gallimard. Co-produced with the Mapfre Foundation in Madrid and the Cantini Museum in Marseille, this exhibition has received the support of the Hauts-de-France Region and the European Metropolis of Lille. It benefits from an exceptional sponsorship from CIC Nord Ouest, a faithful partner of La Piscine museum. The scenography is realised thanks to the generous support of Couleurs de Tollens paintings.

Caption: Alexej von Jawlensky, Abstract Head: Karma, 1933. Oil on cardboard, glued on a wood board. Private Collection.



**Dubai World Expo  
October 1, 2021 – March 31, 2022**

Kaynemaile's 'WonderCool' shade canopy will greet an expected 25 million visitors to the Dubai World Expo.

<https://csengineermag.com/kaynemailes-wondercool-greets-visitors-at-dubai-world-expo-2020-2/>

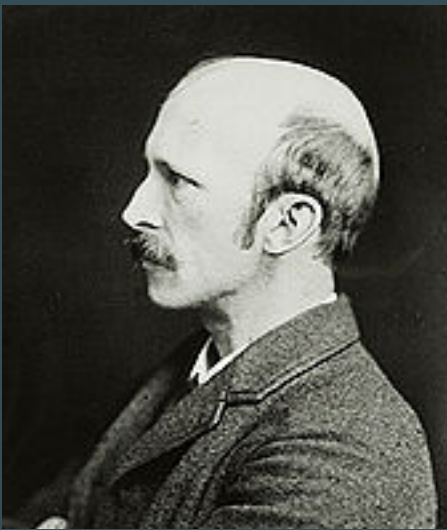
## PUBLICATIONS: ROY OSBORNE'S NEW LOOK AT OLD BOOKS

*Roy Osborne re-assesses a historical book in order to show that many works on colour have not lost their validity, even in current colour research*

### ***Concealing-coloration in the Animal Kingdom***

(published in New York in 1909; republished 1918).

The book's author is given as Gerald Thayer, though its content is based on



Abbott Handerson Thayer, c. 1890



The model on the left is camouflaged and visible;  
The model on the right is countershaded and invisible.



Angel (The artist's daughter), 1887  
(Smithsonian American Art Museum)

observations and deductions by his father, the artist and naturalist Abbott Handerson Thayer (1849-1921). The elder Thayer grew up in New Hampshire and, after studying in New York and Paris, established a thriving portrait studio in New York. He later returned to rural New Hampshire and intensified his interest in studying animals in their natural habitat. The book, subtitled 'An Exposition of the Laws of Disguise through Color and Pattern,' took seven years to prepare, and represents original and valuable contributions to the study of animals' and insects' colouring and markings. Abbott Thayer rejected Darwin's theory of sexual selection, and zoologists' theories in general, proposing instead that the evolutionary purpose of all animal coloration was to minimise figure-ground separation, for example by 'countershading', by which the roundness of forms is made less evident by colouring that opposes shadows cast by sunlight. This effect, known today as Thayer's Law, accounted for the pale undersides of many animals. Long before World War 1 (when the French term camouflage was adopted), Thayer advocated concealment in military contexts, as later did British artists Norman Wilkinson (adopting Thayer's term 'dazzle') and Solomon Joseph Solomon, whose booklet, *Strategic Camouflage*, was published in 1920. Thayer's recommendation to the British War Office that disruptively patterned battledress replace plain khaki was rejected at that time, but eventually adopted by the British Army in the 1960s.



## UPCOMING CONFERENCES



### *Colour Photography and Film: sharing knowledge of analysis, preservation, conservation, migration of analogue and digital materials, Florence, September 2022*

The Gruppo del Colore – Associazione Italiana del Colore (Color Group – Italian Color Association, <https://gruppodelcolore.org/?lang=en>), in collaboration with the Istituto di Fisica Applicata “Nello Carrara” of the Consiglio Nazionale delle Ricerche (IFAC-CNR) and the Opificio delle Pietre Dure (OPD), organises the 2nd edition of “Colour Photography and Film: sharing knowledge of analysis, preservation, conservation, migration of analogue and digital materials” international conference in Florence (Italy) in September 2022 (tentatively, September Monday 12th and Tuesday 13th 2022).

The first edition of the conference held at the end of March 2021 and organised online due to the Covid-19 pandemic was a great success thanks to the approximately 140 participants and the contribution of 50 presentations. The first conference made us understand the importance of such an event and the strength of uniting the worlds of the restoration of photographic materials with that of film and at the same time the analogue and digital world. The works presented have been collected in the proceedings and in the first volume of the Research Culture and Science Books series (RCASB), which is free for readers and authors, and available at <https://www.rcasb.eu/index.php/RCASB/catalog>.

At the request of many colleagues, it was decided to organise the second edition in mixed mode (virtual and physical participation) over two days in mid-September 2022 in Florence.

Contributors are welcome to outline and share their recent research and experiences on analogue and digital colour materials. Highlights on history, preservation, conservation, restoration, digital migration of colour photographs and film are particularly welcomed.

The first call will be sent to all the GdC – Associazione Italiana Colore by mid-December 2021 and it can be seen and download at <https://www.gruppodelcolore.org/la-conferenza/>.

### *XVII CONFERENZA DEL COLORE, Florence, 15-16 September 2022*

In the same week, September 15-16, 2021, in the identical location of the Colour Photography and Film Conference and with the same format (mixed mode) will take place the XVII CONFERENZA DEL COLORE. Since 1995, GdC-Associazione Italiana Colore organises its annual meeting, “Conferenza del Colore”. In 2013, it became international with parallel sessions in Italian and English. The last one was organised in collaboration with the colleagues of the University of Bergamo in September 2020, which was held online. It was jointly organised with the Associação Portuguesa da Cor, the COLOURSPOT (Swedish Colour Centre Foundation), the Comité del Color (Sociedad Española de Óptica), and the Deutsche Farbwissenschaftliche Gesellschaft. More information about the event will be found on our website <https://www.gruppodelcolore.org>.



### *Farbe, Raum und Gesundheit (Colour, Space and Health), International Conference Berlin, GERMANY 26-27 August 2022*

Venue: Humboldt-Universität, Berlin

Organization: Deutsches Farbenzentrum e. V. – Zentralinstitut für Farbe in Wissenschaft und Gestaltung  
<http://deutsches-farbenzentrum.de>



### *PHI 8th International Multidisciplinary Congress "Time and Space" [and Colour] 6-8 October 2022*

Faculty of Architecture, University of Porto (FA-UP), Porto, Portugal

Abstract Submission Deadline: 31 March 2022

<http://phi.fa.ulisboa.pt/index.php/en/project-phi>

## UPCOMING CONFERENCES



### **AIC 2022 "SENSING COLOUR" – CALL FOR PAPERS**

**Deadline: January 7, 2022**

#### **ABSTRACT SUBMISSION:**

Authors are invited to submit an 800-word abstract (plus References) for review.

All submissions must be in English and describe original work that has not been published or submitted elsewhere. Using a double-blind review process, the Program Review Committee will consider all abstracts. The deadline for submission is Friday, January 7, 2022.

All eligible student submissions will be automatically considered for an AIC Student Award.

*The CRSC encourages and prioritises submissions from equity deserving communities including Indigenous, Black, People of Colour, LGBTQ2SIA and communities with diverse abilities.*

<https://www.aic2022.org/authors/call-for-papers/>

### **AIC 2022 "SENSING COLOUR" – CALL FOR WORKSHOPS**

**Deadline for Proposals: February 15, 2022**

Acceptance Notification: March 15, 2022

The AIC Organising Committee invites proposals for in-person and online Workshops to be held on Monday or Friday, June 13 or 17, 2022, in affiliation with AIC 2022 Toronto 'Sensing Colour' (June 14-16, 2022)

The language of the conference will be English, but proposals for workshops to be presented in English or French will be considered.

<https://www.aic2022.org/authors/call-for-workshops/>

### **AIC STUDY GROUPS at AIC 2022 "SENSING COLOUR"**

The AIC has a diverse range of Colour-focussed Study Groups, and has recently updated its website with more information on the Study Groups. Consider joining one if you are interested!

<https://aic-color.org/study-groups>

### **SPECIAL JAIC EDITION ON COLOUR THEORY**

The AIC will be publishing a special issue of the Journal of AIC (JAIC) on Colour Theory at the end of 2022. Papers presented on this topic at AIC 2022 can later be submitted to JAIC (submission deadline is August 19, 2022). More information is available here.

<https://aic-color.org/journal-issues>

### **KALEIDOSCOPE SERIES:**

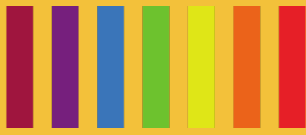
January 26, 2022: A Biologically Inspired Neural Network for Color Representation by Paria Mehrani  
<https://www.colourresearch.org/crsc-events/2022/1/26/a-biologically-inspired-neural-network-for-color-representation-by-paria-mehrani>

February 23, 2022 (Date TBC): Colour in the Work of Jason Baerg, Visual artist and media producer  
<https://www.colourresearch.org/crsc-events/2022/2/23/colour-in-the-work-of-jason-baerg>

March 21, 2022: CRSC AGM and Keynote Speaker, Jennifer Veitch, Principal Research Officer, National Research Council of Canada NRC, President-Elect of the Commission Internationale de l'Eclairage CIE



## LECTURES | SEMINARS



associação portuguesa da cor

### *"A Arte da Cura"*

DOCUMENTARY SERIES | 13 EPISODES 2nd Dec. – "A Arte da Cura" by RTP 2

Date Every Thursday, from December 2, 2021, to February 2022

Time 10:50 pm

"A Arte da Cura" is a 13-episode documentary series, presented and produced by Rita Saldanha, which portrays the evolution of medicine in Portugal, telling the history of medicine from the economic and political perspective of each period. This evolution results from the great contributions that, in time and space, were made by various civilisations, which also evolved with it.

With about 30 minutes of duration per episode, performed during a pandemic, it explores not only the history of medicine, but crosses paths with art, science, politics and our history, trying to reach different audiences.

Some APCor associates participated in the series : Manuel Pais Clemente, João Pernão, Zélia Simões.

**NEXT AIC NEWSLETTER  
DEADLINE**

# FEBRUARY 20, 2022

## FOCUS ON: ROBERT HIRSCHLER



Within large organisations like the AIC, dedicated individuals like Robert Hirschler keep the international colour community alive and afloat. It is essential to have people in our organisation who are driven by the love of colour and who with their experience and wisdom provide an anchor of stability. When I began to participate in AIC conferences, I soon noticed an always well-mannered man who garnered a great deal of respect from meeting participants -- someone who asked pointed questions in the discussion following paper presentations and who could offer advice in complex scientific issues in a modest, soft spoken manner. Specifically, I remember two keynote lectures, one at an ICA meeting in Belgium where Robert Hirschler was able to communicate the rather complex topic of colour science to non-scientists and pointed out common fallacies in colour pedagogics that still linger in everyday teaching of art and design, and another keynote at the Buenos Aires AIC conference, where he showed that the reason for the impressions created by Neo-Impressionist paintings are the result of the simultaneous contrast effect of neighbouring colours when observed up close and the optical mixing of the same when observed from a distance. Who is this polyglot, who on the one hand has a deep understanding of the scientific foundations of colour perception and on the other shows a strong affinity for color in the arts and is dedicated to improve the role of colour pedagogic?

Robert Hirschler was born in Budapest, Hungary. He graduated at the Technical University of this city in chemical engineering/textile chemistry. Working with textiles almost always involves colour in one form or another, be it from the composition of yarns made from differently coloured threads to the design of fabrics or the handling of intricate dyeing processes. In 1966 he became interested in colorimetry, during the fourth year of the Chemical Engineering (textiles) course at the Technical University of Budapest. ICI (Imperial Chemical Industries) had recently launched their IMP – Instrumental Match Prediction (Computerised Colorant Formulation) system, which was to revolutionise the way dyeing (and later printing) recipes were developed in the textile industry. Colour measurement was made on a Hilger and Watts J40 tristimulus instrument, and the XYZ tristimulus values were sent (by telex) to the ICI Dyestuffs Division in Manchester, UK. They returned a formulation, which was then dyed in the laboratory, corrected for the substrate colour (strongly yellowish in case of some wool fabrics). The measurement data of this first dyeing were sent back to ICI, and they provided a computer calculated correction.





## CONTACT

AIC is an international association that is comprised of 28 colour associations from around the world. In addition, our membership includes other related colour associations and individual members as well. Our annual conferences and meetings have become the event of the year where the multidisciplinary colour community meets to exchange knowledge and research.

The AIC newsletter is published quarterly.

Contact for Letters to the Editor and Inquiries: [newsletter \[at\] aic-color.org](mailto:newsletter@aic-color.org)

Next Newsletter Deadline: February 20, 2021