



ANNUAL REVIEW 2024

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Edited by **Maurizio Rossi**
& **Ingrid Calvo Ivanovic**

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**International Colour Association - Multidisciplinary Association in the field of Colour,
Multidisziplinäre Vereinigung auf dem Gebiet der Farben, Abkürzung AIC**

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If you would like to learn more about AIC please go to: www.aic-color.org or 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.

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ANNUAL REVIEW EDITORS' NOTE

BY

MAURIZIO ROSSI - POLITECNICO DI MILANO, ITALY

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ANNUAL REVIEW EDITORS' NOTE

BY
MAURIZIO ROSSI -
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COLOR WORLDWIDE: A REVIEW OF 2024 TYPES OF RESEARCH, APPLICATIONS, EDUCATION, SOCIAL IMPACT, AND CULTURE

Abstract

This contribution offers a reasoned overview of the activities carried out during 2024 in all areas of research, application, education, dissemination, social and cultural, of the associations and study groups that belong to the AIC - International Colour Association. Thematic areas organize the contents to provide a transversal vision of the main areas of research, application, education, and dissemination related to color. The approach adopted is descriptive and designed for a community of teachers and researchers active in multiple disciplinary fields involving color. The richness and variety of the activities reported by the associations and study groups testify to the vitality of an international network developed worldwide, engaged in multiple directions: from scientific research to education, from design applications to artistic experimentation, up to social and cultural impact. The year 2024 also saw the celebration of significant anniversaries, the publication of scientific and dissemination volumes, the organization of international and national conferences, and active participation in the AIC2024 Midterm Meeting in Sao Paulo, Brazil.

1. Scientific and technological research

During 2024, many AIC member associations conducted and presented scientific research on color, ranging from theoretical foundations to applications in imaging, perception, conservation, and the built environment. In China, the Color Association of China coordinated

the seminar “*Color Science and Image Technology*”, with interventions on the topics of HDR imaging, spectral rendering models, and ISP technologies, also presenting studies related to the digital conservation of historical sites, such as the Yungang caves, through three-dimensional reconstructions and dynamic lighting strategies (CAC, 2024). While in Italy, the lighting research group of the Università Federico II di Napoli explored the effects of colored light radiation on fungal proliferation on painted surfaces and conducted experimental studies on the influence of color partitions in work environments on visual comfort indices and circadian activation (GdC-Italy, 2024). The Asociación Chilena del Color has coordinated archaeometric studies on mineral pigments in pre-Columbian cultures, with a particular focus on the Inca period, documenting the ritual and symbolic functions of color in religious and funerary contexts (ACC-Chile, 2024). Also, in the food and environmental fields, the Associação Portuguesa da Cor has reported research on the influence of packaging color on the perception of organic products and the ecological impact of color in sustainable housing projects (APCor, 2024).

In Germany, the Deutsche Farbwissenschaftliche Gesellschaft celebrated its fiftieth anniversary with a conference focused on chromatic metrology, proposing an innovative approach to color measurement based on the responses of visual cones, in line with recent developments of the CIE (DfwG, 2024). The Color Science Association of Japan presented advanced research in metamerism and appearance modeling in fluorescent materials, some of which were awarded during the annual meeting (CSAJ, 2024). In parallel, in Spain, Juan Serra (Universitat Politècnica de València) conducted a study on the perception of spatial dimension in virtual environments with different color schemes, demonstrating the effectiveness of virtual reality as a tool for psychophysical analyses on volume perception (AIC-Spain, 2024) (Serra, Abebe, & Murdoch, 2024).

2. Applications of color in art, design, and architecture

Design and artistic applications of color were a central focus of the 2024 activities, showing how color is a powerful tool for expression, communication, and identity in material and digital contexts.

Rune & Berg Design, Finland, received the Iris Award for the innovative use of color in the design of educational and working environments, highlighting the role of color in building inclusive and inspiring environments (SVY, 2024). The Swedish Colour Centre Foundation celebrated ten years of the “*Prisad Färg / Awarded Colour*” competition, awarding young designers and artists who explored the relationship between color, folklore, symbolic graphics, and sustainability through techniques such as vegetal dyeing and textile composition (SCF, 2024).

Activities at the Centre Français de la Couleur included artistic interventions with natural pigments, exhibitions on the symbolic representation of color, and participatory performances related to gender and identity (CFC, 2024). Of particular importance was the reflection on color in contemporary queer culture, developed through workshops, round tables, and publications. In Portugal, APCor has initiated the publication of volumes on *Colour: Health, Wellbeing and Comfort*, aimed at exploring the role of color in improving the quality of life, in the architectural, therapeutic and environmental fields (APCor, 2024). The Pro Colore Association in Switzerland proposed experiential events in visual design, interior architecture, and public communication. Among these, the workshops on using color in multisensory contexts and orientation for the visually impaired demonstrated a strong commitment to accessibility and inclusion (ProColore, 2024).

The GdC-Associazione Italiana Colore promoted initiatives ranging from historical research to contemporary innovation: urban color design

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workshops, CMF (Color, Material, Finish) studies in the furniture sector, and interdisciplinary projects such as *“Color for Peace”*, in which color is used as a symbolic mediator between aesthetics and historical memory (GdC-Italy, 2024). In Norway, FORUM FARGE presented projects that combine color and architecture in a social way (FORUM FARGE, 2024), while in Belgium, ICA-Belgium supported activities in urban art, co-design, and participatory color design in public spaces (ICA-Belgium, 2024).

3. Education, training, and color literacy

Color education has been at the center of the activities of many associations through training courses, dissemination initiatives, and school and professional projects, both in person and online.

One of the leading international projects is the Colour Literacy Project (CLP), supported by ISCC-USA. The CLP has published open-access resources for teaching color as a meta-discipline and has organized thematic forums in 2024 on topics such as *“Color in Context”*, *“Interaction of Colour and Light”*, *“Color through Time”* and *“Color in Cultural Contexts”* (ISCC, 2024).

In Finland, the *“Color Pedagogy 2030”* seminar brought together teachers, researchers, and practitioners to discuss new approaches to teaching color, focusing on the digital transition and integrating theory and practice (SVY, 2024). In addition, seven doctoral

students active at Finnish universities have included color in their research projects. While in Japan, the CSAJ organized a *“Color Science Tutorial”* for high school students and awarded young researchers at the annual meeting for advanced studies on the vision and appearance of materials (CSAJ, 2024). The *“Color and Lighting Technology”* symposium in Taiwan included talks on art education and color pedagogy in design; the iPAS certification in Color Planning and Color Engineering trained over 10,000 professionals in seven years. The 2024 national symposium included sessions on teaching color and light in creative and technical contexts (CAT, 2024). In Sweden, the *“Young Color Power”* project created a network of teachers and designers who promoted workshops on using color in teaching and craft experimentation, including inlay and natural surfaces (SCF, 2024). In Norway and Canada, color education has been the focus of public events, seminars, and museum activities, aiming to strengthen critical knowledge and interest in color among young people and the general public (FORUM FARGE, 2024; CRSC, 2024).

4. Events, conferences and seminars

During 2024, Regular Member associations organized and participated in numerous events, conferences, and seminars, contributing to the diffusion of color culture in scientific, educational, and professional contexts. In the UK, the Colour Group (GB) organized the symposium *“Colour in Film”* in collaboration with

universities, film archives, and the British Film Institute, addressing issues of restoration, perception, and color reproduction in audiovisual media (CGGB, 2024). While in Italy, the GdC-Associazione Italiana Colore promoted the international conference “*Color Photography and Film: Sharing Knowledge of Analysis, Preservation, Conservation, Migration of Analogue and Digital Materials*” in Amsterdam, together with European universities, with 90 participants, in person and online, attendance remained consistent with previous editions, which collectively hosted around 140 attendees, and organized the “*XIX CdC Color Conference 2024*” in Florence, with 52 papers distributed in six thematic sessions (GdC-Italy, 2024).

In Germany, the DfwG held the “*Stadt Land Farbe*” conference with over 180 participants dedicated to color in urban and rural spaces. The program included presentations on environmental design, contextual perception, and color strategies in territorial development (DfwG, 2024). Also in Switzerland, Pro Colore organized six “*Museum Days*” in collaboration with cultural institutions and museums, including the Kunsthaus Zürich and the Museum für Gestaltung, dedicated to color in the history of art, design, and perception (ProColore, 2024).

The XIV National Congress of Color took place in Spain, with contributions from universities, industries, and research centers. The topics covered included spectral imaging, visual psychophysics, multisensory design, and educational strategies (AIC-Spain, 2024). While in Portugal, APCor celebrated International Colour Day with a public event at CIAPS. The Swedish Colour Centre Foundation celebrated its 60th anniversary with exhibitions, meetings, and artistic activities (APCor, 2024; SCF, 2024). During the AIC2024 Midterm Meeting in São Paulo, Brazil, many associations and study groups presented scientific contributions, posters, thematic symposia, and promotional activities. In particular, the Colour Association of Taiwan promoted the AIC

Congress 2025, scheduled in Taipei, with materials and presentations during the event (CAT, 2024).

5. Awards, recognitions and association activities

Numerous awards, recognitions, and institutional initiatives have accompanied the activities of the AIC associations and study groups in 2024, valorizing established figures and new generations of professionals. In many countries, including Belgium, Portugal, Canada, and Brazil, the associations have continued their association activities with annual assemblies, newsletter publications, collaborative workshops, and strengthening relationships with institutional partners and industrial sponsors. In Switzerland, the “*pro colore GA*” subscription has been introduced, which allows members free access to all annual events (ProColore, 2024).

The ISCC has awarded the Macbeth Award to Leslie Harrington (AIC Past-President) and Anat Lechner for the HueData project, a data-driven color strategy and analysis platform. The Nickerson Service Award went to Rachel Schwen for her multi-year organizational contribution (ISCC, 2024). In Italy, the “*Premio del Colore*” was awarded to Valerio Adami, an artist known for the symbolic and narrative power of color. Prof. Maurizio Rossi (President AIC) received the “*Italian Knowledge Leader 2024*” award for his scientific and popular activity in the fields of color and light (GdC-Italy, 2024).

In Japan, the CSAJ awarded young researchers for studies on metamerism, material appearance, and color perception, while in Germany, academic theses on brilliance phenomena and the psychophysical response to colored light were awarded (CSAJ, 2024; DfwG, 2024). While in Sweden, the tenth edition of the “*Awarded Colour*” competition was celebrated with an exhibition and a participatory performance by artist William Wahlström, who transformed colored footprints into collective works (SCF, 2024).

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6. Social, cultural, and environmental impact of color

Many projects in 2024 highlighted the importance of color as a tool for social inclusion, ecological sustainability, and cultural valorization.

The “*Latin America in Color*” project involved children in vulnerable conditions in creating color catalogues starting from waste materials in Chile. The aim was to promote cultural identity and ecological awareness through visual experience. Also in Chile, “*Los Ríos in Colours*” produced a color mapping of the country’s south, integrating environmental observations, community art, and territorial data, with the support of universities and municipalities (ACC-Chile, 2024).

In France, the CFC promoted activities related to the semiotics of color in queer representation (Bideaux, 2024) through exhibitions, publications, and artistic talks (CFC, 2024). While in Switzerland, the workshop “*Colour, Material and Visual Impairment*” explored the use of color in environments for the visually impaired, involving users and designers (ProColore, 2024). In Portugal, color has been central to projects on environmental comfort and chromatic sustainability in the healthcare and social sectors (APCor, 2024). In Norway, events and workshops have explored color as an element of community cohesion (FORUM FARGE, 2024), while in Canada, the CRSC has kept active its dissemination initiatives related to color in environmental psychology and mental health; CRSC, 2024).

7. AIC Study Group Activities

The six AIC Study Groups have had an eventful and productive year in 2024, engaging in diverse initiatives that have enriched the study and application of colour across multiple disciplines. Each group has contributed significantly to advancing research, education, and practical applications in their respective fields.

The AIC Study Group on Arts and Design (SG AD) organized several key events, including a workshop during the AIC 2024 Meeting in São Paulo, Brazil. A major focus was placed on integrating synaesthesia into colour selection and artistic expression, offering children a transformative experience that connected sensory perception with creativity. These initiatives aimed to explore how sensory perception influences artistic decision-making and how colour interactions shape visual communication. Beyond workshops, SG AD is planning to host a series of online forums featuring global speakers exploring state-of-the-art methods in analysing historical painting techniques, with the first forum planned for International Colour Day 2025, in collaboration with the Colour Society of Australia. Additionally, in partnership with the Portuguese Colour Association and the Colour and Light Research Group, SG AD prepared for the 20th Anniversary celebration of the Colour Lab-Lisbon School of Architecture, further strengthening interdisciplinary research and collaboration. The group also expanded its research focus on the intersection of digital tools and traditional

artistic media, offering new insights into contemporary artistic practices.

The AIC Study Group on Colour Education (SGCE) focused extensively on the Colour Literacy Project, which progressed into its second phase of beta-testing. This initiative involved partner schools across the UK, China, and the US, expanding resources and exercises for colour education. With an emphasis on accessibility and inclusivity, the project sought to develop innovative teaching tools that cater to a diverse range of learning styles. SGCE also hosted four Colour Literacy Forums throughout the year, covering a range of topics from the historical significance of colour to its interaction with light and its societal roles in identity and gender. These forums brought together experts from various disciplines to engage in dynamic discussions, furthering the group's mission of promoting comprehensive colour literacy. The group's participation in the AIC Mid-Term Meeting in São Paulo was also notable, featuring paper presentations and an interactive game session that reinforced the importance of hands-on learning in colour education. Looking ahead, SGCE aims to integrate new digital resources and online platforms to reach a wider audience and enhance the effectiveness of its educational initiatives.

The AIC Study Group on Colour Vision and Psychophysics (SG CVP) explored fundamental aspects of colour perception, particularly in the context of observer metamerism and wide-gamut colour displays. This issue, which arises when variations in individual cone spectral sensitivities lead to perceptual differences in displayed colours, was the focus of a study presented at the ICVS 2024 conference in Slovenia. The research highlighted how colour-matching tasks reveal perceptual discrepancies in individuals with anomalous trichromacy, shedding light on the challenges posed by modern display technologies. The study group continued its commitment to knowledge dissemination

by maintaining its homepage and preparing to launch a new website to facilitate broader engagement within the scientific community. Additionally, SG CVP expanded its focus to examine the effects of ambient lighting conditions on colour perception, investigating how environmental factors influence visual processing and perception accuracy.

The AIC Study Group on Environmental Colour Design (SG ECD) explored the role of colour in urban landscapes through a seminar titled "*Colourful Landscape/Vibrant City*." Bringing together experts in architecture, landscape design, and digital aesthetics, the event examined the historical and contemporary use of colour in urban settings. Discussions provided critical analysis of how colour has been applied in landscape architecture over the centuries, as well as practical applications of heritage and contemporary colour palettes to enhance urban aesthetics. Additionally, the growing trend of bold, saturated colours in urban spaces was analysed, with particular attention to the influence of social media and global branding strategies. The study group's meeting in São Paulo also facilitated engagement with influential research in the field, fostering an ongoing exchange of ideas. Furthermore, SG ECD expanded its Special Collection in the journal *Color Research and Application*, adding several new studies on environmental colour analysis and urban colour planning. Future projects will focus on the sustainability of colour applications in urban environments, aiming to integrate ecological considerations into design strategies.

Linguistic and cognitive aspects of colour continued to be a major area of focus for the AIC Study Group on the Language of Colour (SGLC). With a global membership spanning 63 countries, the group maintained an active presence on social media and launched a dedicated LinkedIn group. Throughout 2024, members contributed to key publications in cognitive and linguistic colour research, including studies on bilingual perception

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of colour, colour categorization across cultures, and the semantics of colour in different languages. Several SGLC members presented research at the 27th International Colour Vision Society Symposium, where discussions ranged from cross-lingual comparisons of colour perception to the impact of ageing on colour language. As the group marked its 10-year milestone, new leadership is expected to guide the next phase of its work in 2025, ensuring continued development in the field of colour linguistics. Additionally, SGLC has started working on a global colour lexicon project, aiming to document and compare colour naming conventions across different cultures and languages, providing valuable insight into the relationship between language, cognition, and perception.

A newly formed addition to the AIC's network of study groups, the AIC Study Group on Colour in Games and Toys (SG CGT), was officially established in February 2024. This group is dedicated to exploring how colour influences gaming experiences, the psychology of colour in toys, and colour accessibility for players with visual impairments. During the AIC2024 Midterm Meeting in São Paulo, the SG CGT organized a special session on *Colour in Games and Toys*, bringing attention to how colour can enhance or hinder gameplay experiences. Additionally, the group participated in the Italian Colour Association's conference, where three papers focused on colour's role in board and role-playing games. One of the most significant initiatives undertaken by SG CGT was its involvement in the

Game4CED project, a government-funded initiative in Italy aimed at designing board games to facilitate early detection of colour blindness in children. By integrating accessibility metrics into game design, this project seeks to improve inclusivity in educational settings. A major outcome of this initiative was the development of ColorFit, a print-and-play board game designed to help identify colour blindness in schoolchildren while promoting awareness among educators. Beyond this, SG CGT is planning to conduct empirical studies on the role of colour contrast in digital gaming experiences and its effects on player performance and engagement.

The collective efforts of the AIC Study Groups in 2024 demonstrate a sustained commitment to advancing colour knowledge, research, education, and application across multiple disciplines. Whether through engaging educational initiatives, scientific exploration of colour perception, or practical applications in urban design and gaming, each group has contributed to a deeper understanding of colour's impact on society. Looking to the future, these study groups will continue to expand their research and outreach efforts, incorporating new technologies and interdisciplinary approaches to ensure that colour remains a dynamic and evolving field of study within the AIC community.

Conclusions

The analysis of the activities carried out in 2024 by the associations and study groups belonging to the AIC – International Colour Association highlights a highly active, articulated, and diversified scientific, design, and cultural community. The initiatives described in the annual reports demonstrate a constant commitment to theoretical study, applied experimentation, interdisciplinary dissemination, and the construction of international collaboration networks. From a scientific point of view, the research conducted ranges from spectral imaging to the appearance of materials, from visual psychophysics to perceptual

education, showing significant progress in the knowledge of color as a complex and multifactorial phenomenon. Applications in design, art, and architecture have revealed a growing attention to the issues of sustainability, cultural identity, and environmental experience.

Color education emerges as a transversal element, with projects combining theory and practice, aiming to train a new generation of aware and interdisciplinary researchers, experts, and professionals. Events and conferences are crucial in strengthening international dialogue and promoting the exchange of experiences and approaches between the various disciplinary fields. Finally, initiatives with a social and cultural impact show how color is also a tool for inclusion, personal and collective expression, memory, and social transformation. In this sense, the AIC network is configured as a privileged observatory, capable of reflecting the complexity of the contemporary world through the lens of the culture of color. The hope is that these activities can continue to develop and contaminate each other, generating new synergies between research, design, education, and society in an increasingly open, plural, and transdisciplinary dialogue.

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The background features large, stylized letters in shades of purple and green. The letters are partially obscured by overlapping geometric shapes and a white rectangular area containing the title. The overall design is modern and abstract.

AIC PRESIDENT'S REPORT

AIC PRESIDENT'S REPORT

BY MAURIZIO ROSSI



"Together, we will continue to explore and celebrate the multifaceted world of color".

A RENEWED AIC: HIGHLIGHTS FROM 2024 AND HOPES FOR 2025

As President of the International Colour Association – Multidisciplinary Association in the field of Colour, Multidisziplinäre Vereinigung auf dem Gebiet der Farben, Abkürzung AIC, it is my pleasure to share the achievements of 2024 and our aspirations for the coming year. This year has been transformative, marked by significant milestones that promise our association a stronger, more dynamic future.

We approved pivotal changes to our statutes during the Extraordinary General Assembly held on September 19, 2024, at the AIC Midterm Meeting Conference in São Paulo, Brazil. These amendments address Legal Compliance, adapting to updated regulations for non-profit organizations, *Operational Coherence*, aligning the statutes with the actual activities and scope of the AIC, better *Role Refinement*, separating the roles of Secretary and Treasurer to manage the increasing complexity of our global association's operations, *Member Inclusion*, introducing a new category of Affiliated members, streamlining relationships with all member categories - Regular, Associate, Affiliated, and Individual - , official

Recognition of AIC Study Groups, acknowledging the critical contributions of our Study Groups within the statutes, a new *Editorial Oversight*, establishing an official Editorial Committee (EC) to manage the five core AIC publications: the *Journal of the International Colour Association (JAIC)*, the *AIC Annual Review*, the *AIC Newsletter*, the *Proceedings of the International Colour Association Conferences*, and the website, and finally the most essential recognition of the *AIC Internal Regulations*, creating the statutory base of a unified set of operational procedures to guide all AIC activities and processes.

One of my key initiatives, the AIC Publishing Project, has begun to bear fruit. The *AIC Annual Reviews (AICAR)* and former *AIC Annual Reports* are now hosted on a dedicated website: <https://www.aic-publishing.org/omp/>. Developed using the Open Monograph Press platform by the Public Knowledge Project, this site centralizes our publications, enabling streamlined and efficient management. This shift underscores our mission to promote all aspects of color—scientific, artistic, cultural, historical, and professional — through accessible publications and conferences.

The AIC is a 100% volunteer-based organization. From the Executive Committee and Editorial Committee to the Conference Organizers and Study Group chairs, the dedication of our members ensures that the AIC's events and resources remain accessible to students, retirees, and researchers from developing countries. For this reason, I would like to extend my heartfelt gratitude to the following individuals and groups for their invaluable contributions to the AIC community: **Paula Csillag** for organizing the AIC 2024 Midterm Meeting in São Paulo, Brazil. **Vien Cheung**,

for her dedicated management of the Journal of the International Colour Association (JAIC) and the Proceedings of the International Colour Association (AIC) conferences over the years. **Ingrid Calvo Ivanovic**, thank you for revitalizing the AIC newsletter over the past two years. The chairs of the six AIC Study Groups, whose leadership has been instrumental in advancing our understanding of color, for the Study Group on Arts and Design (AD): Maria João Durão and David J. C. Briggs, for the Study Group on Colour Education (CE): Robert Hirschler and Maggie Maggio, for the Study Group on Colour Vision and Psychophysics (CVP): Shoji Sunaga and Chanprapha Phuangsuan, for the new, founded in 2024, Study Group on Color in Games and Toys (CGT): Alessandro Rizzi and Andrea Siniscalco, for the Study Group on Environmental Colour Design (ECD): Verena M. Schindler and Juan Serra Llach, for the Study Group on Language of Colour (LC): Dimitris Mylonas and Galina V. Paramei. Finally, all participants of the AIC 2024 Midterm Meeting Conference and those planning to attend the 16th AIC Congress in 2025 in Taipei. Your dedication and passion for the study of color continue to inspire and drive our association forward.

As we approach 2025, I am filled with optimism. The renewed statutes, the Publishing Project, and the unwavering commitment of our volunteers lay the foundation for an exciting future. Together, we will continue to explore and celebrate the multifaceted world of color.

I wish you all a joyful and colorful 2025.

Warm Regards

Prof. Maurizio Rossi
AIC President





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aic.kee.hu

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www.sedoptica.es/comites_SEDO/color/index.htm

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<http://www.color.org.tw/>

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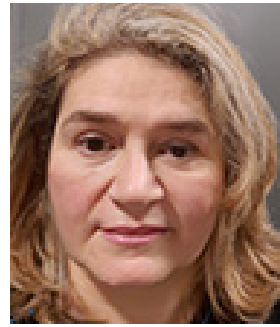
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AIC2024
MIDTERM MEETING

AIC2024 MIDTERM MEETING

BY PAULA CSILLAG
ESPM UNIVERSITY, BRAZIL

The AIC2024 Midterm Meeting was held from 16th to 19th September 2024. The conference main theme was Color Design, Communication and Marketing. It was hosted by ProCor, the Brazilian Color Association in partnership with ESPM University, in São Paulo, Brazil.

The conference received 119 abstract submissions from 26 regions. A total of 228 reviews were conducted by members of the Scientific Committee which comprises of over 60 colour experts from around the world, who generously offered their valuable time as volunteers to support this critical task. Through full paper submission and registration processes, the conference consisted of 88 papers with 70 oral and 18 poster papers, with 21 entries for the AIC Student Paper Award, and 18 entries for the Colour Group (GB)'s Robert W G Hunt International Poster Awards.

Under the conference theme “*Colour Design, Communication and Marketing*” the oral and poster presentations in the Technical Programme were organised into 14 topics: Colour in Branding and Marketing, Colour and Consumer Behaviour, Colour in Design and Visual Communication (all forms of Design), Colour and Consumer Products, Industrial Colour Application (Cosmetics, Paints, Textiles among others), Colour in Interior Design and Architecture, Colour Semantics and Semiotics, Colour and Psychology, Colour and Physiology, Colour and Physics, Colorimetry and Colour Control and Colour Order Systems, Colour Education, Colour in Art, Culture, and History, and



Colour in Toys and Games. The Technical Programme also featured a total of 9 keynote speakers via the Plenary Sessions over three days and the AIC Study Group meetings on Tuesday evening.

The plenary sessions were:

- *Color Strategy in the Age of Artificial Intelligence*, by **Prof. Ph.D. Anat Lechner**, Professor of business management, Stern School of Business, NYU
- *The Crossover Colors: Utilizing Nature's Most Abundant and Versatile Hues in All Areas of Design*, by **Leatrice Eiseman**, Executive director, Pantone Color Institute
- *Color Trends for 2025*, by Patricia Fecci, Marketing Manager, Sherwin Williams
- *S/S 26 Key Colours and Colour of the Year 2026*, by **Urangoo Samba** Head of Colour, WGSN
- *Natural Pigments from the Brazilian Rainforest*, by Designer **Ciça Costa**, Founder, Laboratorio de Cores da Floresta.
- *Ecology of Color in Urban Environment*, by **Prof. Ph.D. Larissa Noury**, Professor of Colour in Art and Architecture, ITECOM, Art&Design Paris. President-founder “Colour-Space-Culture/ Couleur-Espace-Culture » France, Centre Français de la Couleur
- *Chromatic Design Cases*, **Polar Design Studio**, LAD Awarded as Best Design Studio in Brazil. Former Design ESPM Students
- *Colour Design for a Sustainable Future*, by **Dr. Ingrid Calvo Ivanovic**, Professor, Design Department, Universidad de Chile



AIC2024 Chair, Paula Csillag at the Meeting's Opening Event.



AIC2024 Attendees with Conference's Chair, Paula Csillag



Elisa Cordero-Jahr presenting at the Color in Art, Culture, and History Conference's Session

The study groups occurring were:

- Colour Education (SGCE)
- Art and Design (SG AD)
- Environmental Colour Design (SG ECD)
- Games and Toys (SG CGT)

The conference workshops were: *Watercolour Painting of Brazilian Plants and Landscapes*, offered by the Brazilian Watercolor Association, and *Amazon Pigments*, offered by Laboratório de Cores da Floresta.

Out of the 88 papers, corresponding authors are from 20 regions:

	Corresponding authors
Argentina	1
Australia	1
Brazil	42
Chile	1
China	7
Finland	1
Germany	1
Hungary	1
Israel	1
Italy	5
Japan	6
Portugal	4
Russia	1
Spain	3
Sweden	1
Switzerland	1
Taiwan	1
Thailand	1
UK	1
USA	8

This conference was an amazing network of color enthusiasts!

AIC2024 AWARDS

BY VIEN CHEUNG - UNIVERSITY OF LEEDS (UK)

2024 RECIPIENTS

Started in 2018, the biennial AIC Student Paper Awards aims to encourage students to present their work at the AIC meetings in which students will be benefited from the interaction with the international colour community.

On Sep 19, 2024, Vien Cheung – Editor of the Journal of International Colour Association (JAIC) – presented the Student Paper Awards at the Closing Ceremony of the AIC 2024 Midterm Meeting: Color Design, Communication and Marketing, held at ESPM, São Paulo.

Out of the total entries of 21 student papers, the jury panel with seven members of the AIC Executive Committee confirmed the six finalist student papers as below:

First Prize

Urban polychromy: An experimental methodology tested in Belo Horizonte, Minas Gerais, Brazil

Bianca Monteiro Tavares Fonseca

Faculty of Architecture and Urbanism, University of São Paulo, Brazil

Second Prize

Color in the city: an analysis of chromatic interventions in urban space paving

Lauren Nicole Gonçalves Duarte and **Natalia Naoumova**

Architecture and Urbanism Department, Federal University of Pelotas, Brazil

Third Prize

Dorothy Draper: a Brazilian chromatic palette - case study of the Quitandinha hotel

Josivan Pereira da Silva and **Leonardo Pestana Collalto Toni**

Faculty of Architecture and Urbanism, University of São Paulo, Brazil

Honourable mention

The effect of reading background colour on human cognitive performance based on multi-modal data analysis - A study of gender differences

Lina Xu, Dehan Jia, Zhongyue Zhang, Leyan Huang, Guobin Xia and **Luwen Yu**

The Hong Kong University of Science and Technology (Guang Zhou), Guang Zhou, China

Quantifying emotions evoked by artworks using psychophysical methods: Relationships between emotions and colorimetric structure of abstract paintings

Carlo Martins Gaddi and **Marcelo Fernandes da Costa**

Psychology Institute, University of São Paulo, Brazil

The Communication of Colors in Interior Design: an analysis of the covers of The World of Interiors magazine from the 1990s and 2000s

Rebecka Pires

Faculty of Architecture, University of Lisbon, Portugal





**AIC
FUTURE EVENTS**

AIC FUTURE EVENTS: AIC2025



Welcome to AIC 2025 Taipei.

BY PEI-LI SUN, NATIONAL TAIWAN UNIVERSITY OF SCIENCE AND TECHNOLOGY (NTUST).

The Color Association of Taiwan (CAT) is delighted to announce that the 16th Congress of the International Color Association (AIC) will take place at the Songshan Cultural and Creative Park (SCCP), from October 19 to 25, 2025 in Taipei, Taiwan. The park established in 2011, located at a prime location in Taipei City, with new buildings sprouting up all around, was positioned as the “*Creative Hub of Taipei*”. It used to be a 100-year-old tobacco factory. Now, the park is actively involved in the organization of various artistic, cultural, and creativity events.

The AIC 2025 Taipei provides an excellent opportunity for scholars, experts, and students from the global color community to come together and exchange insights and expertise in various color-related disciplines. The Congress will offer you an unforgettable

experience and the chance to gain more friends along your color research journey. Join us for the event!

On behalf of the International Color Association, the AIC 2025 Organizing and Scientific Committees, invite you to participate and submit abstracts in English, related to the conference theme, “**Color for Future**”. The theme covers different aspects and can fit into the following conference topics:

- **Color Vision:** Color physiology, color appearance, color deficiency, elderly vision, visual comfort.
- **Color Psychology:** Color perception, color emotion and preference, color aesthetic, color experience, synesthesia.
- **Color Communication:** Color naming, color order system, standardization, marketing.
- **Color in Art and Design:** Color in graphics, products, fashion, textiles, textures, cosmetics, packaging and food design; universal color design, CMF design,



AIC 2025 Taipei - Congress Venue.



AIC 2025 Taipei – The Songshan Cultural and Creative Park (SCCP).

color in interior, architecture, landscape and urban design; color in visual arts and visual medium.

- **Color Education:** Pedagogy of color, aesthetic education, artistic education, color certification.
- **Color Culture:** Aesthetics, history, philosophy, semantics, heritage, color naming, cultural difference.
- **Color Therapy:** Health and well-being, color applications in the pandemic period.
- **Color Technology and Application:** Color physics, colorimetry, color measurement and quality control, color imaging, color correction for camera, display, printer, textile, plastic and special materials, color management for still and moving images.

- **Color and Lighting:** Lighting technology, lighting design, human factors in lighting.
- **Color Rendering and Visualization:** Color rendering in computer graphics and data visualization.
- **Color for Future:** AI color analysis, AI in color and image applications; 3D color imaging, virtual reality (VR) and augmented reality (AR), computational photography; measurement, simulation and reproduction of visual appearance; HDR imaging, multispectral imaging, color in computer vision, color application in new fields.

We are looking forward to seeing you in Taipei.

For more information, visit: <https://www.aic2025.org/>

AIC FUTURE EVENTS: AIC2026

BY
ANDREA SINISCALCO,
POLITECNICO DI MILANO (IT)

ALICE PLUTINO -
UNIVERSITY OF AMSTERDAM (NL)

MARCELLO PICCOLO -
IFAC-CNR (IT)



INTRODUCTION: A TRADITION OF EXCELLENCE IN COLOR RESEARCH

The International Colour Association (AIC) has long been at the forefront of advancing the science and application of color across disciplines. Since its founding, the association has provided a global platform for researchers, professionals, and enthusiasts to engage in meaningful discussions about color's role in science, technology, and culture.

Among its key initiatives, AIC Midterm Meetings stand as pivotal moments for the community, offering an opportunity to delve into specialized themes between the broader AIC Congresses. Past editions have successfully explored topics such as “Color and Light in Architecture” (Lisbon, 2016), “Natural Colors – Digital Colors” (Buenos Aires, 2018), “Color and Health” (Avignon, 2022), and “Color Design, Communication and Marketing” (São Paulo, 2024). These events have fostered international collaboration, enriched interdisciplinary research, and shaped the direction of color studies worldwide.

Continuing this tradition, the AIC 2026 Midterm Meeting will be dedicated to “Color and Cultural

Heritage.” Hosted in the extraordinary city of Florence, Italy, from September 3rd to 5th, 2026, the event will bring together experts in color science, digital imaging, lighting, and heritage conservation.

A CONFERENCE IN THE HEART OF FLORENCE

Florence, the birthplace of the Renaissance, is more than just a backdrop for AIC 2026. It is an integral part of the event's identity. The city has been home to some of history's greatest minds, from Leonardo da Vinci and Galileo Galilei to Dante Alighieri and Brunelleschi. Science, art, and philosophy have long intersected in this remarkable setting, making it the ideal location to discuss color in cultural heritage.

Participants will have the chance to experience Florence's unparalleled artistic and architectural treasures, from Michelangelo's David to Brunelleschi's Dome and the grandeur of the Cathedral of Santa Maria del Fiore. The conference will also offer opportunities to explore the role of color in heritage preservation through visits to museums and historical buildings.

CONFERENCE THEMES AND SESSIONS

The conference will feature a general program alongside three specialized thematic sessions, each aligned with cutting-edge research in the field.



View of Firenze Dome by night (Image by Wikimedia Commons / CC BY-NC 2.5)

Color Photography and Film

Chairs: Alice Plutino & Barbara Cattaneo

The session is closely linked to the biennial conference of the same name, traditionally organized by the Associazione Italiana Colore. It will provide a dedicated platform within AIC 2026 to explore cutting-edge methodologies for digitizing and restoring visual media. It will foster interdisciplinary dialogue and continuity in the discussion of preservation practices, technological advancements, and best practices in the field.

Shedding a new light on Cultural Heritage

Chairs: Andrea Siniscalco & Laura Bellia

The session will explore how lighting technologies can enhance the visibility, preservation, and aesthetic impact of cultural sites and artifacts. By connecting experts in lighting design, conservation, and museum studies, this session will encourage an interdisciplinary approach to the role of light in heritage preservation.

Architecture and Built Heritage

Chair: Maurizio De Vita

This session, closely tied to ongoing discussions in architectural color research, will focus on the role of

color in architectural conservation, urban heritage, and material analysis of historical buildings. It will provide a comprehensive space for debate on the challenges and innovations in maintaining and restoring the chromatic identity of built heritage.

CONFERENCE ORGANIZATION AND PARTICIPATION

To guarantee an engaging and high-quality experience, AIC 2026 Midterm Meeting will be limited to 150 participants, ensuring a focused and interactive environment for discussions and networking.

The participation fee has been structured to make the conference accessible to a broad audience. Students can register for €120, while regular participants can join for €190, which also includes the membership to the Associazione Italiana Colore for 2026. Registration will open soon, so keep an eye on updates and be sure to reserve your place early.

Organizing Committee

The dedication and expertise of a team committed to delivering a high-quality and impactful event make the success of the AIC 2026 Midterm Meeting possible. The committee, which brings together professionals with extensive experience in color science, heritage preservation, and academic event organization,

AIC FUTURE EVENTS: AIC2026



Entrance to the Uffizi Gallery
(Image by Wikimedia Commons / CC BY-NC 2.5)

is responsible for shaping the scientific program, ensuring effective communication, and securing resources to support the conference.

At the helm of the organization are the General Chairs, Marcello Picollo, Alice Plutino, and Andrea Siniscalco, each bringing their leadership and expertise to ensure the successful planning, coordination, and execution of the event. Marcello Picollo, former President of the organizing body, contributes his extensive experience in color science and event management. Alice Plutino, Vice-President and Treasurer, plays a key role in both the scientific and financial aspects of the conference, while Andrea Siniscalco, the current President, provides strategic direction and oversees the overall vision of AIC 2026.

The Publicity Committee, chaired by Filippo Cherubini, plays a key role in promoting the event, engaging with the international color research community, and ensuring that information reaches potential

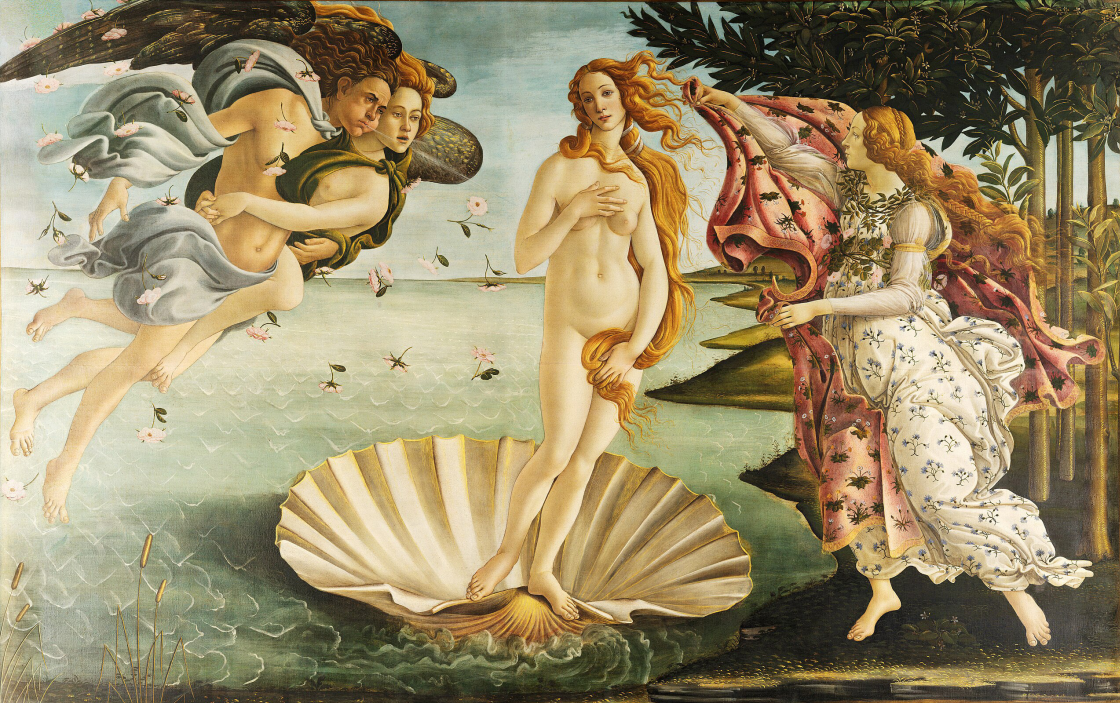
participants through various communication channels. From press releases to social media outreach, this committee works to maximize visibility and participation.

The Publications Committee, led by Marcello Picollo, is responsible for the conference proceedings, ensuring that all contributions are appropriately documented and disseminated. This committee works closely with authors and reviewers to maintain the academic quality of the published materials, supporting the legacy of AIC 2026 beyond the conference itself.

Managing the financial and sponsorship aspects of the event, the Finance & Fundraising Committee is chaired by Alice Plutino, who also serves as Vice President and Treasurer of the organizing body. This committee is instrumental in securing funding, maintaining budgetary balance, and ensuring that the conference remains accessible to a diverse range of participants. Together, these teams are committed to delivering an engaging, well-structured, and inclusive conference experience, reinforcing AIC's mission to advance color research and its applications across multiple disciplines. Their work will be essential in shaping AIC 2026 as a milestone event in the field of color and cultural heritage.

A COMMITMENT TO INTERNATIONAL COLLABORATION

Following AIC guidelines, the Midterm Meeting will uphold the association's international character, ensuring broad participation from diverse backgrounds.



"Nascita di Venere" by Botticelli
(Image by Wikimedia Commons /
CC BY-NC 2.5)

Papers and presentations will be peer-reviewed, maintaining the highest academic standards while promoting new voices and innovative perspectives in color research. English will serve as the primary language of the conference, with translation support where needed. As with all AIC Midterm Meetings, efforts will be made to keep costs accessible, allowing a wide range of scholars and professionals to participate.

CONCLUSION

As we look ahead to the AIC 2026 Midterm Meeting, it is clear that this event will not only serve as a platform for scientific exchange and professional networking but also as a celebration of color and its profound connection to cultural heritage. By bringing together experts, researchers, and practitioners from across the world, the conference will continue the legacy of AIC Midterm Meetings, fostering interdisciplinary collaboration and advancing innovative methodologies in color science.

The choice of Florence as the host city is no coincidence. A place where art, science, and philosophy have historically converged, Florence offers an extraordinary setting in which to explore the intersection between color, heritage, and technology. The conference's thematic sessions reflect the evolving challenges and opportunities in the preservation and interpretation of cultural heritage through color research. Each session is designed to build on existing dialogues

within the AIC community while also introducing fresh perspectives and fostering new collaborations. AIC 2026 is made possible thanks to the commitment of a dedicated organizing committee, whose expertise spans scientific research, event coordination, and fundraising. Their meticulous planning ensures that this conference will uphold AIC's tradition of excellence, providing attendees with a stimulating intellectual environment, high-quality presentations, and valuable networking opportunities. The support of the Associazione Italiana Colore and the collaboration with key experts in color science, imaging, conservation, and architecture will further strengthen the impact of this event.

Finally, AIC 2026 Midterm Meeting is not just an academic conference: it is an opportunity to celebrate the role of color in shaping our past, present, and future. Whether through scientific research, practical applications, or artistic exploration, the meeting will serve as a catalyst for innovation and collaboration in the field of color and cultural heritage.

We invite researchers, professionals, and students to join us in Florence from September 3rd to 5th, 2026, for what promises to be an unforgettable event. Stay connected, follow our updates, and be part of this unique journey into the world of color and heritage. For more details and to register, visit <https://www.aic2026.org>.





AIC REGULAR MEMBERS

MAURIZIO ROSSI - POLITECNICO DI MILANO, ITALY

INGRID CALVO IVANOVIC - UNIVERSIDAD DE CHILE, CHILE

AUSTRALIA

COLOUR SOCIETY OF AUSTRALIA (CSA)



Colour Society
of Australia

Knowledge
Inspiration
Community

Through its NSW and Western Australian Divisions, the Colour Society of Australia hosts webinars and live presentations on a broad range of topics spanning colour science and applied science, colour technology, colour in art and design, and colour education. We invite you to follow our [Facebook](#), [Instagram](#) and [LinkedIn](#) accounts, which we use to disseminate colour information and news, including our own events.

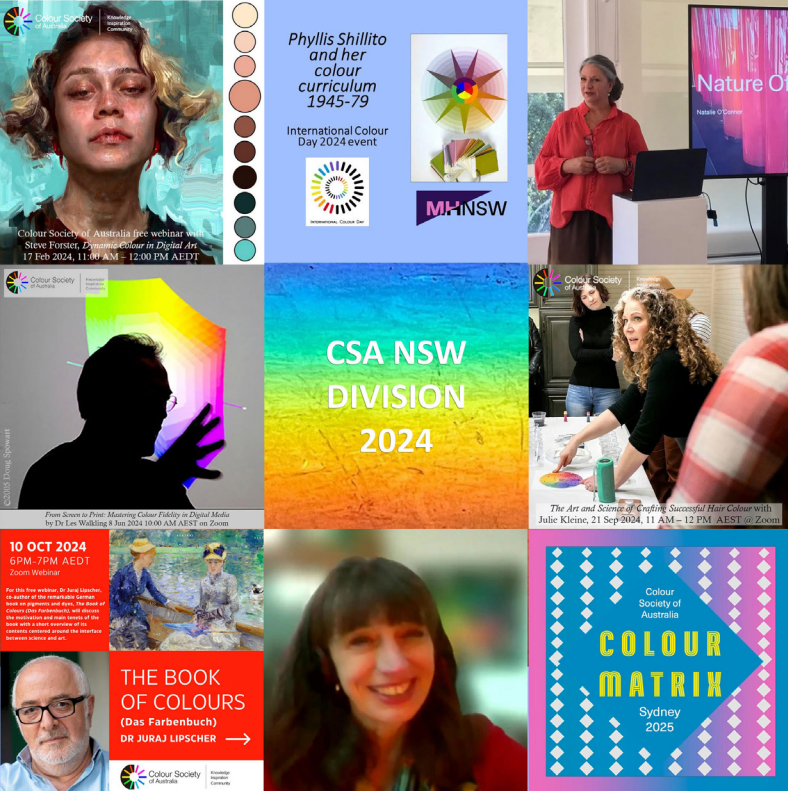
As of late 2024 the Colour Society of Australia had 134 members, comprising 61 in the NSW Division, 17 in the Southern States Division (Victoria, Tasmania and South Australia), 18 in the Western Australian Division, 7 from Queensland, and 30 international members, from the United States (15), the United Kingdom (3), New Zealand (3), Belgium, Canada, Germany, Hungary, Italy, Portugal, Sweden and the Netherlands (1 each).

The CSA national Annual General Meeting for 2024 was held via Zoom on December 10, and the following office bearers were elected to continue in their positions unopposed: Michael Dixon (President), Dr David Briggs (Vice President), Emily Guo (Treasurer), Glenys Thomson (Secretary) and Julianne Blackmore (Membership Secretary). Alessandro Premier accepted a position as Ordinary Member of the National Executive Committee and Emily Guo and David Briggs continued in their roles of Social Secretary and AIC Representative respectively.

NEW SOUTH WALES DIVISION EVENTS

The NSW Division continued its series of free webinars as well as having one in-person event in 2024:

- **February 17:** *Dynamic Colour in Digital Art* with Steve Forster (Long Island Academy of Fine Art, USA). In this, the fourth webinar in our Creating Colour series. Steve Forster gave a very detailed account of the principles behind his use of colour, followed by a demonstration of his digital painting process, from values to “wild colour”, and a lively Q&A session.
- **March 20:** International Colour Day 2024 event: *Phyllis Shillito and her Colour Curriculum 1945-79*. Our hybrid in-person and online ICD 2024 event centred on the colour teaching of pioneering Sydney-based colour and design educator Phyllis Shillito (1895-1980) and was presented jointly with Museums of History NSW. Three presentations established the context of Shillito’s teaching of colour. Dr Catriona Quinn examined the broader context of Phyllis Shillito’s impact on technical education and its relationship to the dynamic development of the Australian interior design profession. Jocelyn Maughan OAM, who studied colour directly under Shillito at East Sydney Technical College in 1956, gave a lively account of her recollections of Shillito and her approach to colour. And finally, Dr David Briggs presented an update on research he published with Eva Fay in the Proceedings of the AIC2022 conference, based on newly available material that confirmed the direct influence of theorists Munsell, Ostwald, Maitland



Activities of the CSA NSW Division, in 2024

- well prepared and detailed webinar that revealed the remarkable amount of scientific knowledge and experience that goes into creating a purposeful colour change in hair.
- October 10:** *The Book of Colours* with Dr Juraj Lipscher. For this webinar, Juraj spoke about the spectacular German-language book on dyes and pigments *Das Farbenbuch (The Book of Colours)* that he co-authored with Stefan Muntwyler and Hanspeter Schneider, giving a detailed overview of the contents of the book with numerous examples and also explaining the proprietary 18-colour printing process the authors developed for the book.
 - November 26:** *Fifteen years of spinning colour wheels and analysing dragons: Alexandra Loske's work on colour.* Dr Alexandra Loske gave us a lively and beautifully illustrated account of her 15+ year journey to becoming a world-renowned author of a string of books and publications on colour and its history and finished up with a discussion of her efforts to bring to light the work of women writing on colour, including above all Mary Gartside.
 - December 10:** Annual General Meeting for the NSW Division on Zoom. At the AGM the following office bearers were elected unopposed: Dr David Briggs (Chairperson), Dr Jean Pretorius (Treasurer) and Kerry O'Donnell (Secretary). Dr Natalie O'Connor, Dr Vladi Rosolova, Emily Guo and Babette Hayes OAM continued as Ordinary Members of the committee.

For more detailed descriptions of each of these events, please see the [CSA NSW Division Annual Report for 2024](#), which can be downloaded from the CSA website. We've made the recordings of all five presentations in the *Creating Colour* series and our ICD 2024 event permanently available to all on the [CSA YouTube channel](#). Recordings of all of our other webinars and conference presentations from recent years are available to CSA members via the *Members' Area* on the CSA website.

Graves, and especially Henry Barrett Carpenter on Shillito's colour curriculum. An illustrated pdf of this presentation can be viewed or downloaded [here](#). In addition, in-person attendees viewed the impressive collection of student exercises and notes created by Eva Fay FDIA as a student at the Shillito Design School in the late 1970's, and donated in January this year to the library, alongside several earlier Shillito portfolios from the MHNSW and private collections.

- April 13:** *Conversations on Colour and Place* at the Woollahra Gallery at Redleaf, Double Bay, Sydney. At this live event Dr Natalie O'Connor and Jo Mellor gave presentations and floor talks on their exhibitions *Nature of Redness* and *Cobalt and Rust* respectively. Members of the CSA NSW Division committee in attendance then held an informal meeting nearby to discuss plans for future events.
- June 8:** *From Screen to Print: Mastering Colour Fidelity in Digital Media* with Dr Les Walkling. In this, the fifth and last in our *Creating Colour* series of webinars, Les Walkling's information-packed and elegantly presented webinar was studied with helpful practical tips.
- September 21:** *The Art and Science of Crafting Successful Hair Colour* with Julie Kleine (*Colors With Chemistry*, Georgia, USA). Julie gave a very

AUSTRALIA

COLOUR SOCIETY OF AUSTRALIA (CSA)

Activities of the CSA WA Division, in 2024

WESTERN AUSTRALIAN DIVISION EVENTS

Western Australian Division held a series of live events through the year.

- **18th February:** *50 Shades of White* by Glenda Roff explored use of colour in kitchens, questioning whether they should be so often white. The presentation was followed by a hands-on workshop exploring subjective colour preferences through the concepts developed by Japanese colour theorist Shigenobu Kobayashi.
- **March 23:** International Colour Day event with Nancy Ballesteros (<https://treetopscolors.com.au>). Nancy gave a presentation and displayed a fabulous range of her specially treated wool and silk fabrics. The presentation was followed by the WA Division Annual General Meeting.
- **May 4:** *Colour Games* with Paul Green-Armytage and the Colour Literacy Project. At this session Paul introduced a new game played with a new set of playing cards and also raised awareness of the many roles of colour in our lives through a visual quiz matching words to images shown on screen.
- **May 9:** First meeting of the Archive Committee to review the very large CSA collection that had to be moved out of Curtin University. On 8th June the committee made a start on curation of the material, and on November 28 determined that the most likely venue will either be the State Library or North Metro TAFE.
- **May 13:** Visit to the *Animals Uptown Art Trail in Joondalup*. The Art Trail was a collaboration between local school students, CSA Membership



Secretary and acclaimed artist Sean Adamas, and Joondalup businesses. Trekkers could visit various locations across the city centre to check out the spectacular Asian elephant, leopard, meerkats, giraffe and many other creatures.

- **July 14:** *Salle des Depart* at the Grove. Annie Hoar and Dianne Smith presented the paper that Estelle Guerry was unable to present by Zoom at the 2023 Conference last October. The topic was the colours used in a room where bereaved people can say good-bye to their recently deceased loved ones. The afternoon workshop was led by Dianne, drawing on her experience of colour therapy to help us explore the relationship between colour and music.
- **August 24:** *Colour symbolism in different cultures: China and India* at the Grove. CSA, members Huilin Sun, who is Chinese, and Anita Grewal, who grew up in India,

tackled the subject of colour symbolism in the cultures they are familiar with. Anita showed us the Indian designs called Rangoli and we tried our hand at making these using colour cards, scissors and glue sticks on paper.

- **October 26:** *A Fresh Approach to Colour* at the Grove. A group of around 18 people participated in colour activities from the Colour Literacy Project with Dr Paul Green-Armytage and members of the Colour Society of Australia WA Division. The day's activities included some exercises from the Eye Opener series that have been developed for the Colour Literacy Project and that have been tested successfully with primary school students and with adults. Some new exercises were seeking feedback.
- **November 10:** Visit to the ABC Studios in East Perth. This was a special private viewing, organised for our CSA members and friends by our long-time member, Emma Fletcher who did the set design for a new series of *The Twelve* and gave a very good presentation from Emma regarding the challenges of set design and lighting.

CSA National Conference *Colour Matrix Sydney 2025*
The national conference of the Colour Society of Australia, *Colour Matrix Sydney 2025*, will be hosted by the NSW Division in Sydney on **October 31-November 2, 2025**. The venue will be the Royal Australian History Society's History House in Macquarie Street opposite the Botanic Gardens. The venue is in easy walking distance from many wonderful locations where we're planning to hold activities during the conference, so in-person attendance is a great idea, but we're also providing an online option for attendees and speakers.

Submission deadline for abstracts: **25 April 2025**

Acceptance for full-length/short presentation:

06 June 2025

Registration opens: **13 June 2025**

Early bird registration deadline: **29 August 2025**

General registration deadline: **26 October 2025**

The theme *Colour Matrix* acknowledges the importance of cross disciplinary approaches to colour in this era of ever-narrowing specialization. Participants are invited to consider how their own work involving colour may be of interest and of importance in other disciplines, or to critically contrast and perhaps reconcile different specialized approaches to colour within their own discipline. We encourage participation from designers, artists and other colour practitioners whose work references scientific or philosophical understanding of colour, from colour educators whose teaching programs span the art-science divide, and from scientific, historical and other researchers who believe that their insights about colour have relevance beyond their specialized areas of interest. Enquiries: csa.nsw.chair@gmail.com

Submissions may be for either full-length oral presentation (30 minutes including introduction and some questions) or a short presentation of up to 5 slides accompanied by an up to 10-minute oral summary. All abstracts will be reviewed by the Program Committee and scientific submissions will be anonymously peer-reviewed. In general, outreach-style papers of broad interest would be best suited to full oral presentation, while specialized original research might be better suited to our short presentation format. A pdf volume of the accepted abstracts will be posted publicly on the CSA website shortly before the conference. For further details including a link to the Abstract Template please see the full call for papers at <https://coloursociety.org.au/event-5983396>.

VALE

Our dear friend and veteran Colour Society of Australia Member **Annamaria di Cara Santos** passed away on Tuesday, April 30, after a long battle with cancer. Annamaria was a central figure in the CSA from the time she became a member in 1993, soon joining the NSW Division Committee and then serving in various roles including Chair of NSW Division (1999-2001) and National President (2001-2005).

BELGIUM

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ICA-Belgium Colour Talks, 2024

In 2024 we continued with our free online colour talks and we organised several events in Belgium.

SUNDAY MORNING COLOUR TALKS

The online colour talks are regularly attended by participants from more than 30 countries and are generally fully booked. We are very grateful to the speakers and the participants for their enthusiasm and interest.

Our speakers in 2024 were:

Catherine Borowski & Lee Baker - **How to Hack your Happiness Levels in 20 Minutes**

Catherine Borowski and Lee Baker are artists on a mission to improve quality of life through nature inspired public art. In their talk *Hack your happiness levels in 20 minutes* they explained why neuro-aesthetics, a combination of neuroscience, psychology, philosophy and the arts, can help us understand why and how our brains respond to aesthetic experiences.

Sonia van de Haar - **Place-Based Colour Design for Architecture**

Sonia van de Haar is an Australian artist and architectural colour designer. Her studio, Lymessmith, reflects her cross-disciplinary interests, and position outside of traditional gallery-based art making. Sonia spoke



ICA-Belgium Workshop Colour Stories, Gallo-Roman Museum, Tongeren

about her practice in colour design and site specific artworks for the built environment.

INTERNATIONAL COLOUR DAY 2024

On 17 March 2024, ICA-Belgium celebrated International Colour Day (ICD) with an online event of colour talks. For this occasion, we invited two guest speakers, each an expert in colour in their field.

Ulrike Koch-Brinkman - Pigments on Marble

The first speaker was Ulrike Koch-Brinkmann, a German archaeologist, specialising in the colour reconstruction of ancient sculptures. She spoke about Pigments on Marble and the Polychromy of Greek and Roman Ancient Sculptures. Her reconstructions of ancient sculptures were seen all around the world and were, at the time, also on view in the exhibition Antiquity in Colour, at the Gallo-Roman Museum in Tongeren, Belgium.

Stephen Westland - Colour Nowcasting

The second speaker was Stephen Westland, a British colour scientist and a professor of Colour Science and Technology in the School of Design at the University of Leeds. He spoke about Colour Nowcasting - AI and Sustainability, exploring colour trends in the context of the fashion and textile industry, and the possibility of using AI to predict what colours are trending now - so-called colour nowcasting.

The recordings of all their presentations can be found on our YouTube Channel and on <https://www.ica-belgium.org/t/colour-talks>.

EVENTS

Workshop Colour Stories - Colour Mapping the Living Past

Gallo-Roman Museum in Tongeren, Belgium

On 27 April 2024, ICA-Belgium organised a 1-day workshop **Colour Mapping the Living Past: Reimagining**

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a **Colour Narrative**, hosted by the *Gallo-Roman Museum* in Tongeren, led by *Maja Kaurin*, *Inez Michiels*, and *Jeannette Hanenburg*. This workshop brought together colour experts from various disciplines to explore the combination of colour mapping, mythology, storytelling, and composition.

The workshop started with *Jeannette Hanenburg* presenting the RAL tools for colour design, the sponsor of the workshop.

Maja Kaurin gave the introduction to **colour mapping**, followed by a visit to the *Antiquity in Colour* exhibition. Using RAL fans, the colours of selected statues were recorded by the participants and taken into the next part of the workshop in which *Inez Michiels* told the *Lion Story*.

Participants thus discovered that the themes and associated colour combinations from this ultimate heroic myth of the *Journey of the Sun*, a tale of victory over death that dates back over 6000 years, can be retrieved to this day in advertising, illustration, film.

The mythological segments from this universal story formed the basis for the final part of the workshop. Thus, *Maja Kaurin* introduced the participants to the **fundamentals of colour composition**. Next, based on a set of cards depicting the myth's elemental concepts and their metaphors, a unique story was created by each participant and translated into a colour composition. The stunning results were finally exhibited.

Walk & Talk / Meet & Learn event for ICA-Belgium members

Villa Empain, Brussels, Belgium

At the end of June, we had a wonderful **Walk & Talk / Meet & Learn** event for ICA-Belgium members at the *Villa Empain* in Brussels, a masterpiece of Brussels Art Deco architecture, built at the beginning of the 1930s by Swiss/Belgian architect *Michel Polak*.

We visited the exhibition **Josef and Anni Albers: Iconic Couple of Modernism**, the first exhibition dedicated to their work in Belgium.

With almost hundred artworks (paintings, assemblages, photographs, graphic works, textiles, films and furniture), the exhibition presented a fascinating sample of the work of *Josef and Anni Albers*. We did what we love most - immersing ourselves in colour and talking about it a lot, of course!

GROWTH AND DEVELOPMENT

2024 was a year of further development for ICA-Belgium. We worked on developing a new website and newsletter, hoping to be thus able to provide our members and readers with easier access to information, a publicly accessible archive of all the news and a better way to connect and share their colour related news with us and each other.

In September we welcomed our new volunteer, **Joanna van Gent**, who helped us with social media, creating



Colour Fields by Nanna van Heest

videos about Colour Forecasting in preparation of our **Colour Forecast Research Workshop with Anna Maria Nyk** (postponed for 2026).

We are working on several colour workshops and colour study trips for 2025 and 2026, as well as developing closer collaboration with Belgian institutions and other colour associations.

All our upcoming events and an archive of our colour news can be found on ica-belgium.org.

NEWS FROM ICA-BELGIUM MEMBERS

Vinciane Lacroix

2024 was a successful year for my artistic exploration of digital color. I launched *Chromagenesis*, a process aimed at capturing the colored soul of a painting. By digitally reordering the pixels, I create new compositions that explore the interplay of color and form. This digital collage technique transforms familiar artworks, inviting viewers to experience them anew. To celebrate

Ensor's year, I generated two Ensor Chromageneses. A well-received exhibition showcased this technique. I continued my color challenges on vincianelacroix.net (French) and color-time.net (English), refreshing both websites. My science-infused color talks reached diverse audiences (CEPULB, Académie Constantin Meunier, atelier couleur de Caroline Dujardin). An article on gray in *Artichaut* further highlights this success. Looking ahead, 2025 will see a dedicated website for Chromagenesis (chromagenesis.net) and new exhibitions. I plan to finish the color challenges and continue blog posts. I'm also eager to adapt my color conferences for new audiences.

<https://www.vincianelacroix.net>

<https://color-time.net>

Nanna van Heest

Nanna van Heest continued in 2024 to focus on the impact of colour and explores how personal memories and associations can enrich and expand existing colour

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theories. In order to fully understand the phenomenon of colour and train her eye, Nanna often works in series. Through the systematic execution of colour studies, she investigates both the optical effect and the personal experience of colour. This visual research began during her master's research "*Colour Stories*" (Piet Zwart Institute Rotterdam, 2021). This approach allows her to artistically explore colour and theory and translate it into visual work.

Exhibitions, workshop & publication:

- January: *Textile installation ColourSpace* / Group exhibition CHESS, Berlin
- May: *3-day workshop Making Colour* / art academy Zuyd-university of applied science, Maastricht
- July: *Textile installation Colourfields* / Group exhibition TUSSEN RUIJTE, Het Archief, Rotterdam
- October: *Publication of my master's research Colour Stories* / HANDS ON RESEARCH, for artists, designers and educators (published by Set Margins)
- December: *Mural Paradigm Shift* / Group exhibition TELE GREY FLAMINGO PINK, Murals Inc, Rotterdam

Autonomous work:

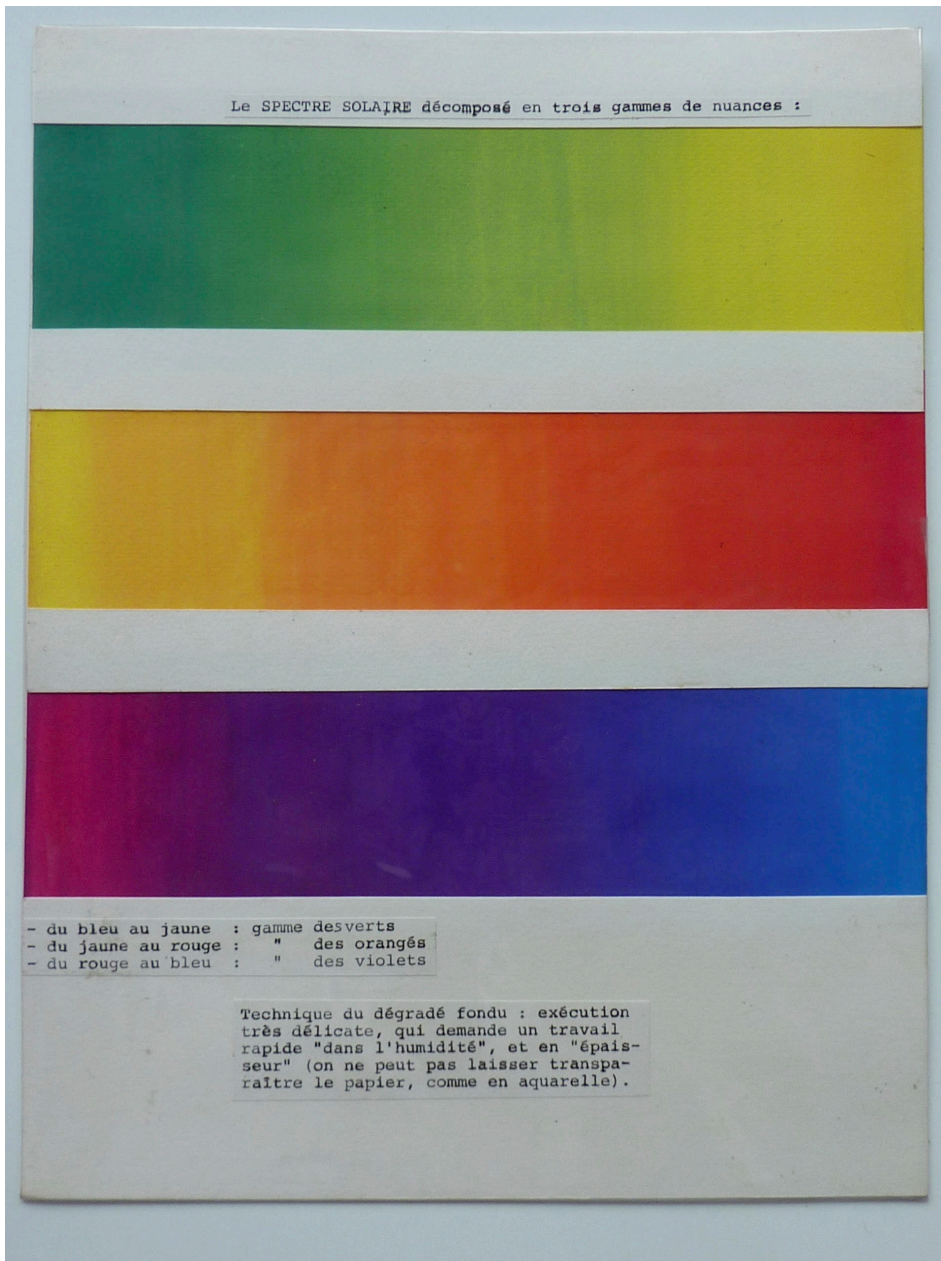
- *Colour Fields* – large scale textile works
- *Colour Studies* – ongoing series of studies in oil pastel on paper
- *Colour Landscapes* – imaginary places and horizons, series of collages of coloured paper
- *Paradigm Shift* – daily colour notes, series of 100 oil pastel drawings

<https://www.nannavanheest.com>

<https://www.instagram.com/nannavanheest>

Felix A. D'Haeseleer

Besides the two yearly seminars on color I conducted at home in 2024, I was invited to teach my hands-on lesson on color in a few art schools. The Library of the Seminaire de Couleur made new acquisitions, among them a stunning hand-painted and hand-typed 17-page A4 book on color from the 1960's by a young student in a Belgian technical school (see image). Since early January, the very first copy of "*S'Aiguiser l'oeil à la couleur*", my hand-made book for autodidacts and bibliophiles is sitting on my desk. During 2025, the



Le spectre solaire, hand-painted by J.Y. Hellin, 1960s

contents of the two boxed volumes will be the subject of *show and tell* events. A presentation clip will also be posted on social media. Each copy will be constructed to order only. Sometime this year the ICA-Belgium will schedule my presentation of the original edition of *Interaction of Color* by Josef Albers, the teacher of my teacher. In addition to the two yearly seminars I conduct at home, I will be teaching my lesson on color to students of book-binding, as an in-service training for art teachers and in the framework of *Antichambre La Cambre*.

felix.a.dhaeseleer@gmail.com
<https://leseminairedecouleurs.wordpress.com>

Interdisciplinary Colour Association Belgium (ICA-Belgium)

Contact:
Jeannette Hanenburg, President
Maja Kaurin, Vice-President
Inez Michiels, Secretary General

ica@ica-belgium.org
<https://ica-belgium.org>

BRAZIL

ASSOCIAÇÃO PRÓ-COR DO BRASIL



Associação ProCor do Brasil is a rich network of color enthusiasts and this report shows some of members highlights in 2024.

MEMBER ANA LAURA ALVES COMPLETES HER DOCTORAL THESIS: COLOR – AN ERGONOMIC VARIABLE ON THE PERCEIVED USABILITY, AESTHETIC INTERPRETATION, AND EMOTIONAL RESPONSE IN DIGITAL INTERFACE

In the previous year, experimental studies evaluated the influence of color, first on decision-making and mental constructs and then on perceived usability, aesthetic interpretation, and emotional evaluation when interacting with a mobile application for medical schedule, developed as part of the doctoral thesis titled 'Color – An ergonomic variable on the perceived usability, aesthetic interpretation, and emotional response in digital interface' authored by **Ana Laura Alves**. Due to vision deterioration in aging and its possible effect on the interpretation of chromatic information, the potential generational differences between young and old age groups were also analyzed as a variable. This thesis adopted methodological procedures based on inductive reasoning, characterized by a mixed and transversal approach. The results showed the relevance of color as an ergonomic variable in decision-making and in human-digital interface interaction. However, the influence of color on the experience of using the

application was not identified; it was only based on the dimension of perceived usability. The author highlighted that due to psychophysiological characteristics, designers may encounter nuances in the perception and interpretation of visual messages among individuals of different generations and thus have difficulty creating and validating visual cues applied to user interfaces of mobile applications and other types of interfaces. The thesis can contribute to scientific knowledge in the areas of color applied to Design, Ergonomic Design, and User Experience, as well as design guidelines for professionals in the creative industry. The results and insights will be published as research articles and shared with the AIC community as soon as possible. Congratulations Ana Laura!

MEMBER FABIO RITTER PRESENTS: DESIGN THINKING, POLICROMIABR, AND THE VALORIZATION OF BRAZILIAN IDENTITY IN VISAGISM AND INTERIOR DESIGN

This study investigates the application of Design Thinking in the creation of color palettes, integrating research developed by the PolicromiaBR group, led by Fábio Ritter, professor, doctoral candidate at Anhembi Morumbi, and member of ProCor Brasil. The PolicromiaBR brand, registered with INPI (National Institute of Industrial Property), is dedicated to mapping the colors of Brazilian culture, valuing national identity, and promoting diversity and representation in the practices of visagism and interior design.



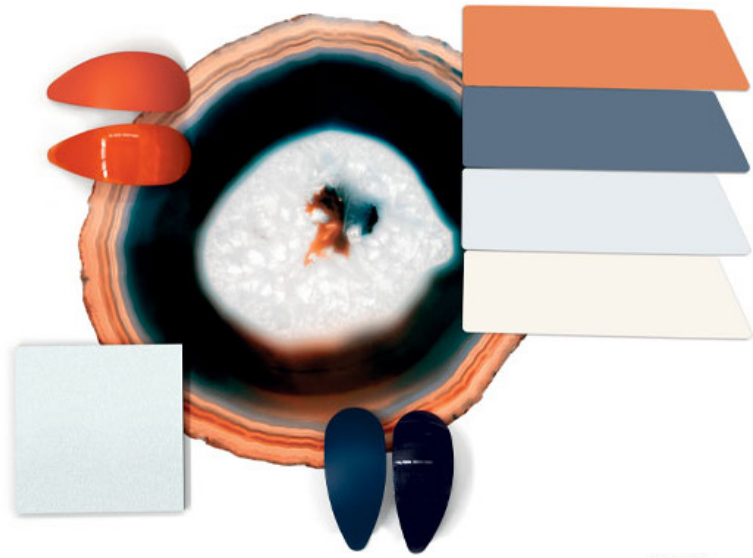
Fabio Ritter

Although widely used, color palettes in these areas often lack scientific grounding, resulting in limited and exclusionary solutions. The research connects elements such as biodiversity, regional traditions, and Brazilian cultural manifestations, promoting palettes that respect social plurality and address issues such as gender associations, avoiding stereotypes, and creating more inclusive and representative combinations.

Through the application of Design Thinking, the methodology encompasses stages such as user analysis, creative ideation, prototyping, and validation, ensuring aesthetically harmonious, culturally significant, and technically grounded results. This approach personalizes visagism and enriches interior design with cultural authenticity, positioning Brazil as a global reference in innovative and inclusive chromatic solutions.

MEMBER LECHLER PRESENTS: "THE WAY OF LIVING EMOTIONS" – COLOR DESIGN@ LECHLER

A chromatic journey that weaves together emotions and values, a narrative that embraces the past and looks to the future, thus translating interior nuances into collective experience.



Lechler Color Design

"The way of Living Emotions", the Lechler Color Design project for 2025, aims to convey authentic and lasting emotions, going beyond the simple concept of colour harmonisation. An inner journey made of progressive and significant steps that lead to a stable and conscious change.

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The collection goes beyond the mere harmonious design of colour to focus on the emotional design of environments. The goal is to arouse slow-release emotions, capable of stimulating altruistic feelings, a sense of shared responsibility and a deep connection with the social and relational context.

The intent is to draw a clear distinction between ephemeral, momentary and superficial happiness, and deep and lasting joy or happiness, while promoting an authentic and open approach towards others and the world.

The collection's colour schemes have been designed to enhance the emotional dimension of colour, thus designing environments that exalt the most genuine and profound sensations. This attention involves the entire habitat universe: from the industrial manufactured items of the Lechler Tech world, to the furnishings with IVE products, up to the walls characterised by the products and colours of the **new Chrèon project "Color Trainer, Guida Interni, Inspiring Matrix"**.

It is the colours that guide the path of introspection that evolves over time, thus leaving an indelible mark.

The collection is developed through five thematic harmonies, defined as "metamaterial" for their ability to embrace different sensorial forms. Each theme represents a stage of a profound emotional journey:

1. **Thoughtful Serenity:** spaces that invite reflection, thanks to a colour palette without evident contrasts, able to create an atmosphere of tranquillity, serenity and introspection. This harmony is designed for those who wish to rediscover, through a visual context that encourages, a deep reflectiveness.
2. **Natural Balance:** colours inspired by nature, such as greens and desaturated colours, which evoke balance, natural equilibrium and harmony between the environment and the individual, thus rediscovering the bond with the natural context.
3. **Comfort:** welcoming environments that convey a sense of protection, security and emotional stability, offering refuge and support.
4. **Enthusiasm:** a celebration of enthusiasm and the joy of living, characterised by dynamism and lightness, while inspiring spontaneity and vitality.
5. **Fresh Desire:** a representation of the desire for renewal, hinting at the craving for innovation, for something fresh and lively, while inviting to explore new possibilities and embrace change.

The proposed emotional journey is divided into five main stages: inner reflection, connection with the universe, open-mindedness and emotional warmth, transformation, and renewal. Each harmony contributes through building a unique story, while inspiring and accompanying people on a journey that goes beyond aesthetics to embrace the deepest and most universal values of the human soul.



Renner Sayerlack

For more information on the exhibition and the collections, come and visit us in the Tortona area at Antica Fabbrica 14 in Milan or contact us at communication@lechler.eu

MEMBER RENNER SAYERLACK PRESENTS:

With over 55 years of history, Renner Sayerlack is a Brazilian multinational leader in the wood coatings segment. Present in more than 90 countries, the company operates manufacturing facilities strategically located in Brazil, the United States, Italy, and Chile, ensuring efficient production and proximity to its key markets. Recognized for its innovation, sustainability, and excellence, Renner Sayerlack continues to set a global benchmark in wood solutions development.

Renner Sayerlack has played a key role in promoting the use of colors in furniture, integrating technological innovation and design into its paint and varnish solutions. With a wide range of high-performance products, the company embraces global color trends that meet the demands of the furniture industry, architects, designers, and end consumers, through a library of more than 8,000 shades. Additionally, the ability to develop new colors, customized according to professionals' requests, is enabled by the SAYERSYSTEM computerized tinting system and the SMART EYE equipment, which identifies colors and measures similarity levels. This approach not only emphasizes aesthetics but also sustainability and durability, positioning the company as a reference in the wood coatings market.

CANADA

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The Colour Research Society of Canada had an eclectic and engaging year of programming that included our online Kaleidoscope Lecture series, and online as well as in-person Members' Events.

This year, we welcomed new Board Members **Thoma Doehring**, **Setayesh Babaei** and **Carolina Espinoza-Sanhueza**. Thoma founded *Tri-City Paint & Design* and was the first female paint store owner in Canada. Founder of Thoma and Co Designs, she continues to pursue her passion for helping clients bring their spaces to life with expert color and design consulting for homes and businesses. Thoma is a Board Member for the Color Marketing Group® (CMG), and has recently cultivated an *Indigenous Colour Stories* initiative for the CRSC. Setayesh is pursuing graduate studies at OCAD University. Her studio practice revolves around the concept of healing through creative expression, where she explores materiality, colour, and diverse forms of artistic endeavor. Carolina, our 2023 Student Award winner, is an architect and researcher interested in lighting and colour application in architecture for well-being. She completed her PhD in 2024 on the photobiological effects of biophilic architectural applications including lighting strategies and interior colour design to entrain vision and circadian cycle in arctic regions. (Congratulations!)

As is our tradition, the CRSC celebrated **International Colour Day** with a Keynote lecture following our Annual General Meeting. Our 2024 speaker was



Social Media post for International Colour Day. Design by Montaha Hidefi, image courtesy of Robin Kingsburgh.

Udo Schliemann, who gave a beautifully illustrated presentation *Out of the Blue? Colour as a Strategic Tool in the Built Environment*. As a lead up to ICD, our VP and Marketing and Communication Chair **Montaha Hidefi** organized and posted a 15-day social media campaign on International Colour Day, which was widely followed and shared.

Our **Kaleidoscope Lecture Series** continued. These online lectures are open to the public, consistent with our mandate to widely share colour knowledge. Colour and lighting, and particularly ideas about lighting for



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My First Language: Talks Around Colour

Tuesday, January 23, 2024

7-8 pm ET



Lynne McIlvride

Banner for CRSC Kaleidoscope Lecture by Lynne McIlvride. Design by Montaha Hidefi, images courtesy of Lynne McIlvride.

specific places and populations, was one through-line for our 2024 talks. Board member **Emily Grundy** rebranded a new **CRSC YouTube channel**, where we post select recordings for the general public, as well as our recordings archive available for CRSC Members and Colour Society of Australia members.

- **January:** Multidisciplinary artist **Lynne McIlvride** spoke about the role of colour in her mixed media maximalist artwork.
- **February:** **John Seymour** gave us his critical insights on *The Power of Red - A Critical Look at Color Psychology*.
- **April:** CRSC Treasurer **Venkat Venkataramanan's** spoke on current research on *Lighting for Older Adults*.
- **May:** **Bill Fischer** spoke about his work on *Universal Color Design: Creating Rich Experiences for a Color-vision Diverse Population*.
- **October:** **Jeff Hovis**, spoke on how low-oxygen environments affect colour perception in those with and without colour vision deficiencies, in *Colour Vision Deficiency in Hypoxic Environments*
- **November:** **Doreen Balabanoff** spoke on Colour and *Birth Spaces: Research for Transformational Change*

Our **Members' Nights & Events** included the continuation of the theme of light and colour. We held an in-person event in that drew many of our Toronto members to the Aga Khan Museum. We were joined by former CRSC Vice-President Glenn McArthur, who showed us his fascinating exhibit *Muqarnas: Form and Light*, on display outside of the Aga Khan. Glenn has travelled worldwide following his passion for these stunning geometries, documenting these beautiful examples of Islamic architecture. He gave us insight into the geometric building blocks used for these captivating designs, and described his travels and insights behind this fascinating architecture. Following Glenn's tour, we visited the *Light: Visionary Perspectives* exhibition, an extremely well-curated show featuring highly engaging installations on light, colour and form, by artists like Anish Kapoor, Tannis Nielsen and Olafur Eliasson.

In 2024, we continued our Members' Book club. This year's choice was Kai Kupferschmidt's enjoyable read *Blue: In Search of Nature's Rarest Colour*. Members from across the country gathered to discuss Kupferschmidt's colour blue, led by CRSC Treasurer **Venkat Venkataramanan**.

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The **2024 CRSC Student Award** was presented to **Trevor Canham** of York University for *A Novel Technique for Visualising Multi-spectral Images*. Trevor studies colour imaging under the supervision of Michael Brown at York University in Toronto. His interests lie in the interaction between colour phenomenology and imaging systems. Thanks to Sherwin Williams for their generous support of the CRSC Student Awards.

MEMBERS' NEWS

Doreen Balabanoff, Professor Emerita, OCADU Faculty of Design continues her work with an international research project focused on transformational change for birth environment design. Funded by the Social Sciences and Humanities Research Council of Canada, the Partnership Development Grant facilitates collaborative research between partners at OCADU, U Florence, Boston Architectural College, and Flinders University (Australia). She reported on colour and light insight development for birth environment design in these presentations:

- 2024. Invited Speaker. Jan 28th LabCor-GI CorLuz: '(Im)materialities of Colour'. Organised by the Research Group on Colour and Light at the Centre of Research for Architecture, Urbanism and Design (CIAUD), Lisbon School of Architecture, in partnership with the Portuguese Colour Association (APCOR) and the AIC- International Colour Association Study Group on Arts and Design.

- 2024. Balabanoff, D., Harte, J. D., Dür, A., Fletcher, A. & Macchi, A. EDRA 55 'Human-centred Environments: Promoting design that sustains human prosperity, well-being and the global environment at all scales'. 19-22 June 2024, Portland, Oregon. Report from Terra Alta Birth Centre, Switzerland: Constructing and presenting a team-based live case study.

The OCADU **Sustainable Colour Lab** (Instagram: @ocadusustainablecolourlab) was launched in September 2024 in Toronto, by Co-Directors **Nicole Collins** (Associate Professor of Material and Visual Culture), Julia Rose Sutherland (Assistant Professor Material Art & Design and Indigenous Visual Culture) and Lauchlan Reid (Associate Professor and Chair of Illustration). An In-Conversation with Paintmaker and Artist Anong Beam of BEAM Paints was followed by a series of workshops focusing on the local Toronto Black Walnut as a source for dyeing, paintmaking and even as an abrasive in a soap-making workshop led by guest artist Lauren Nurse of Sheridan College and Small Spade Farm. Research continues in 2025 with more workshops and a Summer Institute, currently in planning.

Brian Funt presented a paper in collaboration with Alexander Forsythe at the CIC32 32nd Color and Imaging Conference, Montreal, December 2024 on: 'Assessing Color-rendering Differences in Cinematic Lighting with a New Metamer Mismatch Metric'. This paper introduces a new metric, the Camera Lighting Metamer Index (CLMI), rooted in the concept of metamer



Heart graphic for Casey House by Udo Schliemann.
Image courtesy of Udo Schliemann.

mismatching. The CLMI is for assessing the color-rendering differences of disparate sources when a single camera is used and the camera's spectral sensitivities are known. This metric can serve as a useful tool for cinematographers and visual effects artists, providing more predictable and precise control over color fidelity. Brian also had 2 papers accepted for publication:

- 'The object-color solid', Alexander Logvinenko, Brian Funt and Pouya Bastani. Accepted for publication in the Journal of Vision, 2025. This paper describes an algorithm which accurately computes the true object-color solid for the first time.
- 'Metamer Mismatching Predicts Color Difference Ellipsoids', Emitis Roshan and Brian Funt. Accepted

for publication in Color Research and Application, January 2025. The hypothesis advanced and tested in this paper is that the degree of color variability created by metamer mismatching is the primary (although not exclusive) factor underlying the variation in color-discrimination thresholds throughout color space.

Paul Haft is President and Chief Colour Officer at Haft2. Haft2 has been busy working on several interesting colour-related projects. One highlight is their work with the Alzheimer Society in Toronto and York Region to redesign and refresh their environments with new colours, graphics, and overall design. They are working with **Emily Grundy** at Sherwin Williams, to access their colour research when selecting paint colours. Here's a link to [the Toronto space](#). The York region space is still in

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progress. Another Haft2 highlight is their work with Canadian Feed the Children, on developing a 10-year strategy and a new brand identity to be launched in May 2025. Part of the logo design process included informal research with Indigenous and African designers to provide feedback on the logo design and colour palette. The visual direction and initial colours can be seen in the microsite for the 10-year strategy [The Path to Kinvia](#).

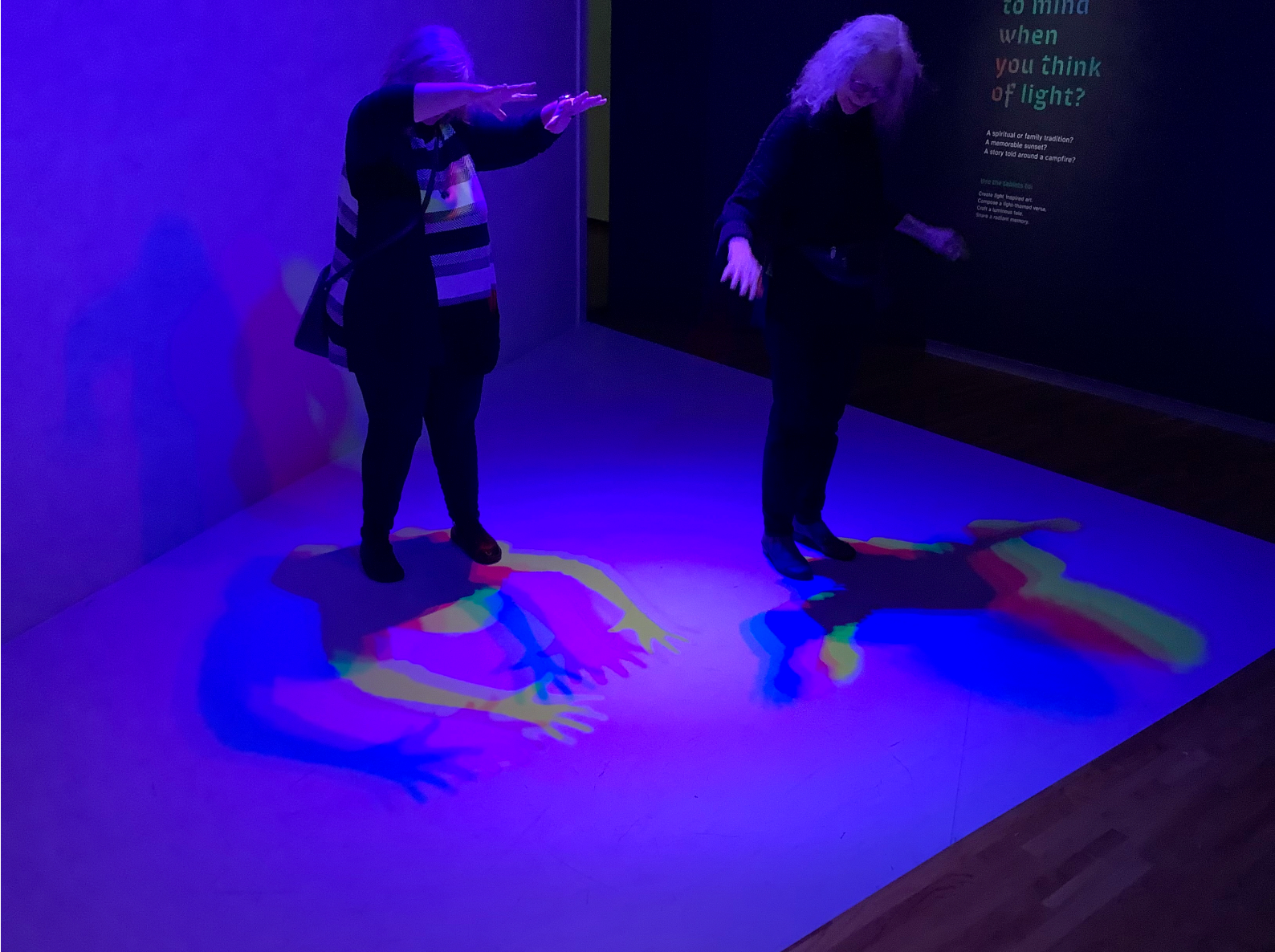
Sara Hartland-Rowe had a solo show, *Trees, Animals, and Things* at Struts Gallery in Sackville, New Brunswick in 2024, and is working on a permanent public-art commission for the Dartmouth North Community Centre (installation, Fall 2025). Currently she is at the ZK/U Artist Residency in Berlin and will be travelling from there to Aix-en-Provence to see, for the first time, the light and colour so beloved by Cezanne.

CRSC Vice President **Montaha Hidefi** was elected as President of the Color Marketing Group® with an effective start on January 1st, 2025 Congratulations! Montaha was busy throughout the year with lectures and presentations around the world. She presented virtually at the Women In The Floorcovering Industry (WIFI), at the "It's Your Turn" Book launch, at CMG's Virtual Summit Reveal, and at the CMF Trend LAB 2024 at the Guangzhou 53rd China International Furniture Fair CIFF. She presented in-person at the

Business Workshop organized by Impact Events in Dubai, UAE, at the Hempel Middle East Color Trends Launch in Riyadh, Saudi Arabia, and at Neocon Shows in Chicago, IL. She also organized a virtual Trendclusive Masterclass on Pantone Color of The Year.

Robin Kingsburgh was an invited speaker at the XIX Color Conference organized by the Associazione Italiana Colore. She presented on: *Colour is for Everyone - Teaching Interdisciplinary Colour Foundations*. In 2024, she became a Board of Directors Member for the Inter-society Color Council, and a Section editor for the Color, Culture and Science Journal. She continued her work with the [Colour Literacy Project](#) and its website, where resources on a revitalized meta-disciplinary approach to teaching about colour are now available, for teachers of all levels.

In 2024, CRSC member, visual artist and Assistant Professor at the University of Regina, **Larissa Tiggelers** had two solo exhibitions, one public workshop and a self-directed artist residency. Tiggelers is steadfastly interested in exploring articulations of care through mindful colour selections, surface, and soft cumulative gestures. Her established painting practice investigates the unknowability of colour, the limitations of authorship, and quiet expressions of care and is grounded in feminism and epistemological inquiry into the study of colour knowledge and colour theory.



CRSC members playing with coloured shadows at the Aga Khan Museum. Photo courtesy of Judith Tinkl.

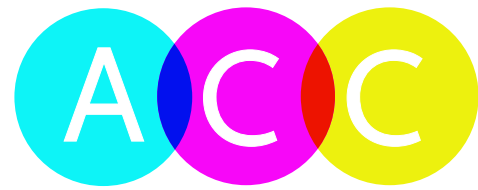
In 2024, **Judith Tinkl** displayed her colourful textile-based work in several exhibitions. Two were at the Station Gallery in Whitby, Ontario: their fundraiser *Drawing for Art*, and *Letters to the Earth between Despair and Hope*. She exhibited with her husband Viktor in *Whatever is Handy* at the Second Wedge Brewing Co. in Uxbridge Ontario, which was very well received. She was also in the *Uxbridge Studio Tour* in September and *Handmade* at the Blue Heron Bookshop in December. In November she participated in **Space & Place: A Making & Thinking Symposium**, at Harbourfront Centre in Toronto, where she was interviewed by Alan Elder, a respected Canadian senior curator, writer, and thinker.

They conversed about her memories of the history of craft in Ontario, where Judith played key roles in the development of early Craft organizations in Ontario, and the start of craft programs in Ontario Community Colleges established in 1967.

2024 CRSC Board: **Robin Kingsburgh** (President), **Montaha Hidefi** (Vice President), **Venkat Venkataramanan** (Treasurer), **Judth Tinkl** (Secretary), **Doreen Balabanoff** (Past-President) and Members at Large: **Vivian Lo**, **Sara Hartland-Rowe**, **Lora Di Fabio**, **Emily Grundy**, **Thoma Doehring**, **Setayesh Babaei** and **Carolina Espinoza-Sanhueza**.

CHILE

ASOCIACIÓN CHILENA DEL COLOR



ASOCIACIÓN CHILENA DEL COLOR



Ingrid Calvo Ivanovic presenting her Keynote Speech on the SCDS Framework at the AIC2024 Midterm Meeting

SUSTAINABLE COLOUR DESIGN STRATEGIES: A FRAMEWORK FOR THE FUTURE

In 2024, our member **Ingrid Calvo Ivanovic** actively promoted the *Sustainable Colour Design Strategies (SCDS) Framework*, a comprehensive tool designed to help designers, educators, and industry stakeholders make informed and sustainable colour-related decisions. The SCDS framework is the culmination of three years of research and consists of eight strategies and forty actionable recommendations. It addresses

critical issues such as fostering a sustainable colour mindset, integrating colour circularity, embracing local identity, and promoting bio-colour innovations. Ingrid showcased the SCDS framework at several design and colour venues, including her participation as a Keynote Speaker at two major international events: the *Biocolours2024 Conference in Helsinki* in June and the *AIC2024 Midterm Meeting: Color Design, Communication, and Marketing* in São Paulo in September 2024. The SCDS framework will also be published as a journal article in 2025.



The opening of the 'noi, voi ed io: i colori della collaborazione' exhibition at Bracciano (RM), Italy.



The Teamwork Colour Matrix exercises, the dataset of the exhibition.

'THE COLOURS OF COLLABORATION': AN EXHIBITION AT BRACCIANO, ITALY

In September 2024, **Ingrid Calvo Ivanovic** (U. de Chile) and **Francesca Mattioli** (Politecnico di Milano, Italy) co-authored a gallery exhibition titled 'noi, voi ed io: i colori della collaborazione' ('we, you, and I: the colours of collaboration'). The **exhibition** featured a data physicalization installation that explored colour as a tool for communicating individual and collective experiences of teamwork in design education. Building on their **Teamwork Colour Matrix**—a colour-based exercise for self and peer assessment introduced to over 1,000 students—the authors presented their findings and insights in the shape of data physicalization artworks, at the Rosticceria M gallery in Bracciano (Rome, Italy). The exhibition ran for a month and attracted more than 250 visitors.

Mattioli, F. & Calvo Ivanovic, I. *Have You Felt Blue or Red? A Colour-Based Tool For Culturally Plural Teams*. DS 110: Proceedings of the 23rd International Conference on Engineering and Product Design Education (EGPDE 2021). Hering: The Design Society. doi.org/10.35199/EPDE.2021. ISBN: 978-1-912254-14-9

CHILE

ASOCIACIÓN CHILENA DEL COLOR



Example of color catalogs made by children with Sara Viloria.

LATINOAMERICA IN COLOR, SARA VILORIA

The researcher, writer, and artist **Sara Viloria** held the workshop “Latin America in Color” every two weeks during 2024. This online project was aimed to vulnerable children across the Americas and it was developed in collaboration with the Canadian organization “Engagement Foundation” and its program “Geeky Latinas.”

This workshop, which combines art, science, and sustainability, highlights the identities of the participants and their environment, rediscovering the colors present in their territory through observation and the creative reuse of waste, debris, and discarded materials.

In the workshop, children explore how to classify and transform everyday and discarded materials into pigments that tell their personal stories, establishing a chromatic poetics with their own listings and nomenclatures by creating color catalogs inspired by the landscapes, biodiversity, and waste and debris characteristic of their communities.

This process not only fosters creativity and environmental awareness but also empowers participants by linking color to their cultural identity and the value of sustainability. This workshop, with a profound social focus, exemplifies the positive impact that can be achieved when the history of art is connected with contemporary landscapes and colors.



The image shows the analysis of a polychrome painted leather piece from the Regional Museum of Iquique, Chile (ANID FONDECYT 1190263).

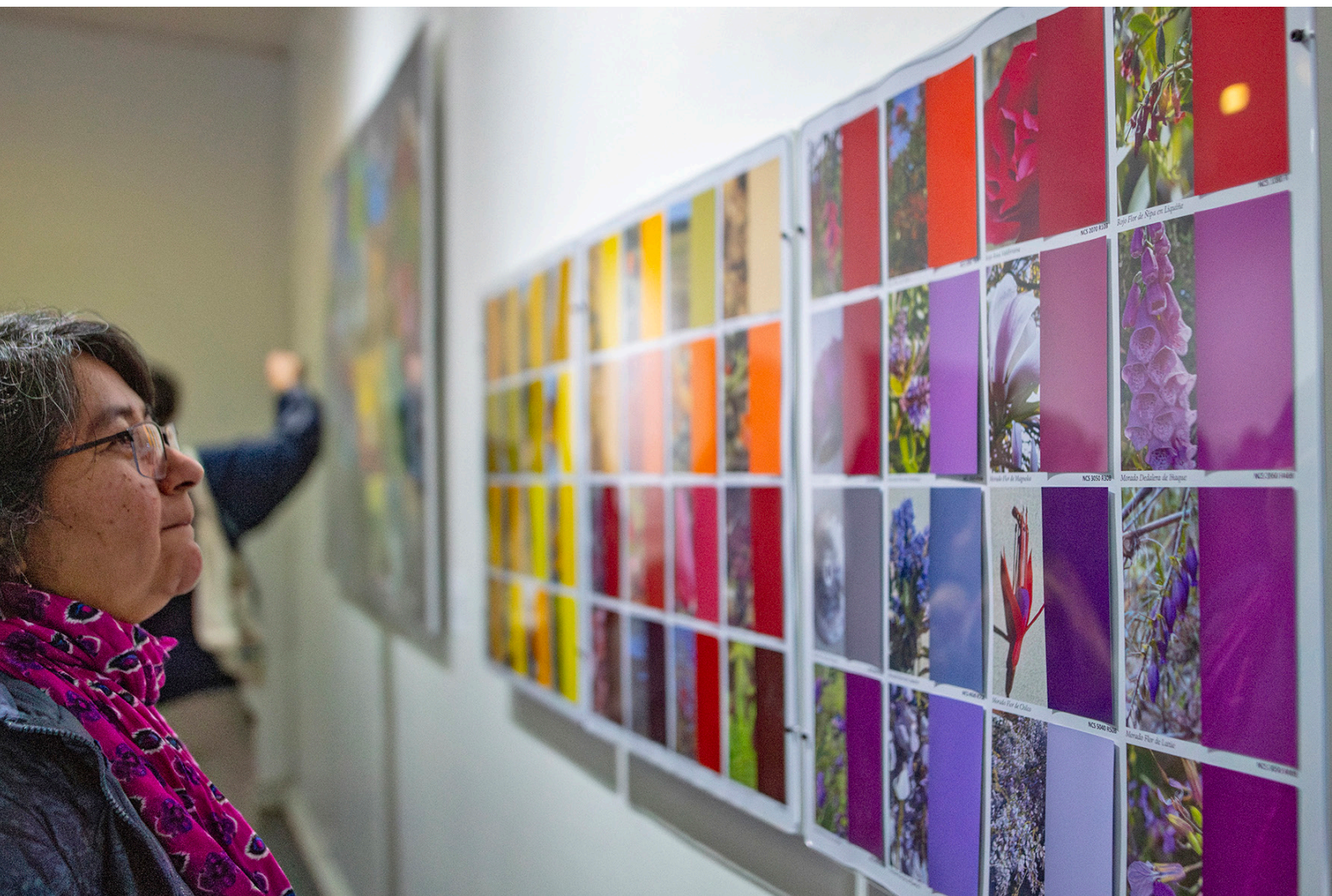
COLORS USED BY THE INCAS DURING THE 15TH AND 16TH CENTURIES IN PERÚ

The Chilean-French archaeologist **Marcela Sepúlveda** conducted a project from 2019 to 2023 with funding from ANID FONDECYT (1190263), focused on the pigment biographies of the Late Intermediate Period (1,100-1,350 AD) in the Atacama Desert. This project aimed to understand how mineral pigment mining, circulation, and consumption participate in northern Chile's social and economic dynamics of pre-Hispanic populations. Since 2024, she is engaged in a new research project (ANID FONDECYT 1240467) that examines the colors used by the Incas during the 15th and 16th centuries across various archaeological sites in Peru, Chile, Bolivia, and Argentina. This study employs an archaeological and archaeometric

approach, which includes the physicochemical characterization of archaeological materials, to explore the relationship between color and power within Inca society. Additionally, she participated in a project (ANID FONDECYT 1230858) led by **Paula Martínez-Sagredo**, which investigates the role of color's materiality in cultural memory from the 15th to the 18th centuries through an interdisciplinary lens that incorporates ethnohistory, linguistics, and archaeology. This project mainly focuses on archaeological materials, such as textiles, associated with Inca women. By combining a gendered perspective into the interpretation, this research aims to enhance our understanding of women's role in preserving cultural memory in the Inca society.

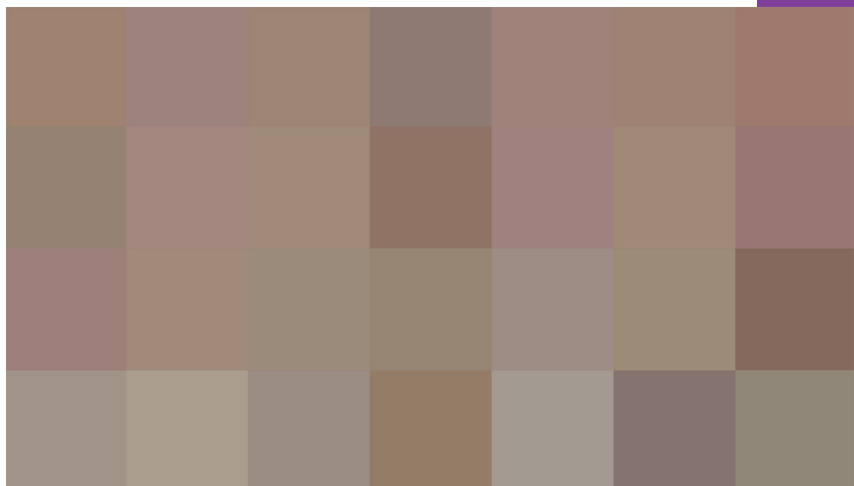
CHILE

ASOCIACIÓN CHILENA DEL COLOR



Panels with part of the project's colours of the "Los Ríos in Colors. Color chart from Southern Chile" exhibition, at Réplica Gallery

Seven columns, one per each participant, with the four most different colors within everyone.



“LOS RÍOS IN COLOURS. A COLOUR CHART OF SOUTHERN CHILE” PROJECT.

During 2024, work continued on the “*Los Ríos in Colors*” project. On May 29, 2024, the exhibition “*Los Ríos in Colors. Color chart from Southern Chile*” was inaugurated at the Réplica Gallery of the Universidad Austral de Chile. On the occasion, various works were presented that showed the colors collected during a year in our region: the general color chart with photographs of 208 objects and atmospheres of the region and its corresponding sample on NCS (Natural Color System) paper; the 40 color palettes made from the general chart; the mandala with the 208 colors differentiated by saturation; 35 watercolors made in situ, in different places in the region and at different times of the year; a sample of different soils; the map of the region and its colors; a table of rocks and the table with the team’s work tools. In September, the results of the project were presented at the AIC Midterm Meeting in Sao Paulo. In December the project was completed with the publication of a website and a printed catalogue, which is also available online. The project director is **Elisa Cordero-Jahr** and the collaborators are the forestry engineer **Víctor Gerding**, the geographer **Carlos Rojas**, the designer **Eréndira Martínez** and the color consultant **Ingrid Calvo Ivanovic**, in addition to other supporting professionals. This project was funded by the Ministry of Arts, Culture and Heritage (folio N°660802). More information and the online catalogue can be found on the webpage www.losriosencolores.cl and news on the Instagram [@colorrios](https://www.instagram.com/colorrios)

MESTIZO: SKIN COLOR IDENTITY(IES)

Researchers **Lina Cardenas**, **Alejandra Rojas**, **Katherine Mollenhauer** and **José Guerra**, conducted 2023-2024 a study that is part of a larger creative project that explores the relationship between the measured skin color and the individual perception of skin color with the aim to establish a psychological identity as proposed by Hammack (2008). During the first part of the research, a study was carried out using 50 volunteered participants tested for normal color vision. The participants had their skin color measured in different visible parts of their body and then they answered a questionnaire.

Initial results of this study showed a tendency among the participants not to recognize the color of their own skin. In addition, when evaluating the colors, the participants did not show negative connotations in their visual assessment. Finally, part of the material collected for this research will be used in the production of a visual arts exhibition that questions the reduction of the identity of skin color promoting education on diversity and inclusion.

Hammack, P. L. (2008). *Narrative and the cultural psychology of identity*. *Personality and social psychology review*, 12(3), 222-247. <https://doi.org/10.1177/1088868308316892>

CHINA

COLOR ASSOCIATION OF CHINA



Some speakers at the seminar of “Color Science and Image Technology 2024” held by Color Association of China (CAC) on 9-11 August 2024 in Xi’an Shaanxi.

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 various aspects, and through seminars to exchange information and new technology about color.

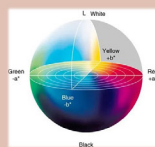
ACTIVITIES IN 2024

On 9-11 August 2024 the seminar of “**Color Science and Image Technology 2024**” was held successfully in Xi’an University of Technology, Shaanxi. This seminar was hosted by the Color Association of China (CAC), together with the Technical Committees of Vision & Color and Image Technology of the China Illuminating Engineering Society (CIES). A total of 17 technical reports were presented by the experts coming respectively from Zhejiang University, Beijing Institute of Technology, Xi’an University of Technology, Yunnan Normal University, Northwestern Polytechnical University, Shandong University of Aeronautics, The Palace Museum, Huawei Technologies, Coloro Technology, Suzhou Baishiyuan Technology, Xiaoyuan Sensing (Beijing) Technology Co., Ltd, and etc. At the seminar, the participants earnestly exchanged

2024.1.22

均匀颜色空间
——颜色感知差异的定量表征

Uniform Color Space – Quantitative Representation of Color Perception Differences



2024.4.23

亦光亦影
——HDR成像技术初探

Light and Shadow
– An Introduction to HDR Imaging Technology



2024.5.21

HDR图像数据集：解锁真实视觉效果
的密码

HDR Image Datasets: Keys to Unlock the Realistic Visual Effects



2024.7.18

从LCD到MicroLED：现代显示技术的变革与迭代

From LCD to MicroLED: The Revolution and Iteration of Modern Display Technologies



2024.6.19

从光子到图像——
相机如何捕获世界？

From Photons to Images
– How Do Cameras Capture the World?



2024.8.20

HDR影像技术：业界标准解读

HDR Imaging Technology: Interpretation of the Industry Standard



2024.9.20

美丽的结构色——微观世界的色彩魔术

The Beauty of Structural Colors
– Color Magic of the Microscopic World



2024.10.18

未经雕琢的图像之胚
——RAW格式的奥秘

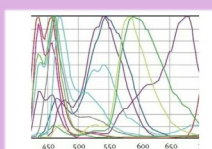
The Unpolished Image Embryo
– The Mystery of RAW Format



2024.11.21

多光谱成像：看见光的
更多可能

Multispectral Imaging:
Exploring More Possibilities of Light



2024.12.17

承上启下——HDR影
像阶调映射算法

Connecting Past and Future
– HDR Tone Mapping Algorithms



The topics of 10 popularization articles about color science and technology published on our WeChat account “Wonderfulness of Color” in 2024 by Color Association of China (CAC).

the academic trends, research experiences, and latest achievements in the relevant technical fields of color vision, color constancy, color reproduction, color management, color fusion, color database, HDR imaging, spectral imaging, compound eye imaging, image signal processing (ISP), color mapping of digital imaging devices, color correction of heritage images, image retrieval, digital detection, and so on. Finally, many professional issues, industrial applications, and development directions were discussed for the interdisciplinary science and technology of color and image.

At the **15th Asia Lighting Conference (ALC2024)** held in Seoul, Korea on 22-23 August 2024, among the 129 presented papers in total, 71 papers were from Chinese attendees, who also won 6 excellent papers, 15 excellent student papers as well as 6 innovative product awards.

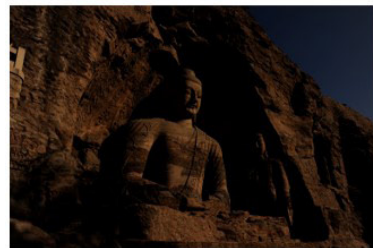
An exquisite essay was published on our WeChat platform via the public account “Wonderfulness of Color” on 21 March 2024 by the Color Association of China (CAC) to celebrate the **International Color Day 2024**. In the essay, the profound influences of colors on our emotions and behavior were revealed, involving

CHINA

COLOR ASSOCIATION OF CHINA

the psychological and emotional effects, cultural implications, historical evolution, and times features behind the red, orange, yellow, green, cyan, blue, purple, and neutral colors, along with their practical applications in art, design, and daily life.

To continuously popularize the related knowledge of color science and technology, a total of 10 specially written pretty articles were published on the WeChat account “Wonderfulness of Color” in 2024, including “Uniform color space – Quantitative representation of color perception differences”, “Light and shadow – An introduction to HDR imaging technology”, “HDR image datasets: Keys to unlock the realistic visual effects”, “From photons to images – How do cameras capture the world?”, “From LCD to MicroLED: The revolution and iteration of modern display technologies”, “HDR imaging technology: Interpretation of the industry standard”, “The beauty of structural colors – Color magic of the microscopic



Three SDR images (left) with different exposures and the HDR image (right) generated by fusing these three images. Scene: Cave No.20 of Yungang Grottoes, Datong Shanxi.

world”, “The unpolished image embryo – The mystery of RAW format”, “Multispectral imaging: Exploring more possibilities of light”, and “Connecting past and future – HDR tone mapping algorithms”. These articles have been widely read and highly praised by the big amount of more than 3600 followers.

The high dynamic range (HDR) imaging technology captures a wider scope of light intensities, providing more accurate and detailed representations of scenes, compared to traditional standard dynamic range (SDR) imaging methods. By changing exposure, HDR imaging is able to acquire fine details in both bright and dark areas, making it valuable for documenting intricate architectural specifics and textures of historical relics. The color science and imaging technology research team of Zhejiang University, in collaboration with the Shanxi Culture Relics Bureau, undertook the project “Research on key technologies

for HDR imaging and display of immovable cultural relics”. For high performance imaging, we proposed an efficient exposure time selection method to take into account the human visual characteristics and integrate HDR image fusion algorithms with the image signal processing (ISP) pipeline. For high fidelity displaying, we developed a specialized uniform color space suitable for tone mapping of HDR images. Our developed technologies were tested and applied to imaging practices at the Yungang Grottoes in Datong, Shanxi, one of China’s most renowned cave complexes, dating back to the Northern Wei Dynasty. Finally, we successfully took a series of HDR images and completed a 3D Gaussian radiation field reconstruction of the greatest Cave No.20, creating a highly detailed digital model of the relics.

FINLAND

SUOMEN VÄRIYHDISTYS SVY RY



Rune & Berg Design received the FCA Iiris Prize 2024 for their seminal contribution in color-centered design in built environments. In the image the president of FCA (2018-2024) Saara Pyykkö is holding the certificate with Lead Designer, Partner, Design Business Lead of Rune & Berg Design, Sara Tuohikumpu.

INTERNATIONAL COLOUR DAY

The Finnish Colour Association (FCA) celebrated the International Colour Day on the 21st of March by awarding the Association's Iiris Prize to **Rune & Berg Design** for their experience-focused color design in built environments. Since their founding in 2011, Rune & Berg Design have developed and grown into a

multidisciplinary team of experts that today numbers more than 20 people whose mission is to create holistic, multisensory and meaningful experiences in the built environment. Their experience-focused design philosophy includes responsibility, insight, user experience, comprehensiveness and collaboration. This philosophy is rendered visible in how each designed space has its typical color palette, feel of space and atmosphere. An airport lounge, company offices, hotels, and libraries are very different design environments for different kinds of users. Colors have been used to support a quiet or simulating working environment and intuitive or experiential public spaces, employing methods from service design. Color palettes have been adjusted for special needs where appropriate. Although the use of color is sometimes surprising and daring, it is easily approachable. Rune & Berg Design have shown with their vision how the quality of our built environments can be enhanced with color in various ways.

EXCURSION

FCA organized a visit to the exhibition *Colour and light – the legacy of impressionism at Ateneum* (Finnish National Gallery) on February 3rd, 2024. The members received a guided tour of the exhibition, after which they freely viewed the art and enjoyed a cup of coffee in the beautiful Café Höijer at Ateneum.

IIRIS SEMINAR

The association organized the traditional **Iiris seminar** on December 3rd, 2024 in the *House of Sciences and Letters* in downtown Helsinki. The seminar was organized in a hybrid fashion with 20 participants at the venue and 33 participants watching the seminar remotely. The topic of the seminar was ‘*Color pedagogy 2030*’ and the goal was to review the status of color teaching at different educational levels in Finland and discuss future goals. The vice-president of the SVY **Saara Pyykkö** opened the event and gave an introduction to the current status of color pedagogy. The first seminar speaker, **Harald Arnkil**, gave a presentation on the international *Colour Literacy Project*, who has been a member of the project team since its inauguration in January 2020. **Ville Huhtanen** from LAB university of Applied Sciences, Finland, followed with a talk on color education in technical universities. The final speaker was **Henri Hagman** from University of Lapland with a fascinating talk on how color education can mediate a sensory relationship to the world. The evening was rounded out with a lively panel discussion moderated by the SVY president (2024-) **Maria Olkkonen** and a lovely seminar dinner.

The seminar is available in Finnish via the following link: [Suomen väriyhdistyksen Iiris-seminaari 2024: Väriopetus 2030](#)

FINLAND

SUOMEN VÄRIYHDISTYS SVY RY



Panel discussion in the Iiris seminar organized in the House of Sciences and Letters on December 3rd, 2024. From left to right, Henri Hagman, Ville Huhtanen, Harald Arnkil and Maria Olkkonen.

INTERNATIONAL ACTIVITY

Harald Arnkil continues on his fifth year in the project team for the *Colour Literacy Project (CLP)*, focusing especially on developing information and resources for university-level colour teaching. The goal of the CLP is a web portal through which one can reach up-to-date and peer reviewed information and teaching material on colour (<https://colourliteracy.org>). CLP has organized four virtual *Colour Literary Forums* per year. The 2024 series of Forums, *Colour in Context*, was planned by Harald Arnkil who was also the speaker in the first Forum together with professor **Valtteri Arstila** (see <https://colourliteracy.org/colour-in-context>).

At the Finnish Color Association, no less than seven members of the Finnish Colour Association were working during 2024 on doctoral theses on various aspects of colour. The first to reach the final goal was **Veera Hatakka**, treasurer of the SVY, who defended their PhD thesis in linguistics titled *On the Borders of Colour: Semantics of Finnish Colour Expressions* (<https://helda.helsinki.fi/server/api/core/bitstreams/417c465d-75a2-484b-a501-bf403e6abfc0/content>). Several other

theses are scheduled to be defended in the course of this spring and summer.

The Finnish Architectural Journal published a color-themed issue 4/2024 (<https://www.ark.fi/en/2024/04/>) with several articles authored by FCA members:

- **Saara Pyykkö's** article "*Short Syllabus in Colour Research*" dealt with research-based color design in architecture (<https://www.ark.fi/en/2024/04/short-syllabus-in-colour-research/>).
- **Kati Winterhalter**, "*Layers of Intention*" (<https://www.ark.fi/en/2024/04/layers-of-intention/>)
- **Enni Heiskanen, Matti Pärssinen, Emmi Santamäki**, "*The Architect's Degree – in Black and White?*" (<https://www.ark.fi/en/2024/04/the-architects-degree-in-black-and-white/>)
- **Esa Laaksonen**, "*A First Step in Housing*" (<https://www.ark.fi/en/2024/04/a-first-step-in-housing/>).

Helsinki, February 15th, 2025

Maria Olkkonen

President

Suomen väriyhdistys SVY ry

FRANCE

CENTRE FRANÇAIS DE LA COULEUR



Centre Français de la Couleur



Jacqueline Carron in her painting studio at Poët-Laval (Drôme)

MEMBERS ACTIVITY

J. Carron (born in 1920), CFC doyenne, several interviews and TV shows.

A. Varichon, *Nuanciers chez*. Princeton University Press Princeton University Press ; with D. Cardon, Meetings on the know-how of the Mobilier National: Listing color, classification challenges © Mobilier National.

Parcours couleurs avec Passeurs d'Oeuvres Contemporaines, centres sociaux et médiathèques de Sète, CADA et école des beaux-arts, © Passeurs d'Œuvres Contemporaines.

C. Besse, *Minerals, gems, colors of art*. VAN CLEEF & ARPELS - MADISON AVENUE, NYC, a 6m long fresco in jade and azurite powders ; CARTIER - MIAMI, two frescoes with mineral powders malachite, lapis-lazuli, tiger's eye and golden garnet.

Exhibitions "*Romance in the stone*", Musée de Minéralogie des Mines Paris; MAISON & OBJET, ESPACE WHAT'S NEW IN DECOR?, Paris & Hong Kong.

Goody - Gilles EUGENE, invites you to discover his study, research and exhibition program which will extend over several years: "*Chemin de Croire*"; CFC newsletters editor.

L. Noury, “*Symbolique des Couleurs. Art, design, architecture*” dans le cadre de l’exposition de peintures tactiles, Salon d’automne La Grande Halle de la Villette; Salon de Charenton, 70th edition; «*COULEUR et HAUTE COUTURE*»

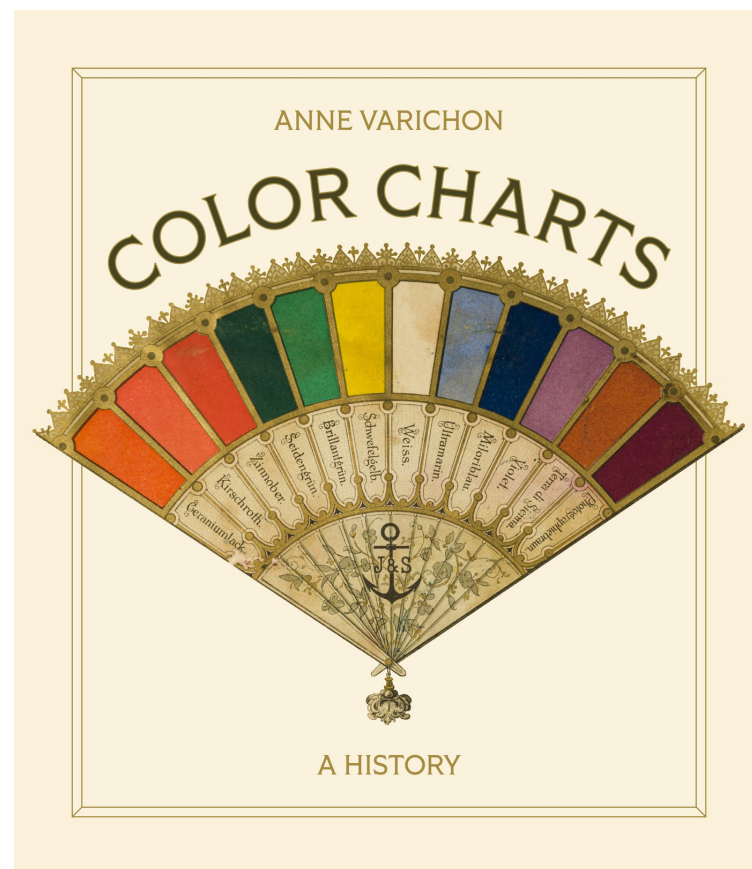
Exhibition «*Ode au Vivant*», galerie Agape, Paris; Landscape: Beyond the Visible, Paris; VENT, Ginza, Tokyo. <https://www.youtube.com/watch?v=GS7MhejX8fM>

P. Callet, March-June: *Colour of minerals and minerals for colour*; Course on colour and materials at Institut d’Optique Saint-Etienne, “*Nuit des musées*” at Museum of Mineralogy (School of Mines in Paris).

L. Tardy, a lot of commented visits at Louvre Museum, course on colour and Paintings at Institut d’Optique Saint-Etienne.

A. Vret, conference on Ochre in modern art, November 7th, Paris.

K. Bideaux, «*Queer Futures, Violet Futures: Queer Modernity Symbolism of Violet in West Culture*», *Color Culture and Science Journal*, <https://doi.org/10.23738/CCSJ.160212>, «*Vilés Vilaines Violettes. Représentations des antagonistes en violet dans l’animation*», *Real Colors and Cultures*, Mulhouse, «*Des paillettes dans nos vies. Usages et significations des paillettes dans les pratiques artistiques et/ou militantes queeres*», Toulouse.



Anne Varichon's new book cover page

FRANCE

CENTRE FRANÇAIS DE LA COULEUR

SOCIETY ACTIVITY

Commission Ethique et Restauration Numérique: **E. Trouvers, L. Tardy, P. Callet**, technical meeting on autochromes acquired in the 1920's at Albert Khan Museum for study on Delacroix colours and painting restorations.

May 16th is the **International Day of Light**. About 70 participants from different fields of research and artistic activities; Varnishes, historical uses in paintings and violin making, contemporary research on optical properties, ageing, digital techniques for survey, analysis, restoration.

Meeting with **CNRS GDR Appamat**, february and June in Lyon, Les dernières couches formalisant une peinture artistique, by **L. Tardy & E. Trouvers**.

L. Tardy, P. Callet, S. Depondt, Comments (on site) on ND-Paris cathedral at summer solstice and natural light.

On the restoration of Delacroix chef d'oeuvre La Liberté guidant le peuple. Comparisons Before-After and proposition



GERMANY

- DEUTSCHE FARBWISSENSCHAFTLICHE GESELLSCHAFT (DFWG)
- DEUTSCHES FARBENZENTRUM (DFZ)
- DIN-FNF (DIN)



Participants at "50 Years of DfwG"

DEUTSCHE FARBWISSENSCHAFTLICHE GESELLSCHAFT (DFWG) | GERMAN SOCIETY OF COLOR SCIENCE AND APPLICATION

DFWG 50TH ANNIVERSARY EVENT 2024

On the evening before the conference, 38 guests accepted the invitation to the traditional pre-event get-together, which took place in a brewery. Regional beer specialities were tasted, good food was enjoyed and interesting conversations were held in a cosy

atmosphere. The different colours of the various types of beer alone were enough to get people talking shop. You are always amazed at how many nuances there are.

A three-hour workshop on the development of colour measurement took place prior to the conference. The presentations provided well-founded introductions to historical, current and future approaches to measuring methods for colourimetry. Many thanks to all participants for their exciting contributions!

In keeping with tradition, the President opened the conference, followed by a welcome from the hosts. **Carmen Lang**, Managing Director of MICRO-EPSILON Eltrotec GmbH, surprised everyone with a laudatory speech and a birthday cake to mark the anniversary:

“Dear Board members, dear members, dear guests, it is a great pleasure for me to welcome you all here today. What a special occasion! 50 years of the German Society of Color Science and Application - that is truly a reason to celebrate. Congratulations on this impressive anniversary!

For half a century now, the work and discoveries of the DfwG have made a significant contribution to a better understanding of the world of colour in all its facets. From the study of how we perceive colours, to the measurement and standardisation of colours, to the diverse applications in areas as varied as design, art, medicine and industry - the DfwG has established itself as a shining star in science and has played a decisive role in shaping this development.

An anniversary like this is not only an opportunity to look back proudly on the successes achieved so far, but also to look ahead with optimism. The German Society of Color Science and Application stands for innovation and is held in high esteem in the industry. Its spirit of research remains unbroken and the voices of the luminaries who work here are heard around the world. Especially in the digital world, which is constantly evolving, colour technologies are playing an increasingly central role. Whether in image processing, in precise colour matching or in the design of virtual worlds - here too, the DfwG relies on state-of-the-art technologies such as artificial intelligence in order to always be at the forefront.

What always impresses me is the enormous passion that the members put into their work. The seminars, workshops and annual meetings that are organized provide an indispensable space for the exchange of knowledge and ideas. Each time I am inspired by the scientific presentations and new insights. And I always look forward to receiving this valuable content in printed form - to read, marvel at and think about. Finally, I would like to congratulate all our members, researchers and all those who have made the DfwG what it is today over the past 50 years. Let us celebrate this milestone and look forward to all that the future has in store for us.

Congratulations and here's to the next 50 years full of colour, science and innovation!”

Over the two days of the conference, 15 presentations were given on the main topics of colour measurement, appearance, HDR & colour printing and interdisciplinary colour. Many thanks to all the speakers for their great contributions! The first topic block “Colour measurement - basics” was particularly exciting. The contributions by **Tobias Schneider**, **Christoph Schierz** and **Udo Krüger** opened the discussion on the opportunities, consequences and risks of a possible transition to a new cone-based colorimetry, which is currently being discussed internationally.

The DfwG general meeting took place on Wednesday afternoon. During the meeting, long-standing members were honoured for their twenty and thirty years of membership of the DfwG, and the DfwG Sponsorship Awards 2024 were presented.

Lone Marleen Schindler was honoured for her bachelor's thesis at HAW Hamburg entitled “Psychological indicators of the effect of different coloured light stimuli”.

GERMANY

- DEUTSCHE FARBWISSENSCHAFTLICHE GESELLSCHAFT (DFWG) | GERMAN SOCIETY OF COLOR SCIENCE AND APPLICATION
- DEUTSCHES FARBENZENTRUM (DFZ)
- DIN-FNF (DIN)



"50 Years of DfwG" Publication Cover

Dr. Carl Fridolin Weber received the prize for his dissertation "*Studies on Gloss of Printed Surfaces*", which he wrote at TU Darmstadt. A gloss memory was created from his own print samples produced as part of the thesis.

Just in time for our annual conference, the commemorative publication "*50 Years of DfwG*" was published as Report 4/2024.

Its timely completion was only possible thanks to the contributions of the authors as well as the editorial co-operation and great support of **Frank Rochow** and **Werner Rudolf Cramer**. And thanks to **Andreas Kraushaar**'s unwavering optimism that the printed version could go to press in time for our conference - there were doubts in the meantime. **Ellen Stockmar** gave the commemorative publication a colourful and appealing layout and worked several night shifts to produce the printed version. Thank you for that!

In the anniversary year, it was particularly important to thank the many active members of the DfwG for their commitment. Whether for their work on the Board,

in the DfwG working groups, in the CIE divisions, on committees, in the editorial team of the DfwG Report, on the Awards Committee or as auditors, as advisors and friends who are always available - all of this makes the DfwG vibrant and contributes to the successful work of our organisation. We would also like to thank those who support us with the logo design and layout design, as well as those who maintain our website. After the members' meeting, a guided tour of Göppingen was on the programme. We were able to experience Göppingen as a Staufer city, water town and toy centre (e.g. Märklin railways). An entertaining walk through the town provided interesting details. This was followed by a festive dinner at the Hotel Hohenstaufen.

Andreas Kraushaar had prepared an anniversary quiz, which in the end **Tatjana Quast** narrowly won ahead of Team Farbenblind/Colourblind (Florian Süßl) and **Marcus Barbieri**. TechnoTeam kindly sponsored the 100 years of $V(\lambda)$ shirts for the winners. Thank you for an entertaining and enjoyable evening!

The second day of the conference also offered many interesting presentations on various colour-related

topics. The lab tour at lunchtime provided insights into the precise colour measurement and industrial application possibilities that are being developed at MICRO-EPSILON.

Exciting contributions and discussions from research and industry as well as the networking opportunities contributed to the success of our conference. Thank you to all speakers and participants for their contributions and for their interest! The abstracts of the presentations and the conference programme can be found in the DfwG Annual Conference archive on the website.

The conference in Göppingen left lasting impressions, new ideas and experiences. It was once again very enjoyable. Many thanks to MICRO-EPSILON Eltrotec for their hospitality, the insights into their fields of activity and the great support during the conference! With inspiring ideas and diverse topics, we look forward to another exciting event next year. The DfwG Annual Conference 2025 will take place in the University Colour Research Collection at TU Dresden.

GERMANY

- DEUTSCHE FARBWISSENSCHAFTLICHE GESELLSCHAFT (DFWG) | GERMAN SOCIETY OF COLOR SCIENCE AND APPLICATION
- DEUTSCHES FARBENZENTRUM (DFZ)
- DIN-FNF (DIN)



Participants at STADT-LAND-FARBE-2024

DEUTSCHES FARBENZENTRUM (DFZ) GERMAN COLOUR ASSOCIATION

2024 INTERNATIONAL CONFERENCE "STADT – LAND – FARBE", HAMBURG

The international conference STADT LAND FARBE, organised by the German Colour Association (Deutsches Farbenzentrum), the HAWK Hildesheim and the Fachschule Farbtechnik in Hamburg,

highlighted current approaches to colour design in urban and rural environments. Around 180 experts, including designers, architects and urban planners, as well as pupils and students, discussed the role of colour as a functional and design element. On both days of the conference, lectures such as those by **Dr Christopher Dell**, **Lina Lahiri** and **Prof. Esther Hagenlocher** structured the programme and offered insights into urban colour dynamics. Other contributions dealt with



Marcella Wegner-Di Gabriele, Dr. Stefanie Wettstein and Julia Hausmann

the historical and social aspects of colour. Sustainable material utilisation and cultural dimensions were also highlighted. Practical workshops made it possible to directly apply what was presented. An accompanying exhibition presented urban art and façade concepts. The conference marked an important moment in the interdisciplinary discourse on space, design and the complex interactions between colour and the environment.

DIN – FNF

In 2024 the following new standards have been published:

DIN 6171 - Draft: 2024-09, “*Aufsichtfarben für Verkehrszeichen und Verkehrseinrichtungen*“
(*Surface colours for traffic signs and traffic facilities*)

DIN 67520 – Draft: 2024-10, “*Retroreflektierende Materialien zur Verkehrssicherung - Lichttechnische Mindestanforderungen an Reflexstoffe*“
(*Retroreflective materials for traffic safety - Minimum photometric requirements for reflective materials*)

DIN EN ISO/CIE 11664-5:2024-10, “*Colorimetry - Part 5: CIE1976 $L^*u^*v^*$ colour space and u', v' uniform chromaticity scale diagram (ISO/CIE 11664-5:2024); German version EN ISO/CIE 11664-5*”

DIN 5033-9
Colorimetry - Part 9: 2024-07, “*Reflectance standard for calibration in colorimetry and photometry*”

DIN EN ISO 18314-4
Analytical colorimetry - Part 4: 2024-04, “*Metamerism index for pairs of samples for change of illuminant (ISO 18314-4:2024); German version EN ISO 18314-4:2024*”

For details about the work of DIN-FNF please see:
<https://www.din.de/en/getting-involved/standards-committees/fnf>

Deutscher Verband Farbe

Frank Rochow

(Chairman)

dvf@rochow-berlin.de

GREAT BRITAIN

THE COLOUR GROUP (GREAT BRITAIN)

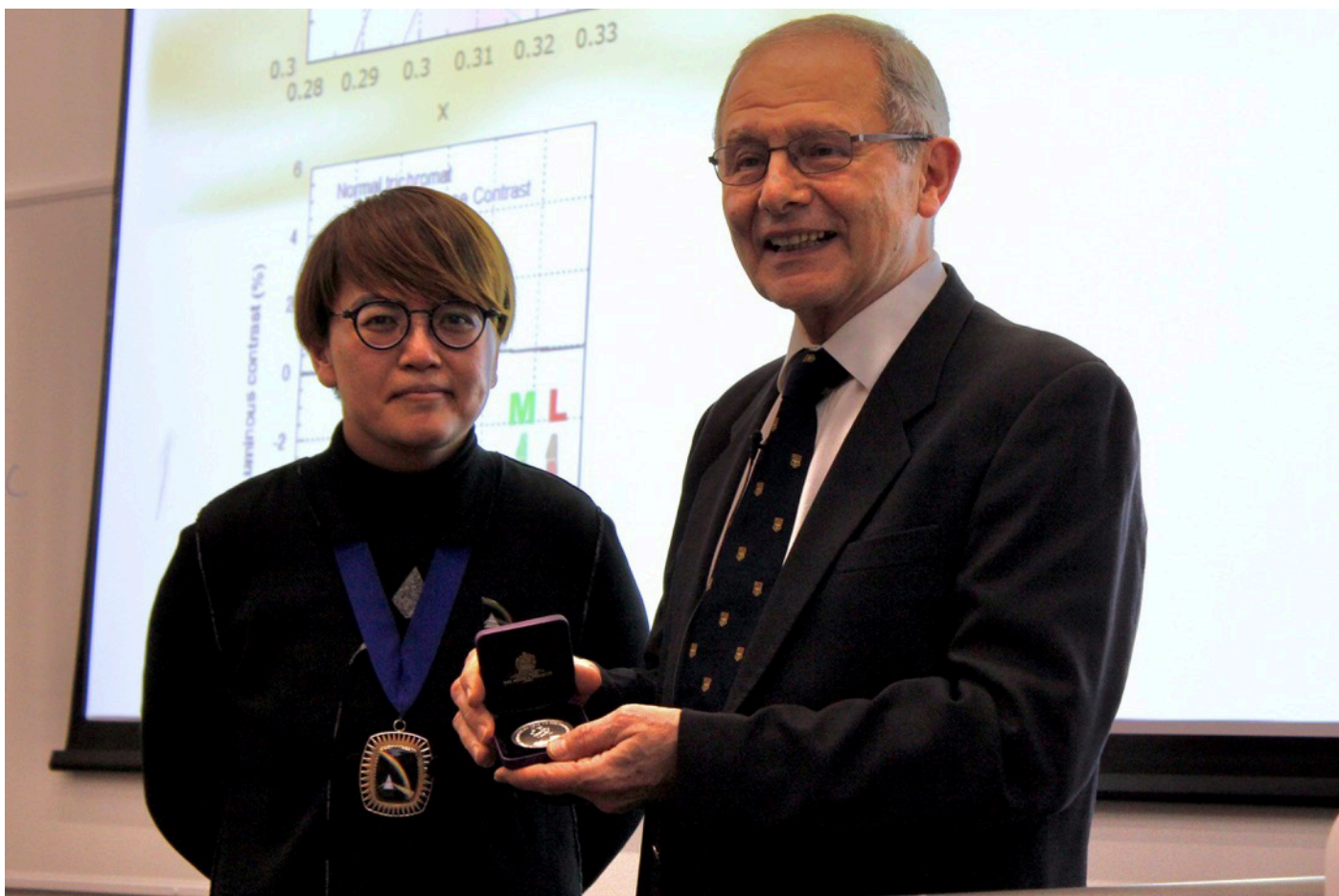


Prof. Wuerger delivering the Palmer Lecture 2022 – courtesy of Dr Robert Lee

The year began with the Colour Group (GB)'s customary Colour Vision Meeting. In 2024 the annual Palmer Lecture was delivered by **Prof. Daniel Osorio**, University of Sussex, UK. The meeting began with a special tribute to the previous year's Palmer Lecturer, **Prof. Sophie Wuerger**. The announcement of her sudden death came early in January. Various events to celebrate her life and achievements have already been planned within Britain's colour community and the Colour Group

(GB) took part as well as celebrating her as one of its active members. Prof. Wuerger was one of the regular organisers of the Group's Colour Vision Meetings.

Every two years the Colour Group (GB) awards its **Newton Medal** to a distinguished worker in the field of colour science, on the occasion of his or her delivery of The Newton Lecture. In February the Colour Group (GB) honoured the professional achievements of one of



Prof. John Barbur receiving the Newton Medal from the Colour Group (GB) Chair, Dr Vien Cheung – courtesy of the Colour Group (GB) Archives

its prominent long-term members, **Prof. John Barbur**, by awarding him the 2024 Newton Medal. He gave his Newton Medal lecture on *Variability, colour thresholds and chromatic mechanisms*.

On the afternoon of 21st March 2023 members and friends of the Colour Group (GB) gathered in the Victoria and Albert Museum, London, to celebrate International Colour Day 2024. **Dr Lucia Burgio**, the Lead Conservation Scientist at the Museum, a Fellow of the Royal Society of Chemistry and an Honorary Research Fellow at the Department of Chemistry, UCL as well as the Chair of the AMC Heritage Science Expert Working Group of the Royal Society of Chemistry, led a tour around the Museum, introducing the participants to the intriguing colour history of selected objects from the collection.

In April the customary seminar *Colour in Art* was co-hosted with the University of the West of England,

Bristol and was held in a hybrid format to give the opportunity for a greater number of members to participate. Artists, designers and makers from Great Britain and United States joined authors to discuss the subject.

Traditionally the Annual General Meeting of the Colour Group (GB) takes place on the first Wednesday of May and 2024 was no exception. After reviewing the work of the last Committee, the Assembly proceeded to vote the new Committee in. Later in the afternoon members and friends were treated to a talk by **Dr Sophie Boon**, senior lecturer in design crafts at the University of the West of England. Her subject was *Neo-Gemstones: the illuminating future of coloured crystals*.

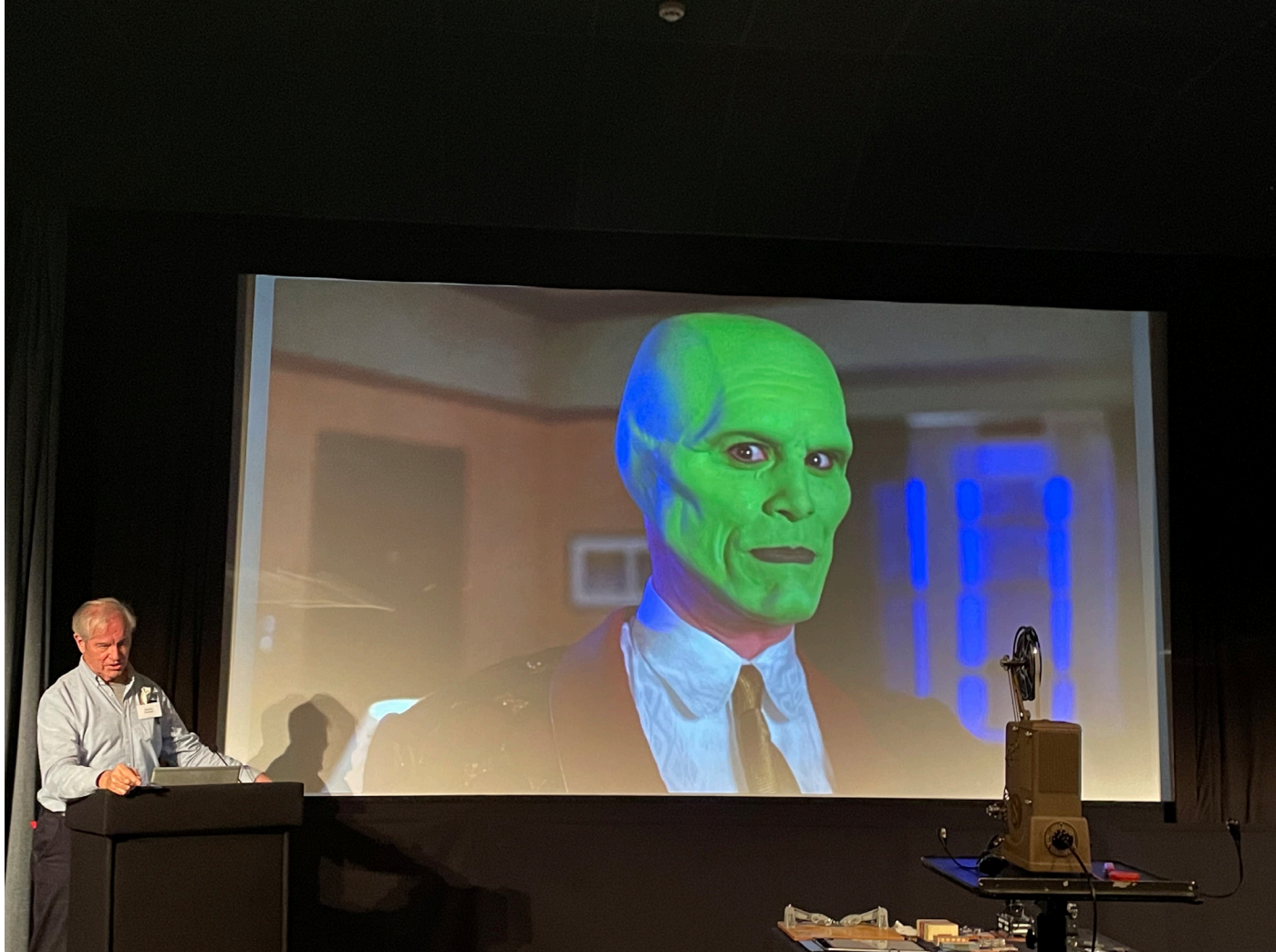
After a well-deserved summer break the members and the Committee gathered to celebrate new and emerging talent at the well-attended Awards Meeting at the beginning of October. Presentations were given

GREAT BRITAIN

THE COLOUR GROUP (GREAT BRITAIN)



Coromandel Screen, the Victoria and Albert Museum collection – courtesy of V&A©



Dr Charles Poynton delivering the Colour Group Keynote at the Colour in Film Conference - courtesy of Dr Elza Tantcheva-Burdge.

by the 2024 recipients of the WD Wright and Palmer Travel Awards and some of the Robert W G Hunt Poster Awards - all supported by the Colour Group (GB)'s awards for early career researchers.

From 10th to 13th November the *Eighth International Conference Colour in Film* took place at the Megascreen and Watershed in Bristol which marked ten years since the Colour in Film seminar at the City University, London, which gave birth to the conference. In 2024 it was co-organised by the Colour Group (GB) the Hochschule für Technik und Wirtschaft (University of Applied Sciences for Engineering and Economics) Berlin, the British Film Institute, the University of Bristol and in co-operation with Filmarchiv Austria, Cinematek, Belgium and South-West Silents, Bristol. The conference's theme was *Colour in TV, Video and Film* with a special session dedicated to **Mr Ken Freeman**, one of the pioneers of British colour television and a

life member of the Colour Group (GB), who passed away relatively recently. As is customary, the conference programme included scholarly presentations and curated screenings.

The following month, the Colour Group (GB) for the first time staged an event on Colour in Interiors which sparked the interest both of the members, and of the general public who attended in good numbers. Amongst the speakers were academics, a curator, and an author who is also a retailer.

The Group has already lined up an ambitious programme for the first part of 2025 and the event diary for the second half is already almost full. This creates an optimistic horizon and a promise that the Colour Group (GB) will be able to continue to propagate interest in the different aspects of colour and to nurture emerging talents in 2025.

ITALY

GRUPPO DEL COLORE –
ASSOCIAZIONE ITALIANA COLORE



GRUPPO DEL COLORE
ASSOCIAZIONE ITALIANA COLORE

EVENTO DI PRESENTAZIONE DEL PROGETTO

**ESPLORAZIONI
CROMATICHE**

**L'ARTE DEL DESIGN
E DEL COLORE**

15.10.2024
ORE 18.00

PORDENONE
LOGGIA DEL MUNICIPIO

IL TERRITORIO RACCONTATO
NEI PROGETTI D'ARREDO
DEGLI STUDENTI
ISIS CARNIELLO

PRESENTAZIONE E
PREMIAZIONI DEI LAVORI

**EVENTO APERTO
A STUDENTI, GENITORI,
CORPO DOCENTE,
IMPRENDITORI
E APPASSIONATI DI DESIGN**

Comune di Pordenone
CLUSTER FVG
LEGNO ARREDO CASA
ISIS
INNOVATION
PLATFORM
Canton
CORALLO
Pordenone Fiere
In collaborazione con
STUDIO
FRANCESCA
VALAN

Poster presenting the results of the workshop organized by Francesca Valan in Pordenone (Italy) on color trends, sustainability, and CMF.

The GdC - Associazione Italiana Colore brings together Color enthusiasts, professionals, and academic figures, so 2024 has been full of professional teaching, research, and dissemination events. Below are just some of our members' significant experiences.

RESEARCH ACTIVITIES

The research group in Lighting of the *Department of Industrial Engineering of the University of Naples Federico II*, led by **Prof. Laura Bellia**, is currently engaged in two main research areas regarding colors: the influence of light and colors on cultural heritage and the impact of colors in interiors on human non-visual responses.

The former study examines how light color affects fungal growth on artworks. Five fungal strains from the Zoological Museum of Naples were exposed to monochromatic blue, green, yellow, and red light from LEDs. Results show that colored light influences growth and biochemical composition differently per species, highlighting the need for tailored museum lighting protocols.

The latter study explores how partition colors in open-plan offices can affect circadian rhythms. Simulating 144 setups, it finds yellow partitions can lower the melanopic equivalent daylight illuminance (mel-EDI) values, while blue, purple, and green have minor effects. High-reflectance partitions amplify lighting

impact, highlighting the need for color and lighting strategies to enhance worker well-being.

The research "*The multiscale documentation of color with GIS*" by **Prof. Maria Martone** (Formerly *Dipartimento di Ingegneria Civile, Edile e Ambientale, Università Sapienza di Roma*) explores advanced techniques in digital surveying, 3D modeling, and information systems to analyze the role of color in architectural and urban heritage. Color, tied to surfaces and influenced by environmental factors, serves as a key tool for documentation. Studies include Pontine landscapes, Naples' metro, and Leonardo's maps. Recent work integrates GIS and Urban Digital Twins for spatial color mapping.

WORKSHOPS

Francesca Valan designed and held two workshops for Cluster Legno, Arredo e Sistema Casa FVG, focusing on education and industry innovation. The initiative enhanced students' learning experiences and developed a replicable project model to strengthen institutional offerings.

The first workshop, *Color Design*, was for fourth-year students at Giovanni Sello High School in Udine. It taught them to create textures and color patterns reflecting Friuli Venezia Giulia's cultural identity. Inspired by regional landscapes, architecture, and gastronomy, the project emphasized sustainability and inclusivity

ITALY

GRUPPO DEL COLORE –
ASSOCIAZIONE ITALIANA COLORE



Images taken during the Workshop “The Transformative Power of Colour in Weaving” organized and held by Renata Pompas in Udine (Italy).

in furniture design. It was selected for the *New European Bauhaus Festival 2024*.

The second workshop, at Institute B. Carniello (Pordenone), introduced students to color trends, sustainability, and CMF. As part of a furniture restyling project, they analyzed the color identity of eight cities, including Pordenone, Udine, and Venice. The final phase involved restoring and repainting damaged furniture from SICAM fair refreshment points, which was showcased at *SICAM 2024*, highlighting the impact of color design on sustainable furniture innovation.

Renata Pompas held the three-day workshop “*The Transformative Power of Color in Weaving*,” requested by the C.I.R.T. aps association of Udine. The event was designed for professional weavers, addressing the lack of structured color knowledge in traditional textile weaving. The workshop introduced key concepts such as light/dark, warm/cool, saturated/desaturated, and chromatic/achromatic and explored how fiber material affects color perception. Participants selected six key colors from artistic images, balancing warm and cool tones, and applied them in a Color Chart divided into neutrals, pastels, brights, and darks. Using diverse wool yarn samples, they created unique, harmonious palettes that reflected their aesthetic preferences, enhancing their ability to make conscious color choices in textile design.



Prof. Maurizio Rossi, former president of the Associazione Italiana Colore and president of the International Color Association, receives the Italian Knowledge Leader 2024 award.

INITIATIVES

Prof. **Anna Marotta** of Politecnico di Torino carried the initiative *“Rediscovered and shared color, from history to the present day: Casa Marotta-Carboni.”* The research on historical color focused on a restored neoclassical apartment (Luigi Formento, 1852) in the Turin Jewish quarter. The Casa Museo Marotta-Carboni was founded to promote it as a “living lesson in architecture,” hosting cultural and academic events. Its rich decorative system, blending chromatic culture and architecture, preserves historical identity, making it a key site for color and heritage studies. The project led to the birth of the association *“Casa Museo Marotta-Carboni,”* which granted the use of space for cultural initiatives, such as the culture of project and color, to students and associations like the Associazione Italiana Colore and the International Colour Association.

Another initiative coordinated by Prof. Marotta is the association *“Associazione per la Cittadella,”* which is involved in activities to valorize the Cittadella di Alessandria, an example of eighteenth-century defensive architecture. The CoE’s *“Lighthouse of Peace*

in Europe” project has supported it since 2022. The association’s activities are connected to color-related topics. Studies on fortress landscapes through the artistic vision of painter-soldiers like Bagetti, Bossoli, and Cambiaso link their work to color theories by Goethe, Turner, and Pitloo. The activity “Color for Peace” features artworks, including those by war-affected children, highlighting color’s role in conveying peace implemented in the logo/symbol of the Faro Project. The topic of “green” is central in the Heritage Walks in the Cittadella, aimed to explore its rich botanical identity, including iconic plane trees studied with the Turin Academy of Agriculture. Research expands internationally finding common ground with Arad’s Citadel in Romania. Also, the spaces managed by the association “Associazione per la Cittadella” are accessible for cultural events to specific associations, including the Associazione Italiana Colore and the International Colour Association.

AWARDS

On November 26, 2024, at the Protomoteca hall in Campidoglio (Rome), in the event organized by the Ministry of Tourism, the Ministry of University and

ITALY

GRUPPO DEL COLORE – ASSOCIAZIONE ITALIANA COLORE

Research, ENIT and Convention Bureau Italia, Prof. **Maurizio Rossi** of the Politecnico di Milano, former president of the Associazione Italiana Colore, and current president of the AIC - International Colour Association, received the *Italian Knowledge Leader 2024 award*, for his research, editorial and association activities in the sectors of Color and Lighting.

In the context of the 2024 Color Conference, the Associazione Italiana del Colore awarded the annual Premio del Colore (Color Award) to the extraordinary painter **Valerio Adami** for the incredible use of color in his works; *“The tool for reading the drawing is color, just as the voice is the tool for reading the written word”*, because *“The voice is the color of writing; color is the voice of painting”*.

JOURNAL AND PUBLICATION OVERVIEW

The Gruppo del Colore – Associazione Italiana Colore proudly manages the **Color Culture and Science Journal (CCSJ)**, a leading academic publication dedicated to advancing interdisciplinary research in the field of color studies. As a key initiative of the Gruppo del Colore, CCSJ serves as a vital platform for scholars

and professionals to disseminate their findings on the scientific, technological, and cultural dimensions of color. Its inclusion in Scopus, one of the most prestigious abstract and citation databases, underscores the journal’s commitment to scientific excellence and highlights its increasing influence within the global academic community.

Over the years, CCSJ has demonstrated its dedication to advancing knowledge in this vibrant domain, publishing 24 articles in the last year among 41 submissions. These contributions address a wide array of topics, ranging from colorimetry and perception to applications in design, art, and conservation. The Journal’s top articles receive over one thousand visualizations each year.

In addition to the journal, the Gruppo del Colore also manages the publication series **Research in Color and Applied Sciences Books (RCASB)**. This series serves as an essential complement to CCSJ, focusing on in-depth studies and extended discussions on specific aspects of color science and its applications. RCASB aims to bridge the gap between academic research and practical applications, offering resources that benefit both the scientific community and industry practitioners. The



Picture taken on the occasion of the "Color Photography and Film: Sharing Knowledge of Analysis, Preservation, Conservation, Migration of Analogue and Digital Materials" held in Amsterdam and organized by the Associazione Italiana Colore.

series includes contributions from leading experts in the field, as well as the proceedings of the Gruppo del Colore yearly conferences.

CONFERENCES

The GdC - Associazione Italiana Colore organizes color-related events such as conferences and seminars; in 2024, two conferences were organized, the Color Conference 2024 (CdC2024) and the Color Photography and Film 2024 Conference.

The "Color Photography and Film: Sharing Knowledge of Analysis, Preservation, Conservation, Migration of Analogue and Digital Materials" conference was held in Amsterdam on the 12th and 13th of September 2024. With 90 participants, in person and online, attendance remained consistent with previous editions, which collectively hosted around 140 attendees. Keynote speakers **Elif Rongen-Kaynakçi** and **Monica Marchesi** offered insightful talks on early color cinema restoration and reprinting as a transformative preservation tool.

On the 11th of September, participants joined a special tour at the University of Amsterdam's Conservation Program, featuring presentations on conservation research and the SBMK project photography. The event attracted a diverse group, with 27% from archives, 23% from academia, and 21% from museums, reflecting its interdisciplinary nature.

The **Color Conference** was held online on 28 and 29 November 2024. Fifty-two papers were presented in two parallel sessions in Italian and English. The invited speakers were Professor **Phil Green** from the NTNU, the Norwegian University of Science and Technology, Professor **Vien Cheung** of the University of Leeds in the UK, and Professor **Robin Kingsburgh** of the Department of Science, Technology & Society of York University Toronto, Canada. The proceedings of the **Color Conference** have been published in the *Research Culture and Science Books* series edited by the association.



Participants in Annual Meeting 2024

THE 55TH ANNUAL MEETING 2024

The 55th Annual Meeting of the Color Science Association of Japan (CSAJ) was held hybrid of face-to-face and online on 29-30 June by Prof. **SUNAGA Shoji** (Kyushu University). More than 246 participants attended, and 75 contributed papers were presented. The special invited lecture was “Various things on anno lab” by **Mr. FUJIOKA Sadam** (anno lab) and a panel discussion on “Polylogue on color vision diversity” took place by four panelists. In addition, the commemorative

lecture on recognition by the Minister of Education, Culture, Sports, Science and Technology was given entitled “Appearance synthesis of fluorescent objects with mutual illumination effects” by **Dr. TOMINAGA Shoji** (Nagano university). Moreover, Color Science Tutorial for High School Students was conducted. The CSAJ Presentation Encouraging Awards were given to four students: **Mr. INOSHITA Daiki** (Kyushu university), **Dr. HE Yuanyuan** (Chiba University), **Mr. SUZUKI Yusho** (Kyushu university) and **Ms. FUJII Toshitaka** (Chiba University).



Research posters at the Annual Meeting 2024

THE STUDY GROUP MEETING 2024 AUTUMN

The Study Group Meeting 2024 Autumn was held online from 30 November to 1 December chaired by **Dr. NISHI Shogo** (Osaka Electro-Communication University). More than 85 people attended, and 10 contributed papers were presented. The Four invited lectures were “*International comparison of the effect of skin color on facial appearance*” by **Dr. HE Yuanyuan** (Utsunomiya University), “*Why is the Mona Lisa facing left? The influence of faciality on left-facing preference*” by **TANIYAMA Yujin** (AIST), “*A computational model explaining the negative response generation process for human agents - Toward understanding the uncanny valley phenomenon*” by **Dr. TAWATSUJI Yoshimasa** (The University of Tokyo) and “*Exploring Kokoro with pictograms - Possibility of emotion measurement with pictograms*” by **Dr. KUTSUZAWA Gaku** (AIST). The CSAJ Presentation Encouraging Award was given to **Ms. KISHIMOTO Nagisa** (Osaka Metropolitan University).

AWARDS

The 16th CSAJ Best Paper Award was given to **Dr. SHINODA Hiroyuki** and **Mr. NISHIO Kunihiro** (Ritsumeikan University) for “*Estimation of cone fundamental functions in metameric color matching with non-monochromatic light stimuli using differential evolution method*”, Color Science Research, Vol.1, No.1, 15-30, 2023. The 26th CSAJ Research Encouraging

Award was given to **Dr. WAKATA Tadayuki** (Waseda University) for “*A proposal of the integrative dimension of brightness and vividness in PCCS tones, “Brilliantness,” and its relation to the dimensions of color impression*”. The 4th CSAJ Distinguished Service Award was given to **Dr. SAKAMOTO Takashi**. In addition, the 2nd Supporting Member Distinguished Service Award was given to **Japan Color Research Institute, FUJIFILM Corporation, Japan Fashion Color Association, Murakami Color Research Laboratory and DIC Color Design, Inc.**

PUBLICATIONS

Bulletin of the Color Science Association of Japan (Vol.3, No.1 - 4) were published in electronic media. In addition, Color Science Research (Vol.1, No.1-2) including 7 papers was published electronically.

UPCOMING MEETING

The 56th Annual meeting of the CSAJ will be held hybrid on 7-8 June 2025 at Yamagata University.

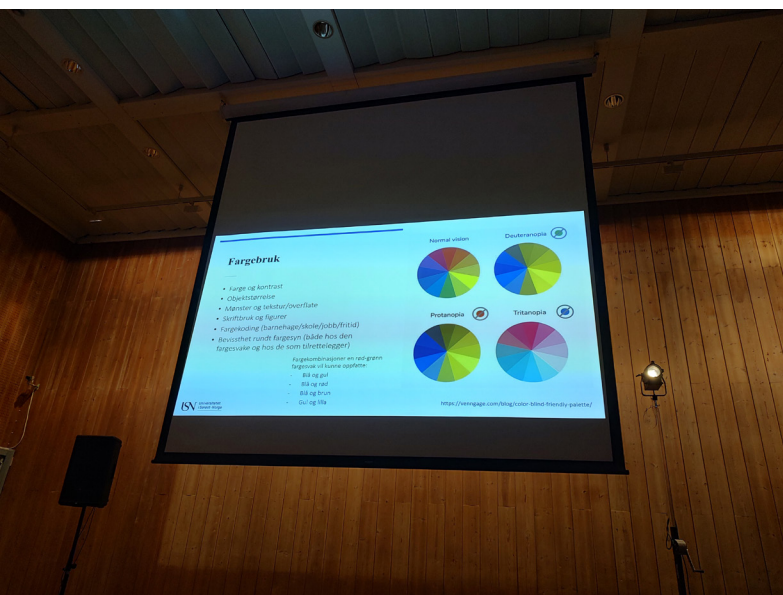
LOCAL CHAPTERS

Three local chapters in the Kanto, Tokai and Kansai areas worked actively and organized several meetings throughout the year. Currently, CSAJ has 1,031 members.

NORWAY

FORUM FARGE

FORUM FARGE®



Forum Farge event at "Gamle Munch". Photos: Bjørg Owren

Forum Farge, the Norwegian Colour Association, was founded on the 10th. of April 2013. Forum Farge aims to disseminate research-based knowledge about color. This is achieved through an interdisciplinary approach, focusing on areas such as color in design, architecture, technology, art, color vision, and science. The forum aims to ensure that this knowledge is applied both in practice and theory. Throughout the year, Forum Farge hosts two events/workshops that are open to everyone. Various speakers are invited to these events, contributing their research and expertise on color within different disciplines.

BOARD MEMBERS 2024

Ingvild Constance Festervoll Melien
Bjørg Owren
Heidi Pettersvold
Elise Dees Krekling
Matilde Wedzicha
Steven le Moan
Carle Lange
Johnny Spangen



Forum Farge's event at the Architects' House.
Photos: Heidi Pettersvold

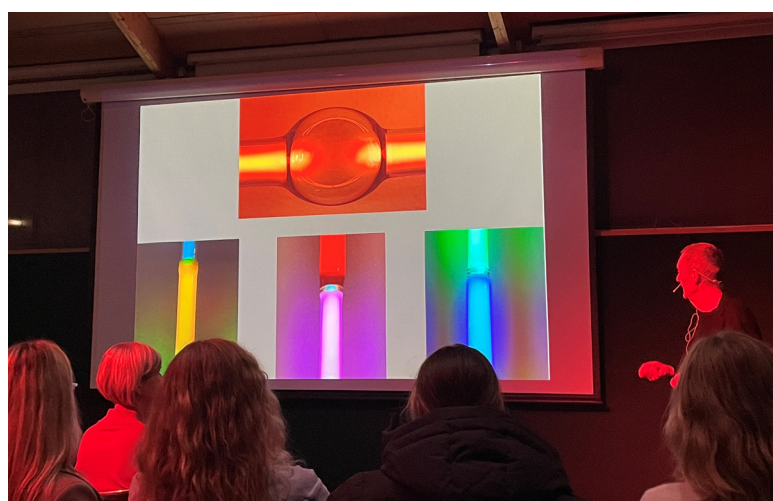
PARTNERSHIP

Forum Farge collaborates with NTNU, the Oslo National Academy of the Arts, the Faculty of Fine Art, Music and Design at the University of Bergen, the architecture firm Snøhetta, and the paint and building conservation store Miljømal. Forum Farge is also connected to Norwegian Colour and Visual Computing Laboratory (Colourlab) and Light and Colour Centre at the Norwegian University of Science and Technology (NTNU).

MAIN EVENTS BY FORUM FARGE

Forum Farge held two in-person events in 2024. The first event took place at "Gamle Munch", the old Edvard Munch Museum in Oslo, March 7. It featured three presentations by **Ingvild Festervoll Melien** (urbanist, photographer, journalist), **Elise Dees Krekling** (Associate Professor at University of South-Eastern Norway), and **Charlotte Holberg Sveinsen** (Color Manager and Creative Director at IFI: Informasjonskontoret for farge og interiør).

Melien spoke about creating a color guide for a district that has yet to be built, using the new Filipstad district in Oslo as a reference. Krekling gave a talk on color vision and whether we perceive our colorful world in the same way. Sveinsen discussed how colors and trends influence interiors.



The second event took place November 12th, and focused on light and color. The seminar was held at the *Architects' House (Arkitektenes hus)* in Oslo. **Steven Le Moan** (Associate Professor at the Norwegian University of Science and Technology (NTNU), talked about "How Many Dimensions Does Color Have?".

The main lecture was given by the Norwegian visual artist **Per Hess**, who works with neon lights and installations. Hess took the audience on an exciting journey through several of his different installations, both nationally and internationally. He also talked about how we perceive light and color and how he utilizes it in his art.

Link to both events can be found here:
<https://www.forumfarge.no>

PORTUGAL

ASSOCIAÇÃO PORTUGUESA DA COR



associação portuguesa da cor



Photo of the 1st National Color Meeting

2024 ACTIVITIES

The Portuguese Color Association has continued developing the work of color dissemination through the community. We thus present our main activities on color during the last year.

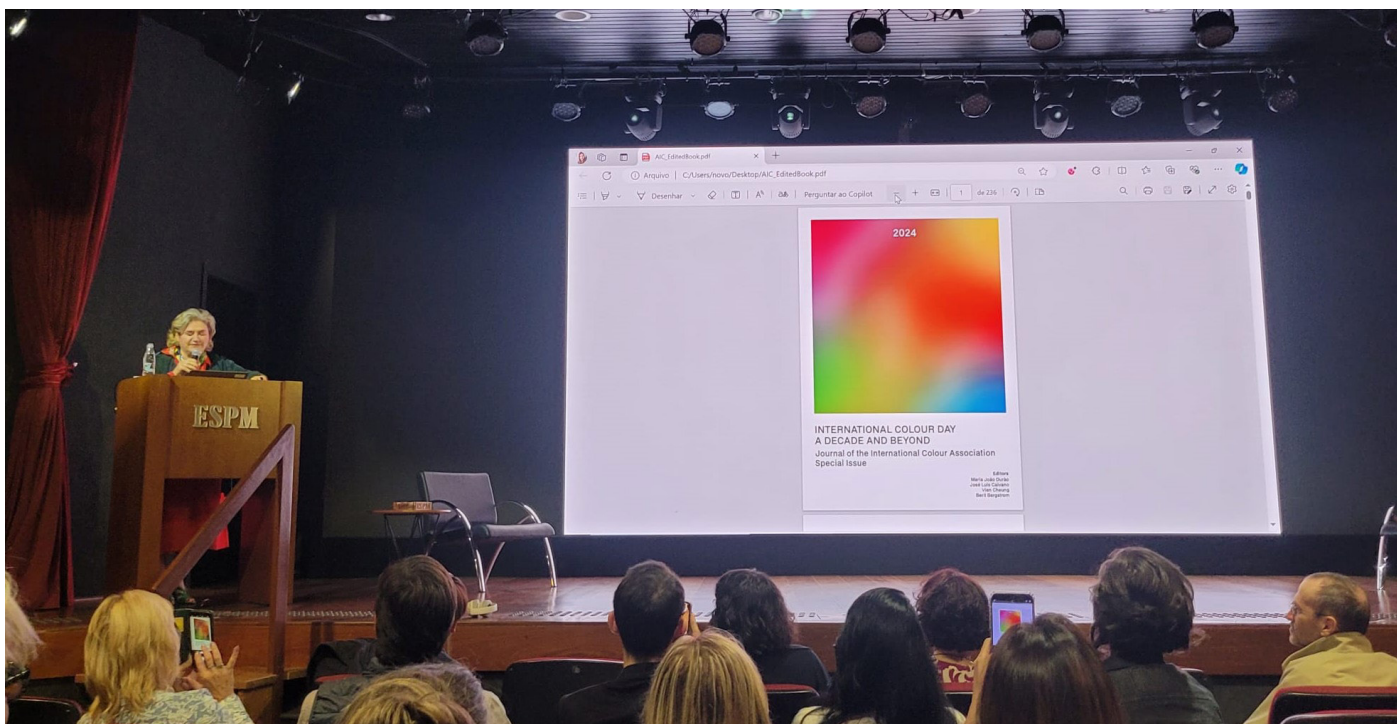
ICD24

The Portuguese Color Association (APCor) celebrated the International Color Day (March 21st), as a way of promoting color literacy within the community. The 1st edition of the **National Color Meeting** (March 23rd) was a fantastic opportunity to bring together

professionals in the most diverse areas (e.g., design, painting, architecture, photography, construction, personal image, psychology, education), disseminating knowledge to everyone. The one-day in-person meeting gathered around 140 people, and the public could participate in lectures and workshops related to color. The event also served as a professional development opportunity for teachers, with accreditation. Children were also able to participate through intervention on a collaborative panel, in a continuous activity throughout the day.

More information:

<https://www.apcor.org/dia-internacional-cor/#icd15>



Presentation of the ICD book at AIC2024 Midterm Meeting

OTHER EVENTS

September | AIC Midterm Meeting, S Paulo, Brazil

Some members of the Portuguese Color Association presented their academic research in the event. The book *'International Colour Day: A Decade and Beyond, Journal of the International Colour Association - Special Issue 2023'* was launched and presented by the ICD coordinator, **Prof. Maria João Durão**.

November | 1st Color Retreat, Mafra, Portugal

The 1st Color Retreat took place over two days and brought together 12 participants. It was a unique opportunity to reflect on the importance of color in our lives. Activities such as painting, meditation, and color hunt were developed with the enthusiasm of the participants. Topics discussed included color symbolism, color and expression, personal coloring, chromotherapy, and more.

APCOR PUBLICATIONS

The book *"Colour: Health, Wellbeing and Comfort"* (EN) / *"Cor: Saúde, Bem Estar e Conforto"* (PT) is in its

final preparation phase. This is an APCor edition in collaboration with CIAUD - GICL (Colour and Light Research Group) and LabCor (Colour Lab), based at FA-ULisboa (Faculdade de Arquitetura da Universidade de Lisboa). The book is a bilingual publication (Portuguese and English) on colour, with an international scientific committee of researchers, which aims to disseminate the research undertaken in the multidisciplinary area of colour.

CURRENT ACTIVITY BY EACH MEMBER

Ana Paula Pinheiro & Rui Barreiros Duarte

Pinheiro, A.P., Duarte, R.B., 2024. *Color, environment, and sustainability: Faculty of Law, University of Lisbon*. AIC2024 Midterm Meeting, 18 September 2024, São Paulo, Brazil. [Poster Session]

Pinheiro, A.P., Duarte, R.B., 2024. *Color, environment, and sustainability: Faculty of Law, University of Lisbon*. AIC2024 Midterm Meeting, 16 – 19 September 2024, São Paulo, Brazil. Book of Abstracts, p.105. ISBN: 978-0-6484724-6-9. <https://aic2024.org/wp-content/uploads/2024/09/Book-of-Abstracts-Sep-15.pdf>.

PORTUGAL

ASSOCIAÇÃO PORTUGUESA DA COR

Luisa M. Martinez

Martinez, L.M., Bento, A., Martinez, L.F., & Ramos, F.R. (2024). Visual elements in organic products communication: The impact of yoghurt packaging material and color on consumer perception. In *Proceedings of the Midterm Meeting of the International Colour Association 2024*, São Paulo, Brazil, September 16th-19th (p. 92).

Martinez, L.M., Bento, A., Martinez, L.F., & Ramos, F.R. (2024). *Visual elements in organic products communication: The impact of yogurt packaging material and color on consumer perception*. Paper presented at the International Color Association (AIC) Midterm Meeting, Escola Superior de Propaganda e Marketing (ESPM), São Paulo, Brazil, September 16th-19th.

Amaro, A.C., Martinez, L.M., Ramos, F.R., Menezes, K., & Menezes, S. (2024, May 02). *An overstimulated consumer in a highly visual world: The HSP trait*. Sensitivityresearch. <https://sensitivityresearch.com/an-overstimulated-consumer-in-a-highly-visual-world-the-hsp-trait/>

Martinez, L.M. (2024). *Diz-me que cores usas, dir-te-ei quem és: A psicologia da cor*. Workshop delivered at the 1st National Color Meeting, Lisboa, March 23rd.

Luisa Martinez also chaired the session 'Color in Design and Visual Communication' at the Midterm Meeting of

the International Colour Association 2024, São Paulo, Brazil, September 19th.

Vanda Matos

Matos, Vanda & Alho, Carlos (2024, April, 23-24). *Cork in architecture, fashion and design, tradition and innovation*, D_TEX Textiles, Identity and Innovation, 3rd International Textile Design Conference 2024, Lisboa, Faculdade de Arquitectura da Universidade de Lisboa Portugal.

Matos, Vanda & Alho, Carlos (2024, October, 2-4). *Habituação coletiva de promoção cooperativa em Caselas*, 5º Congresso Internacional da Habitação no Espaço Lusófono, Laboratório Nacional de Engenharia Civil (Lisboa, Portugal); <https://www.5cihel2024.org/pt/>

Matos, Vanda; Alho, Carlos. "Cork in architecture, fashion and design, tradition and innovation". In IN TOUCH 3rd International Textile Design Conference 2024 New Codes Book of Abstracts-, (pp- 49-49). Lisboa, Portugal: Universidade de Lisboa, Faculdade de Arquitetura, 2024

Matos, Vanda; Alho, Carlos. "Habituação coletiva de promoção cooperativa em Caselas" in 5º CIHEL - Congresso Internacional da Habitação no Espaço Lusófono | Livro de Atas, Lisboa, Coelho, A. B. & Pinho, F. F. S., (pp. 237-238), Ubana Creative Agency, Lisboa, 2024, ISBN 978-989-8152-27-5



Photos of the 1st Color Retreat

Social housing and UrbanCroma a factor for integration, identity and sustainability-CIAUD-GI.CORLUZ | 2022 to 2026 (Ongoing project)

Palácios e palacetes em Lisboa dos séculos XIX e XX (Palaces and Mansions in Lisbon in the 19th and 20th, developed at CIAUD) | 2020-2025 (Ongoing project – to be extended until 2029)

Color Sustainability and Authenticity in Portuguese Contemporary Architecture (2018-2026) (Ongoing project)

Luisa Martinez

APCor President | apcor@apcor.org



SPAIN

COMITÉ DEL COLOR
SOCIEDAD ESPAÑOLA DE ÓPTICA



Comité del Color
Sociedad Española de Óptica

Ana Belén López Baldomero

4. IMAGEN ESPECTRAL

Día internacional del color

- Unmixing e identificación de pigmentos

UNIVERSIDAD DE GRANADA

[26] Valero et al., Journal of Cultural heritage (2023).

“Boceto de Paolo Veronese”

35 / 59

Talk “Color and Spectral Imaging for the Study of Cultural Heritage” by Ana Belén Lopez-Baldomero, University of Granada (Spain).

GENERAL HIGHLIGHTS

Our committee maintained its customary activities participating in different events around color (conferences, workshops, courses, seminars and outreach activities). The committee regularly collaborates in master’s courses about color such as the “*Master Erasmus+ COlour in Science and Industry (COSI)*”, organized by the University of Granada, and the “*Master Erasmus Mundus EUROPHOTONICS and Master in Photonics (course: Active and spectral imaging)*”, organized by the Universitat Politècnica de Catalunya.

The committee also supported several international conferences such as the 32nd Color Imaging Conference 2024(CIC32) and the Midterm Meeting of the International



Conference venue and logo.

Color Association (AIC 2024). Additionally, other conferences, workshops and seminars were organized along 2024 about different aspects of color.

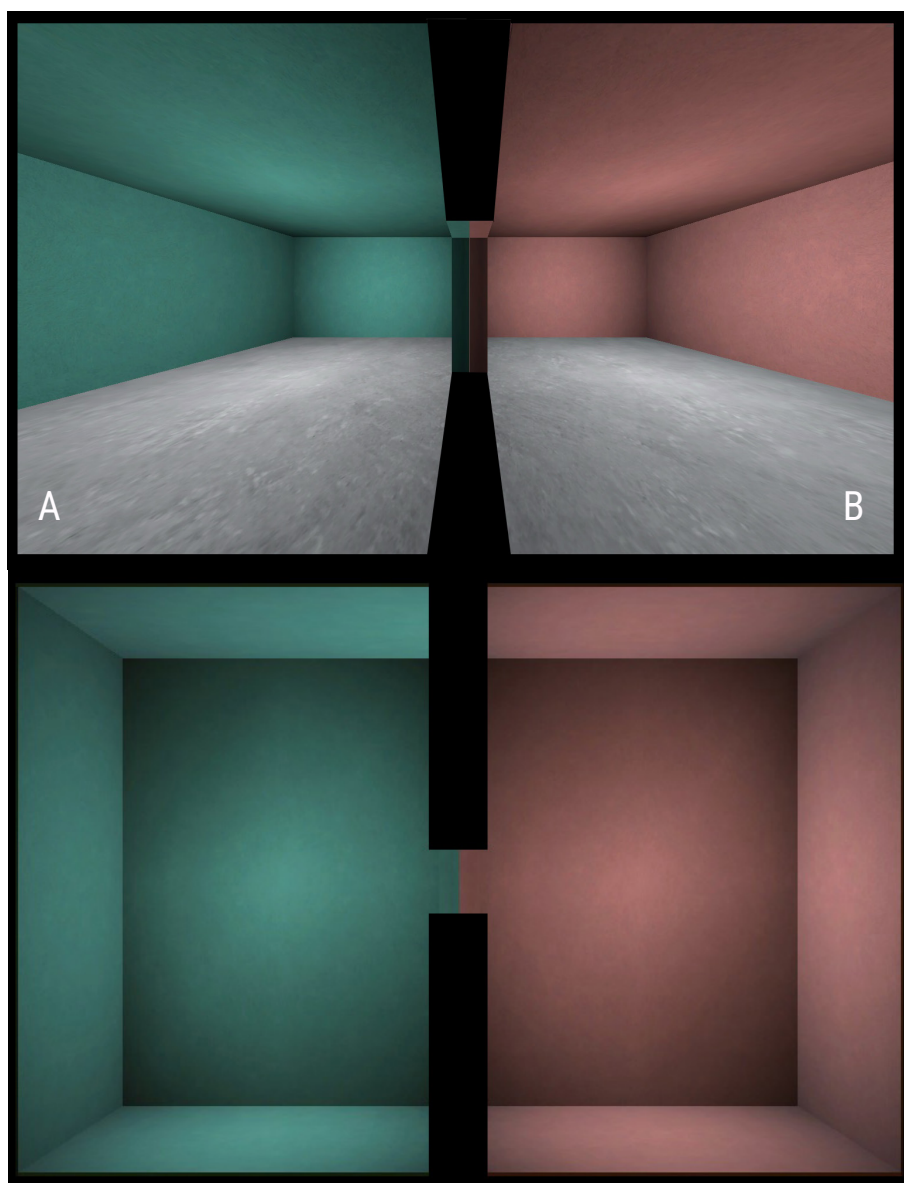
It is also remarkable the participation of the Committee in the International Color Day 2024. In this framework, the committee organized an online talk entitled “Color and Spectral Imaging for the Study of Cultural Heritage” given by **Ana Belén Lopez-Baldomero** from the University of Granada (Spain), which can be found in the **Youtube channel of the committee**. During this talk, the most relevant non-invasive techniques were presented, such as spectrometers and colorimeters, for three specific applications: (i) optimal illumination for the preservation and exhibition of artwork, (ii) restoration follow-up of paintings, and (iii) evaluation of preservation and restoration methods in plasterwork.

RESEARCH HIGHLIGHTS

We would like to point out some events and projects with the highest impact in Color Science and Technology. In June, the **XIV National Color Conference** will be held in Mérida (Spain) and organized by the **Orion Research Group** of the **University Center of Merida**, with **Pedro J. Pardo-Fernandez** acting as chair. This conference stands as the most significant scientific and technical event on Color in Spain, bringing together prominent experts from various disciplines to exchange knowledge and advances in Color Science and Technology. It serves as a multidisciplinary forum and offers a unique platform for discussion and analysis on the influence of Color across multiple sectors, including research, education, and industrial applications. The topics covered will range from Visual Psychophysics, Color and Imaging Science

SPAIN

COMITÉ DEL COLOR
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Frontal perspective (top) and zenithal perspective (bottom) of a scene in Virtual Reality. Room A has a fixed dimension while B appears with a random scale. Source: Serra, J., Abebe, M.A., Murdoch, M.J. (2024). Virtual Reality to Evaluate the Size of Interiors with Different Colors. In: Hermida González, L., Xavier, J.P., Amado Lorenzo, A., Fernández-Álvarez, Á.J. (eds) *Graphic Horizons. EGA 2024. Springer Series in Design and Innovation*, vol 43. Springer, Cham. https://doi.org/10.1007/978-3-031-57575-4_35.

and Technology –including multi- and hyperspectral imaging– to practical applications in art, architecture, design, digital devices, education, and food industry.

On the other hand, our colleague **Dr. Juan Serra** from the Color Research Group in Architecture at the Instituto de Restauración del Patrimonio, Universitat Politècnica de València, participated in the 20th International Congress of Architectural Graphic Expression (EGA 2024), held in Porto from May 27-29, 2024. He presented a paper titled “*Virtual Reality to Evaluate the Size of Interiors with Different Colors*” developed together with **Michael J. Murdoch** and **Mekides Assefa** from MCSL (RIT).

In his work, Dr. Serra explored the longstanding interest among artists and architects, particularly from the Modern Movement, in how color influences the perception of depth and spatial volume. Figures like Albers and Le Corbusier intuitively understood color’s role in this context, despite not having a scientific basis for their observations. While much research has been dedicated to color’s ability to create

a sense of depth in two-dimensional spaces—such as through chromostereopsis—less attention has been paid to how color affects the perception of size and distance in three-dimensional interior spaces. This gap in research is especially notable when comparing real-world scenarios to virtual environments.

Dr. Serra’s contribution aimed to address this gap by applying virtual reality (VR) to objectively measure how the color of a room influences its perceived size. The study employed two VR-based methods to control the colorimetric properties of the virtual space and analyze the psychophysical responses of participants. The results revealed that VR is an effective tool for tasks requiring perceptual matching and motor actions in evaluating the size of virtual interiors. The study found that color differences had a limited impact on the perceived size of the room, being the value of the colors more significant than their hues, what suggests that other visual cues, potentially related to the geometry of the space, may play a more significant role in size perception. Future studies should further investigate these factors to better understand their influence on spatial perception.

SWEDEN

SWEDISH COLOUR CENTRE FOUNDATION

STIFTELSEN SVENSKT FÄRG CENTRUM

SWEDISH COLOUR CENTRE FOUNDATION



The three winners of Awarded colour 10 years Honorary Award: John Wattström, Emilie Palle Holm and Linnéa Andersson, for their continued work in the wonderful world of color!

60TH ANNIVERSARY

The main activity of 2024 was to celebrate 60 years in honor of The Swedish Colour Center Foundation and the yearly competition PRISAD FÄRG/AWARDED COLOUR that was presented for the first time 10 years ago. These two anniversaries were celebrated in Stockholm. In conjunction with the celebration, we also awarded the winners in Awarded colour 2024 and paid tribute to some previous award winners whose work on colour have given an impression outside Sweden. **Emilie Palle Holm**, **Linnéa Andersson** and **John Wattström** who we rewarded with an honorary award.

To give extra star gloss to the anniversary, we hired previously acclaimed colour winner, **William**

Wahlström, who arranged a performance where all participants created imprints on the floor by taking on socks, dip them easily in colour and then go and make an imprint decorating the canvas on the floor. A limited number of socks (50) were then vacuum packed as a signed artwork to take home. Part of the floor has been framed into paintings.

The celebration took place with grateful help and support from OP - Office of Possibilities, NCS Colour AB, Akzo Nobel Decorative Coatings AB, Tikkurila Sverige AB.

PRISAD FÄRG / AWARDED COLOUR 2024

“Prisad Färg” is a competition aimed at students and recent graduates in design, architecture, visual



Color performance "Footprint", with artist William Wahlström.

3-4 colours that interact in different ways. The black colour makes other colours and patterns vigorously appear. The symbols that stand for graphic zodiac signs make creation exciting and mythical.

2nd prize

Celebrate 50 shades of red cabbage Anna Herrmann - Beckmans and Art Academy Munich. The second price of the year Priced colour 2024 celebrates the colour's possibilities with a new dimension showing how plant staining with red cabbage highlights colour and material in an extra careful and mild way.

The jury's motivation: With beautiful proportions and with a soft and transparent technique, the wood patterns on the objects appear. The naked wooden vein gets a mild colour shade. With a simple one and elaborate graphics, the objects are taken care of in a careful manner. This creates a collection, which gives a soft and satisfying feeling. The technology of plant staining is experienced in this context and makes this contribution unique.

3rd prize

Intro the Blues Freja Ullert - Master in Spatial Design, Konstfack. This year's third prize celebrates the colour with a colourful and monochrome interior.

The jury's motivation: In a courageous and powerful way, a full -scale interior design is presented with a clear and secure colour scheme. Each room has received its colour expression in a very refined way. The project is in every way professionally completed. It is scenographic and mood -creating. The colour scheme is well presented and documented with clear drawings and material samples. The colour leaves no one untouched, as a viewer you are sucked into the rooms and the ultramarine colour is continuous and identity creation. This makes this assignment extra exciting.

communication, and art. The purpose of the competition is to award and highlight the importance of colour by focusing on the following topics.

- **Raising awareness:** Creating a deeper understanding of the significance of colour.
- **Encouraging creativity:** Exploring innovative ways we can use colour in design and art.
- **Showcasing excellence:** Presenting outstanding examples of how colour can be applied effectively.

The theme for acclaimed colour 2024 was "Celebrate Colours" and collected 16 competition entries that held a good quality. This year's winner was:

1st prize

This year's winner shows the strength of the colour through technology and form in an irresistible and safe way. *Heaven is our mirror Mia Lehtonen Madsen - Textile Academy Borås.*

The jury's motivation: With rhythm, colour and a joy, Celebrate Colour dances in this competition entry. In a new but known way, rustic graphic symbols and patterns are created. The costumes become a kind of folkloristic holiday costume where the colour is selected. The colour scheme is exciting combined with

SWEDEN

SWEDISH COLOUR CENTRE FOUNDATION



Mia Lehtonen Madsen, 1st Prize Prized Color 2024 and Freja Ullert, 3rd Prize.

The jury for praised colour 2024:

Catrin Vagnemark, chairman, founder of BVD, Axel Norlander, industrial designer, OP, Gunnel Sahlin, glass designer, Åsa Stenerhag, artist/fashion designer, Kennet Vrågård, Business Development Manager, NCS Colour AB, Clara von Zweigberg, Design, Grafisk designer, Freelance journalist, Charlotte Ryberg, Designer, Atelier Ryberg.

TEACHERS NETWORK - UNG FÄRGKRAFT/ YOUNG COLOUR POWER

“Young Colour Power” is a long-term project aimed at promoting knowledge about colour and its significance in higher education teaching. This teachers’ network meets twice a year—once in person and once digitally. On Teachers’ Day, participants can explore colour as a specialized area of knowledge. Organized by the Swedish Colour Centre Foundation, these annual meetings, including seminars and workshops, are free and non-profit. The initiative aims to create a collaborative platform to elevate the academic level and drive progress in a field that bridges design, architecture, and creative industries.

Digital meeting 18/4 2024

At this year’s digital teacher meeting we took part in NCS Trend concept with Karl Johan Bertilsson, Creative Director at NCS. The topic was methods in the colour process and NCS colour trend.

We also discussed the development of colour palettes and the role of trend reports in shaping these processes. We deepened the discussion about the colouring process and asked how it really works and what the students’ expected outcomes are.

Physical Meeting 25/10 2024

This meeting was held at Malmstens School, Campus Lidingö, part of Linköping University, which offers undergraduate programs in Furniture Design, Cabinet-making, and Furniture Upholstery.



Marquetry workshop at Malmstens school, Campus Lidingö

This year's focus was on colour as a material, and the day, as always, provided opportunities for activities and knowledge exchange.

During a tour of the premises, we gained insights into the history and ongoing activities at Malmstens School. Participants engaged in an inspiring workshop and practical exercise with marquetry, wood inlays, exploring new methods in working with colour. The exercise aimed to examine colour as a material and open up new possibilities in colour education.

We reflected on how the natural colour of materials connects to sustainability and the importance of surface treatments. Key questions included: Do we use colour to protect, emphasize, camouflage, or simply to bring aesthetic pleasure?

MEMBER'S MEETINGS

The foundation has organized the following Colour meetings in addition to the annual meeting and the 60th anniversary.

January 18, Millesgården Stockholm, coffee Fassetts "The Power of Pattern".

March 21, ICD – A digital presentation by Sophie Smallhorn, an artist and designer from London, was held. The day concluded with a celebratory dinner with guest of honor Tomas Hård, former CEO of NCS. Tomas is the son of the late Anders Hård, a renowned color researcher and one of the founders of the NCS system.

April 25, 60th anniversary at OP, Stockholm, with mingle, award ceremony, honorary award and performance.

May 14, Millesgården, Stockholm, Jacqueline Marval "Fauvism, Feminism, Flamboyance".

September 11, Color and Culture -Lecture with Ivar Jung, associate professor at Linnaeus University, teacher and researcher on color.

October 24, Christoph Brach - RAW COLOR Eindhoven

November 28, Guided tour - Wiener Werkstätte at Millesgården

December 5, Annual members meeting. Our history - 60 years of color. Tomas Hård, former CEO of NCS Color AB (Scandinavian Color Institute AB)

2024 HIGHLIGHTS: SUCCESSFUL INNOVATIONS

- Introducing the innovative “*pro colore GA*” (general pass) was a great success. It consists of a one-time fee, in addition to the membership fee, that allows members to attend all meetings and museum visits at no extra charge.
- Rolling event planning has been adopted, which is a good way of flexibly organising the annual programme. It significantly increased the number of the pro colore events compared to previous years.
- Besides the pro colore events, museum days were also organized in 2024 to give members the opportunity to take part in guided tours of permanent or temporary exhibitions.
- Strengthening partnerships is essential in order to foster collaborative relationships with corporate members. For example, the collaboration with Lascaux Colours & Restauro was intensified, and a new cooperation with Pentel will be launched in 2025.
- It is especially important that members benefit from the collaborations and partnerships. Alongside the tried-and-tested Faber-Castell offers, since 2024 members have also been able to benefit from exclusive products from the renowned brands Lascaux Colours & Restauro and Leuchtturm1917. Starting in 2025, pro colore will be expanding its portfolio to include exquisite pen products from Pentel.

2024 GENERAL ASSEMBLY

The Annual General Assembly of pro colore took place in March at the corporate headquarters of Thymos AG in Lenzburg. In addition to approving the budget, colour designer and interior designer, Irene Musci, was elected to the Board of Directors. Verena M. Schindler rounded off the agenda with a detailed report on the international colour events.

PRO COLORE EVENTS

Factory Tour of Thymos AG, Lenzburg

On 15 March, following the General Assembly, pro colore celebrated International Colour Day with a guided tour of the headquarters of Thymos AG, a trading company for natural paints that has been combining proven raw materials with state-of-the-art production technology since 1987. Pro colore participants discovered the firm's product ranges and learned how to use them to create trend-conscious colour schemes. <https://www.thymos.ch>

Colour, Material and Visual Impairment, Zurich

On 20 April, the interactive workshop was very informative and explored the following questions: What does visual impairment mean? What can we still see when our vision is impaired? How do we orient ourselves in rooms under these conditions? What do we perceive, and how can colour and its materiality



Colour and material presentation of the project for the Blindenheim Care and Health Centre in Basel by Esch Sintzel Architekten

support our perception and orientation in a room? How does colour smell or sound? How do we develop solutions that are valuable for all users? All these questions were addressed by Esther Garo from Sensability. Furthermore, Esch Sintzel Architects presented their planned building for the Blindenheim Care and Health Centre in Basel. The workshop was jointly organized with the Swiss Association of Colour Designers in Architecture (BSFA). <https://www.bsfa.ch> | <https://www.sensability.ch> | <https://www.eschsintzel.ch>

Factory Tour: Cook and Dine at Forster Kitchens, Arbon

On 31 May, pro colore members learned how Forster kitchens are produced during a factory tour, which was followed by a guided tour of the kitchen exhibition. The focus was on colour combinations, smooth surfaces, and the simplicity of material and design. As a grand finale, the participants enjoyed a delicious meal cooked under the professional guidance of V-Zug. <https://www.forster-home.ch>

Signage - Applied Visual Design, Toni Areal, Zurich

On 14 September, Natalie Bringolf from the visual design agency Bigrafik GmbH shared an insight into the studio's extensive and fascinating work. She then guided a tour of the building on the Toni-Areal, which has been home to the two universities ZHdK and ZHAW since 2014. Together with Hi - Visuelle Gestaltung, Bigrafik developed the signage for the entire building. <https://bivgrafik.ch>

Factory tour of Real Stein AG, Gibswil

On 11 October, the last pro colore event of 2024 took place in Gibswil in the Zurich Oberland. On 2,500 square metres, the participants experienced the showrooms of Real Stein AG. Behind stone-clad walls were secret doors that led into a labyrinth of rooms made of natural stone, ranging from the kitchen to the bathroom and spa. The stone library contained natural stone like an encyclopaedic work. Walking through these rows

SWITZERLAND

PRO COLORE
SCHWEIZERISCHE VEREINIGUNG
FÜR DIE FARBE



Organizer and pro colore Board Member
Marius Guirard guided the participants through
Copenhagen's Nordhavn harbour area.

was a sensory experience and the variety of natural
colours was impressive. <https://real-stein.ch>

PRO COLORE MUSEUM DAYS

On 13 April, a visit to the Art Museum in Zurich.

On 11 May, members visited with a guide four exhibition
sections of the Museum of Design Zurich: Collection
Highlights, Collection Insights, Queen's Discipline,
and Swiss Design Lounge.



Talk by Ralf Weber on the Colour Theory Collection at the Technical University of Dresden.

On 20 July, board member Marius Guirard guided the participants through the permanent exhibition of the Sensorium Stiftung Rüttihubelbad in Walkringen. It includes seventy experience stations where visitors can play with all their senses.

On 24 August, participants visited the Museum Haus Konstruktiv, which is the leading Swiss institution for constructive-concrete and conceptual art. On permanent display is a showpiece from the museum's own collection: the legendary *'Rockefeller Dining Room'* by Swiss artist Fritz Glarner.

On 2 November, a guided tour of the Swiss National Museum in Zurich was a journey into the minds of Gustav Gull and Christ & Gantenbein, the architects of the museum building of 1898 and the extension completed in 2016. The museum's collection provides insights into Swiss identity and the country's rich history and culture.

On 23 November, the tour of the Blind Museum in Zollikofen offered sensory experiences and real-life scenarios. The museum aims to sensitise people to the challenges that persons with blindness and visual impairments encounter in our society.

TRIP TO THE COLOURS OF DRESDEN

From 5 to 8 September, pro colore's annual programme included a trip to the east of Germany. The visit to the Colour Theory Collection at the Technical University of Dresden with Professor Ralf Weber was sensational. This was followed by a guided tour of the Historical Dyestuff Collection with Professor Horst Hartmann. On the second day, the pro colore members visited the New Green Vault in the Royal Palace and enjoyed an exclusive guided tour with Director Dr Marius Winzeler. In the afternoon, a walk through Dresden led to the Kunsthofpassage and many other architectural beauties. On the last day of the colour journey, the group visited the Porcelain Collection of the Dresden Zwinger.

pro colore can look back on a successful year full of events, inspiration and new milestones. In total, pro colore organized five exciting meetings, six inspiring museum days and an unforgettable trip to Dresden that left lasting impressions. Reports on these events and international events appeared in the four newsletters that were sent out to members. <https://procolore.ch>

TAIWAN

COLOR ASSOCIATION OF TAIWAN



CAT's 2024 Color Symposium.

COLOR SYMPOSIUM

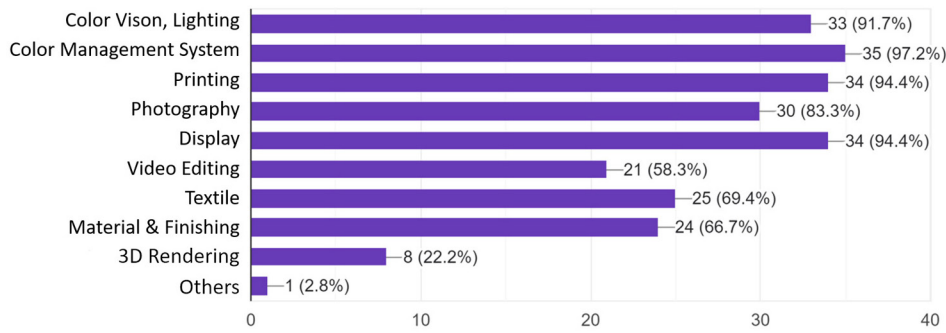
The Color Association of Taiwan (CAT) has continuously held Color Symposium annually since 2000. The 2024 symposium, themed “Color and Lighting Technology”, was held on November 23 at National Taiwan University of Science and Technology. It attracted 90 participants, featuring 7 invited talks and 7 contributed papers. The titles of the invited talks are “When Display Technology Meets Arts – Application of High Fidelity ART Display” by Mr. Jay Chang, “Color Management for Professional Video Production” by Mr. Yo-Zhi Ou, “More Than Just Color – Innovation of Color Education in Art and Design” by Dr. Tsuei-Ju Hsieh, “Application of Color Science in SEMI Display International Industry Standards” by Dr. Chao-Hua Wen, “Non-visual Effects of Lighting” by Dr. Pei-Rong Wu, “The Importance of Definition of CIE Vocabulary in Color Research” by Prof. James Shyu and “Issues and Improvements in

Practical Research on Intellectual Property Strategies Regarding Color in Universities” by Dr. Akiyo Makino. At the end of the symposium, Professor Tien-Rien Lee moderated a panel discussion on the theme of “Color and Lighting”.

IPAS CERTIFICATION

The government-funded iPAS Certified Color Planning and Management Specialist Exam co-organized by CAT has been running for 7 years. Over the years, more than ten thousand examinees have taken the exam, and fewer than 40% have successfully obtained the certification, making it a professional credential recognized by the color related industries. Currently, the exam provides two certificates: Color Planning and Color Engineering, respectively. A questionnaire survey on the “Feasibility of iPAS Color Management Certification” was conducted in July 2024, targeting 50 leading experts in Taiwan.

17. Which areas of color application do you think should be included in the evaluation content of the "Color Management" exam?



The result of 1 of 33 questions in the survey of iPAS Color Management Certification.



AIC banner handover. Right: AIC 2025 promotion at AIC 2024 meeting.

The survey results show that most experts support the “Color Management” iPAS certification and are willing to assist in the creation and promotion of teaching materials. In order to avoid covering too many areas in the exam, experts unanimously recommend that color management in photography, display and printing be the main focus. The evaluation content should balance both theoretical and practical aspects. Experts think that this certification will attract some individuals from the design field. The main current issues are the lack of teaching materials and limited qualified teachers. Additionally, experts pointed out that declining birth rates are causing difficulties in recruiting students for technical universities and labor shortages in traditional industries, which may affect the popularity of the certification.

AIC 2025 TAIPEI PROMOTION

The Color Association of Taiwan (CAT) is honored to host the AIC 2025 Congress from October 19-24, 2025, in Taipei. To promote this important AIC annual event, CAT members, Dr. Yuh-Chang Wei and Dr. Pei-Li Sun, brought postcards, T-shirts, and a large poster to the AIC 2024 Midterm Meeting in São Paulo, Brazil. At the end of the meeting, AIC 2024 organizers, Prof. Paula Csillag and Dr. Vien Chung, handed over the AIC banner to AIC 2025 organizers and brought it back to Taipei to continue the glory tradition of AIC. The CAT members also participated in the ACA 2024 Asian Color Association Conference to promote the upcoming AIC 2025 Congress.

UNITED STATES

INTER-SOCIETY COLOR COUNCIL (ISCC)



Anat Lechner and Leslie Harrington,
recipients of the ISCC 2024 Macbeth Award

Our annual goals for 2024 were focused on interdisciplinary educational programming. As a result, 2024 was a very busy year for the Inter-Society Color Council (ISCC). In addition to publishing our quarterly newsletters online for members, three successful cutting-edge webinars were held free of charge and open to anyone interested in the topics. To learn more about our webinars, please go to <https://iscc.org/cutting-edge-color-webinar-series>. We hosted two



Rachel Scheen, recipient of the ISCC 2024 Nickerson Service Award

Fluorescent Fridays, which are virtual events where university students present their work and network with color professionals and fellow students. Monthly Colorful Connection members-only events were held where members met online in an informal setting to discuss color topics across disciplines.

This report will cover three topics. First, a summary of the virtual 2024 Annual Meeting will be given. Second, an in-memoriam section will pay tribute to two treasured ISCC long-term members who left us in 2024. Finally, an introduction to our 2025 Color Impact Conference will be shared.

SUMMARY OF 2024 ISCC ANNUAL MEETING

The 2024 ISCC Annual Meeting was held on October 19, 2024. It was a successful virtual meeting open to members and the public. In addition to reports given by our administrative officers, this meeting featured Award Presentations, details on the Colour Literacy Project, and an update on activities of the Colour Literacy Forum. It concluded with a Colorful Connections event.

Award Presentations

Macbeth Award

The ISCC 2024 Macbeth Award was presented to Dr. **Leslie Harrington**, AIC Past President and Professor **Anat Lechner** for their pioneering work on HueData, a color intelligence company. The Macbeth Award is given for one or more recent outstanding contributions in the field of color. As co-founders of HueData, Dr. Harrington and Professor Lechner have revolutionized the way color decisions are being made using advanced analytics and artificial intelligence. Their revolutionary company is the first color intelligence platform that offers color data analytics and insights to inspire creativity, inform strategic decisions, and validate design choices of products, brands and environments, globally.

Nickerson Service Award

The ISCC 2024 Nickerson Service Award was presented to **Rachel Schwen** for her years of dedicated service to ISCC as an organization that furthers research and

UNITED STATES

INTER-SOCIETY COLOR COUNCIL (ISCC)

education across disciplines in color. Her contributions ranged from serving on the Board of Directors, Long Range Planning Committee, Membership Committee as Chair, Board Member Nomination Committee, 2023 and 2025 Color Impact Conference Committees, and Macbeth and Godlove Award Committees. Ms. Schwen currently is ISCC President-Elect.

Colour Literacy Project

The ongoing Colour Literacy Project (CLP) is a joint project between ISCC and AIC. This work is conducted within the ISCC/AIC Joint Colour Literacy Project (CLP) Committee. **Maggie Maggio**, Chair of the CLP Committee, gave an update. First Maggie shared the CLP Mission Statement:

The Colour Literacy Project is a 21st century educational initiative that recognizes colour as a meta-discipline. Our mission is to strengthen the bridges between the sciences, arts, design and humanities to meet the challenges and opportunities of the 21st century. We are developing color education materials to provide foundational, state-of-the-art resources for teachers at all education levels focused on expanding and exploring our experience of color.

Next, the **CLP Tenets** were shared:

The Color Literacy Project's approach to color is based on the best available peer-reviewed research on

color. The following tenets describe our understanding of the fundamental facts about color. They are what we support and believe to be useful as of now, but we remain open to new findings.

1. Color is a highly complex and multi-faceted topic. Research is ongoing and knowledge is expanding, but it is not likely that knowledge about color will ever be complete.
2. What colors are, whether they are properties of substances or light, manifestations of radiant energy, pure subjective experiences, or results of interactions between the perceiving subject and any of the above is a matter of ongoing scientific and philosophical debate. In any account it must be recognized that colors are, ultimately, a visual phenomenon.
3. The perception of colors involves adaptation to the environment and its visual stimuli.
4. Colors are perceived in all natural conditions of viewing in either a spatial or a temporal contrast to other colors.
5. The experience of colors involves psychological and cultural factors, such as emotions, expectations and memory, as well as artistic and aesthetic evaluations.
6. Understanding color requires first-hand exploration. Theoretical knowledge is helpful in explaining color and color phenomena, but a deeper understanding of color requires the direct experience of perceiving, judging, comparing, using and appreciating colors and color phenomena.

Finally, the CLP Cornerstones were outlined. At the heart of the project is a new, foundational, 21st Century Color Curriculum based on hands-on exploration of the Color Literacy Cornerstones:

- **Experiencing Colors** - Exercises that build awareness of the wonder of color all around us.
- **Describing Colors** - Exercises that expand color language beyond 2D hue circles to 3D color models.
- **Perceiving Colors** - Exercises that explore the elements of color perception.
- **Working with Colors** - Exercises that focus on comparing the use of color across disciplines.

Please see more information on the work of this cooperative effort in the Colour Education AIC Study Group section of this Annual Review.

Colour Literacy Project Forum

Luanne Stovall shared an update on the four online forums that were hosted by the CLP team in 2024.

1. **Forum #7: Color in Context** on March 22. Speakers: Harald Arnkil and Valtteri Arstila.
2. **Forum #8: The Interaction of Color and Light** on June 13. Speakers: David Briggs, Silvia Pont and Kine Angelo.
3. **Forum #9: Color through Time: Histories, Meanings, Practices** on November 8. Speakers: Patrick Baty, Spike Bucklow and Judith Mottram.
4. **Forum #10: Color in Modern and Contemporary Contexts.** Speakers: Alexandra Loske, Carolyn Purnell and Dominique Grisard.

Forum recordings are available on YouTube at <https://www.youtube.com/channel/UCS1iGEmfo85NKNM7PfkVVig>



Roland L. Connelly, Sr. 1945-2024

IN MEMORIAM

In 2024, ISCC lost two remarkable colleagues who were long-time members and played seminal roles in the history of our organization.

Roland L. Connelly, Sr. 1945-2024

Roland Connelly was a brilliant and curious scientist, and an engaging teacher in the field of color science. The hallmark of his career was his own company, SheLyn. SheLyn was keenly engaged in supporting industries to correctly manage color quality control. Roland was key to implementing standardized methods to evaluate and communicate information related to color. Roland's activity in the standards organizations meant that his contributions were not limited to a single company. Instead, his work benefited all industries that control color. Roland served as President of ISCC and American Association of Textile Chemists and Colorists) AATCC. Roland was an active member of

UNITED STATES

INTER-SOCIETY COLOR COUNCIL (ISCC)

American Society for Testing and Materials (ASTM)
He was awarded the coveted ISCC Macbeth Award and AATCC Education Award both for impactful and outstanding contributions in the field of color. In retirement, Roland served on the board of Hunter Lab, a leading supplier of color evaluation hardware and software. He was a frequent lecturer and author of numerous papers on topics such as Lighting, Colorant Formulation, Quality Control, Supply Chain Management, and Instrumental UV Calibration. He served many years as the U.S. spokesman for color measurement in ISO TC38, Textiles.



Arthur (Art) William Springsteen 1948-2024

Color Impact 2025, Color as Communication Logo.



Arthur (Art) William Springsteen 1948-2024

Art Springsteen was a longtime friend, mentor, and supporter of the ISCC, its membership, and indeed the greater color community. The company he founded in 1999, Avian Technologies, LLC, has been an ISCC Sustaining Member since 2007, demonstrating his enthusiastic advocacy for the color community. His active support precedes even the founding of Avian Technologies, as Art was the champion within Labsphere for their Sustaining Membership beginning in 1992. In addition to that support, Art served on the ISCC Board of Directors from 2013 to 2015, and in a variety of capacities at many conferences over the years. After receiving his PhD in Chemistry from West Virginia University, Art worked at Labsphere, ultimately as Principal Scientist and Director for Advanced Development. Art published more than thirty scientific papers and contributed to Spectroscopy magazine's "Spectroscopy Workbench" section. He was the co-author/editor (with Jerry Workman) of the Academic Press book *Applied Spectroscopy, A Complete Guide for Practitioners*, and edited the *Proceedings of the Third and Fourth Oxford Conferences on Spectrometry*. Art was an active member of the Council of Optical Radiation Measurement (CORM), ASTM Committee E-12 (Color and Appearance) and E-13 (Molecular Spectroscopy), the Society for Applied Spectroscopy, and Council for Near-Infrared Spectroscopy. Recently, Art worked with NASA, the Neils Bohr Institute, and Lucideon Ltd. to develop color standards that are used to calibrate the cameras of the Mars 2020 Perseverance Rover.

COLOR IMPACT 2025

ISCC will be hosting another **Color Impact Conference** from June 16-18, 2025. The theme of the Conference is Color as Communication. The venue will be the Rochester Institute of Technology in Rochester, New York. This conference will feature keynote presentations, workshops, and exhibitions centered around the topics of Color as Communication in Technology, Design, Culture, and Nature. This Conference promises to be a perfect blend of learning, innovation, and community building for anyone passionate about color! Registration will be open in May. We encourage our AIC colleagues to join us in Rochester, NY in June. Please visit <https://iscc.org/Color-Impact-2025> for more details.

Finally, ISCC is pleased to invite you to learn more about all our activities by visiting our website at www.iscc.org





AIC STUDY GROUPS

MAURIZIO ROSSI - POLITECNICO DI MILANO, ITALY

INGRID CALVO IVANOVIC - UNIVERSIDAD DE CHILE, CHILE

STUDY GROUP ON ARTS AND DESIGN

CHAIR: MARIA JOÃO DURÃO (PORTUGAL)
CO-CHAIR: DAVID BRIGGS (AUSTRALIA)
SG-AD@AIC-COLOR.ORG



Jeannette Hanenburg delivering her invited lecture at the SGAD Workshop, AIC2024, S. Paulo.



Jeannette Hanenburg in front of a wall painting at ASAS, Florianópolis, Brazil, that reads: "Juntos, fazendo a diferença na vida das pessoas" / "Together making the difference in people's lives"



ASAS Workshop applied Synaesthesia

The Study Group on Arts and Design held a workshop at AIC2024 Meeting in S. Paulo, Brazil, on September 17th, chaired by Maria João Durão, with an invited lecture delivered by Jeannette Hanenburg.

Jeannette Hanenburg's project, **Teaching Colour through Art Classes for young people in deprived areas of Florianopolis, in Brazil** was the theme that she explored with a focus on a workshop in which children learned and experienced how senses, and choosing colours, can be connected and be transferred to a piece of art. She went to ASAS in Brazil as volunteer for the third time and had the support of many helpers and translators, making the workshop an overall experience in education, love and friendship. These children come from underprivileged neighbourhoods and grow up in a world filled with violence, danger, and poverty. On top of that, they only attend school for half a day, consequently, they miss out on much-needed opportunities. Asas and Power2Fly empower these young people to grow and create meaningful futures.

In Jeannette's lecture, multiple images gave us an idea of the 3-day workshop- **Workshop applied Synaesthesia**-, in which children explored forms of associative synaesthesia, selecting and collecting colours and using them in a later project. With the associative synaesthesia, children felt a strong and involuntary connection between the stimulus and the sense that it triggers. The children were divided into three age groups, between 7 and 15 years, each further split into a morning and an afternoon session, resulting in a total of 18 one-hour workshops over the course of three days. Non-synesthetes can learn how to use senses to develop their unconscious feelings for colours and make colour choices accordingly.

We planned a **new series of online forums** in which two to three speakers from around the world will give presentations on a common theme, followed by a discussion among the speakers and the online audience. Our first forum will look at the application of XRF scanning and other non-invasive state-of-the-

STUDY GROUP ON ARTS AND DESIGN

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ASAS Workshop applied Synaesthesia – the sense of hearing

Poster: 20th Anniversary of the Colour
Lab-Lisbon School of Architecture



art methods of analysis in uncovering the technique and creative process of painters of the past and will be held on Zoom on **International Colour Day**, Friday March 21 in conjunction with the **Colour Society of Australia**. Our speakers will be Simon Ives, Painting Conservator at the Art Gallery of New South Wales in Sydney and Mareike Gerken, Applications Scientist μ XRF at the Bruker Corporation in Berlin.”

The SG Arts and Design organized in partnership with Portuguese Colour Association (APCOR), and the Research Group on Colour and Light of the Centre of Research for Architecture, Urbanism and Design (CIAUD) Lisbon School of Architecture, the event that celebrates the **20th Anniversary of the Colour Lab-Lisbon School of Architecture: Seminar LabCor-GI CorLuz: '(Im)materialities of Colour'**, January, 28, 2025. The programme is multidisciplinary, reflecting the

nature of the research projects developed in the two Colour Modules of ColourLab- EXPER•CROMA- Colour and Space Perception Module, and MED•CROMA - Colour Measurement and Analysis Module.

We invite you to continue to follow SGAD Instagram account (<https://www.instagram.com/aic.sg.arts.design/>) and keep up to date with art and design-related events. In addition, SGAD members who have artworks, design objects or art- or design-related projects or events that they would like to submit for posting on the SGAD Instagram account can send their proposed content to us in the form of one or more high-quality jpeg images (300 dpi) and a short description including hashtags in a text document.

We look forward to seeing you in person at AIC 2025 Congress in Taiwan!

STUDY GROUP ON COLOUR EDUCATION

CO-CHAIRS:

MAGGIE MAGGIO (USA) & ROBERT HIRSCHLER (HUNGARY)



AIC2024 Sessions on Colour Education, chaired by Maggie Maggio and Robert Hirschler.

In 2024 the SGCE focused its activities on the participation at the AIC Mid-Term Meeting in São Paulo and on the Colour Literacy Forums. Phase One of beta-testing for the Colour Literacy Project was completed and Phase Two of beta-testing was launched at the AIC meeting.

SGCE PARTICIPATION AT THE AIC 2024 MID-TERM MEETING IN SÃO PAULO, BRAZIL

Many SGCE members participated and presented papers at the highly successful event, which will be published in the forthcoming AIC2024 Proceedings.

During the conference on September 17, two focused sessions on “Colour Education” were held, chaired by **Maggie Maggio** and **Robert Hirschler**, where some members of the study group, scholars and post-secondary students presented their research projects and colour teaching methodologies. Additionally, on the same day, we organized a 90-minute Study Group meeting, which saw high participation from academics and students.

The SCGE meeting was conducted in two parts: first, **Luanne Stovall** and **Ingrid Calvo Ivanovic** provided updates on the Colour Literacy Project and invited attendees to join the *Post-Secondary Partners Network*, which will be implemented in the next phase of the project starting in 2025. In the second part of the meeting, Maggie Maggio led a card game session, which was greatly enjoyed by SG members who participated enthusiastically.

COLOUR LITERACY FORUMS - 2024 SERIES

In 2024, the Colour Literacy Project team organized four **Colour Literacy Forums**, as part of the *Colour in Context 2024 Series*. The series explored the intriguing and paradoxical nature of colour—both identifiable and ambiguous at the same time. This context-dependent quality of colour is deeply tied to a key epistemological question, making it one of the most debated topics in the philosophy of colour.



Photos of the SCGE meeting held during the AIC Midterm Meeting in São Paulo, Brazil.

Forum #7

We celebrated **International Colour Day** with the first Forum of the series titled 'Colour in Context, Part 1', on March 22, by featuring two presentations:

- **Valteri Arstila** (Professor of Theoretical Philosophy, Department of Behavioural Sciences and Philosophy, University of Turku), spoke about *The identity and ambiguity of colour from a philosophical perspective*
- **Harald Arnkil** (CLP Team Member, Visual artist, Colour researcher & Author *Colours in the Visual World*) explained why *Colours are contextual*.

Forum #8

We explored '**Colour in Spatial Contexts**', through the topic of *The Interaction of Colour and Light*, on June 13 by featuring three presentations:

- **David J. C. Briggs** (Colour Society of Australia), *Colours of objects and colours of illumination*
- **Sylvia Pont** (Delft University of Technology), *Lighting colours and colouring light*
- **Kine Angelo** (Norwegian University of Science and Technology), *Light and colour in urban colour composition*

Forum #9

We explored '**Colour in Historical Contexts**', through the topic of *Colour through Time: Histories, Meanings, Practices*, on November 8, featuring three presentations:

- **Patrick Baty** (author, *The Anatomy of Colour; Nature's Palette*), *Werner's Nomenclature of Colours*
- **Spike Bucklow** (author, *The Alchemy of Paint*), *Lapis Lazuli and Some Meanings of a Blue*
- **Judith Mottram** (Lancaster University, UK), *Why History Matters in Colour Education and Practice in Post-Compulsory Higher Education*

STUDY GROUP ON COLOUR EDUCATION

CO-CHAIRS:
MAGGIE MAGGIO (USA) & ROBERT HIRSCHLER (HUNGARY)

COLOUR LITERACY FORUM #8

A virtual platform featuring presentations and interactive conversations focused on updating and expanding 21st century colour education at the university level

The Interaction of Colour and Light

A Zoom Event
Thursday, June 13, 2024
10am - 11:30am US Eastern Time

Organized by the AIC-ISCC Colour Literacy Project with:

AIC Study Group on Colour Education

REGISTRATION AT:
www.colourliteracy.org

COLOUR LITERACY FORUM #9

A virtual platform featuring presentations and interactive conversations focused on updating and expanding 21st century colour education at the university level

Colour Through Time: Histories, Meanings, Practices

A Zoom Event
Friday, November 8, 2024
11am - 12:30am - US Eastern Time

Organized by the AIC-ISCC Colour Literacy Project with:

AIC Study Group on Colour Education

REGISTRATION AT:
www.colourliteracy.org

COLOUR LITERACY FORUM #10

A virtual platform featuring presentations and interactive conversations focused on updating and expanding 21st century colour education at the university level

The Cultural Palette: Colour's Role in Identity, Gender and Society

A Zoom Event
Friday, December 6, 2024
11 am - 12:30 pm - US Eastern Time

Organized by the AIC-ISCC Colour Literacy Project with:

AIC Study Group on Colour Education

REGISTRATION AT:
www.colourliteracy.org

Forum #10

The last Forum of 2024 was about 'Colour in Cultural Contexts', through the topic of *The Cultural Palette: Colour's Role in Identity, Gender and Society*, on December 6, featuring three presentations:

- **Alexandra Loske** (author, *Colour - A Visual History*), *Lives in colour: Pioneering women in colour history*
- **Carolyn Purnell** (author, *Blue Jeans*), *Blue jeans: an exercise in contrast*
- **Dominique Grisard** (University of Basel, author *Gendering Terror*), *"It's a girl!" What pink reveals about colour, gender and childhood in the 20th and 21st century.*

The Forums have been recorded and are available at <https://colourliteracy.org/colour-literacy-forum>.

UPDATES ON THE COLOR LITERACY PROJECT

This year, the Colour Literacy Project (CLP) website, curated by **Robin Kingsburgh**, expanded to include a dedicated section with exercises and resources for teachers.

Throughout 2024, the project continued its collaboration with partner schools to beta-test the exercises for foundational colour education. Four partner schools actively participated in this phase:



Workshop in Bunbury (a small city south of Perth).
Contributed by Paul Green-Armytage



Explaining additive and subtractive mixing during a workshop at the Fluminense Federal University, Niteroi RJ, Brazil. Photo: Gisela Monteiro.

- **St. Teresa RCP Elementary** in Irlam, England (coordinated by Colette Harrison);
- **Dongmaojie Elementary and Shazitang Elementary** in Changsha, Hunan, China (coordinated by Huang Qian);
- **DaVinci Middle School** in Portland, Oregon, USA (coordinated by Edin Cook);
- **Morristown Beard School** in Morristown, NJ, USA (coordinated by Peter Donahue).

The next year will bring the beginning of phase two of the project, CLP 2.0. The end of CLP 1.0. marked the launching of the **CLP Post Secondary Partners Network (PSPN)**. The CLP Partners Network is conceived as a cohort of post-secondary teachers (college, university, and professional training, among others) partnering with the CLP to beta test the materials and resources at the upper level of education, to provide feedback about the implementation of the exercises, and to share their innovative exercises, projects, and materials to contribute to the CLP Resource Library. Two PSPN Orientation Sessions were conducted in November 2024, and more than 30 teachers have signed up to be part of the Network. CLP 2.0 will see the growth, consolidation, and dissemination of the results of the PSPN action.

Beta-testing of educational materials will continue in CLP 2.0, incorporating feedback from post-secondary

educators and expanding collaborations with new international schools and institutions. This phase will focus on refining existing resources and ensuring they meet the diverse needs of all levels of top-down/bottom-up educators and learners worldwide. Future long-term goals include adapting the website and teaching materials into multiple languages and making the project more accessible to non English-speaking audiences. This initiative aims to facilitate wider dissemination, particularly in regions such as Asia and the Southern Hemisphere, to name a few. More academic dissemination and a comprehensive social media strategy will also be developed to strengthen the CLP's digital presence, engage a broader audience, and foster an active online community. Furthermore, the CLP will seek to establish knowledge alliances with academic and research institutions to apply for international funding and research grants. By securing financial support, the project can ensure its long-term sustainability, allowing it to continue expanding and evolving to meet the challenges and opportunities of 21st-century colour education.

ACTIVITIES OF SGCE MEMBERS AROUND THE GLOBE

In addition to the online Forums and the AIC2024 Midterm Meeting, study group members were active around the globe, with **Paul Green-Armytage** conducting workshops in Australia and China; and **Gisela Monteiro** in Brazil, among other activities.

STUDY GROUP ON COLOUR VISION AND PSYCHOPHYSICS

CHAIR: SHOJI SUNAGA (JAPAN)

SECRETARY: CHANPRAPHA PHUANGSUWAN (THAILAND)

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 ranging from colour vision models to universal colour design including colour perception of the elderly.

ACTIVITIES

- Currently, the number of members of the SG is 102 from 16 countries.
- We are hosting the SG homepage using the following website: <http://www.okajima-lab.ynu.ac.jp/CVPSG/> (the URL will move to a new URL soon).
- We are planning to make a new website.
- SG members reported some interesting research related to the SG.

RECENT RESEARCH TOPIC

For accurate colour reproduction, an observer's cone spectral sensitivity must match the standard observer's cone fundamentals. When this difference appears in the colour difference on color reproduction, it is called observer metamerism. Recently, the development of wide gamut colour displays has made this observer metamerism a problem. Observer metamerism is particularly prominent in anomalous trichromats

because their cone spectral sensitivity differs from that of the standard observer's cone fundamentals and wide gamut colour displays employ a narrow band spectral distribution of the primary colors [1, 2]. Inoshita et. al. * reported observer metamerism in this wide gamut colour display. Their study is introduced here.

Inoshita et. al. used two viewing booths as the apparatus (Figure 1). One of 16 colour chips illuminated by the D65 fluorescent illumination was presented in one booth. The additive mixture colour field consisting of a red, a green, and a blue was in the other booth. The colour chip and the colour field were surrounded by the gray background with a white band, respectively. The colour field was behind of the gray background and was observed through the window on it. The peak wavelengths of the RGB monochromatic lights were 630 nm, 533 nm, and 463 nm, respectively, with a narrow half bandwidth of 10 nm (Figure 2). One protanomalous trichromat (PA1) and two deuteranomalous trichromats participated (DA1 and DA2) in the experiments. One (DA2) of the deuteranomalous trichromats, who was a severe deuteranomalous trichromat, failed the Panel D-15 test whereas the others passed it. The observer's task was to adjust the luminance and the chromaticity of the additive mixture colour field to match the colour chips. The chromaticities of matched colours shifted along the protanopic or deuteranopic confusion lines for each anomalous trichromat. The matched colours shifted to converge toward the centre of confusion colours for the protanomalous trichromat (PA1, Figure



Figure 1: The apparatus and the stimuli used in the experiment

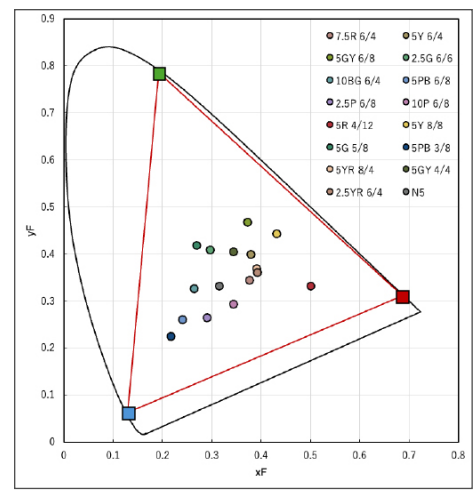


Figure 2: The chromaticities of 16 test colour chips and the colour gamut of the additive mixture colour field.

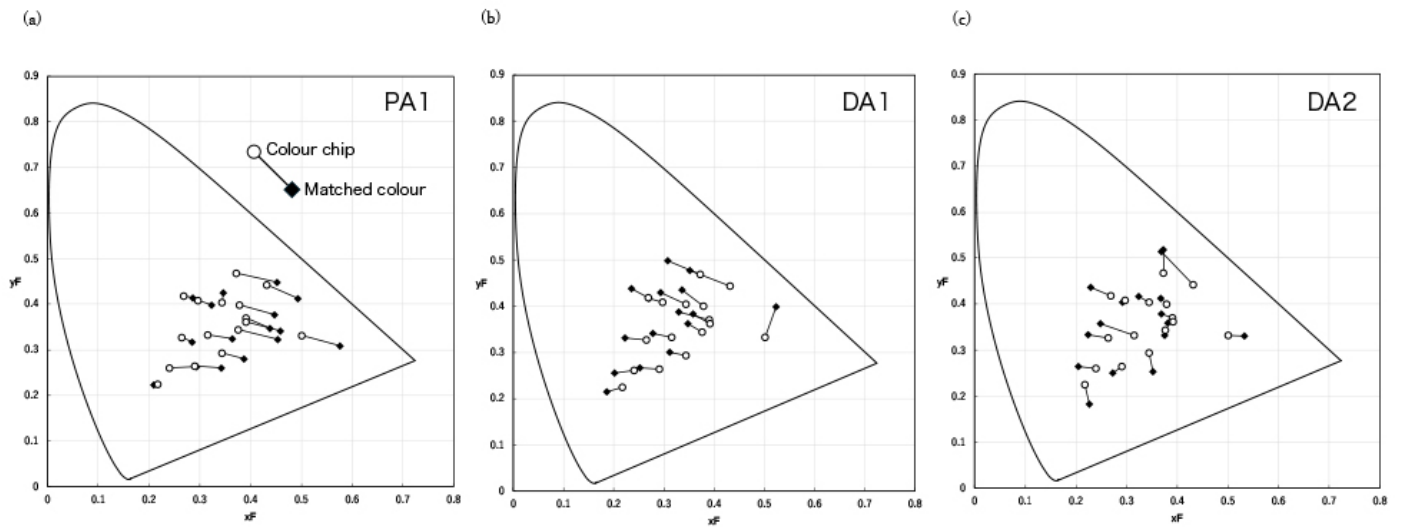


Figure 3: The chromaticities of matched colours for (a) PA1, (b) DA1, and (c) DA2.

3a). For the deuteranomalous trichromat (DA1, Figure 3b) who passed the Panel D-15 test, the matched colours shifted to diverge from the centre of confusion colours. However, for the severe deuteranomalous trichromat (DA2, Figure 3c), although the matched colours to the greenish colour patches shifted to diverge from the centre of confusion colours, those to the reddish colour patches shifted to converge toward it. These results suggest that the tendency of colour shifts due to observer metamerism depends on the degree of anomalous trichromacy. Although the ITU recommends the wide colour gamut display system [3], it may arise a serious problem on the colour appearance of anomalous trichromats.

* This study is presented at the ICVS 2024 (Ljubljana, Slovenia, July 5-9, 2024) by Inoshita et.al. (Kyushu University, Japan).

References

- [1] Ramanath, R. (2009). Minimizing observer metamerism in display systems. *Color Research & Application*, 34(5), 391-398.
- [2] Sunaga S. et al. (2018). Observer metamerism in wide color gamut display for anomalous trichromats, *Proceedings of the 4th Conference of Asia Colour Association*, 236-240.
- [3] ITU-R. (2017). Image parameter values for high dynamic range television for use in production and international programme exchange, Recommendation ITU-R BT.2100-1.

FUTURE EVENTS

The 8th Asia Color Association Conference, at Chulalongkorn University, Bangkok, Thailand, November 13-16, 2024.

STUDY GROUP ON ENVIRONMENTAL COLOUR DESIGN



CHAIRS: VERENA M. SCHINDLER (SWITZERLAND)
JUAN SERRA LLUCH (SPAIN)
WWW.AICECD.ORG



Colorful Landscape / Vibrant City - Seminar Poster designed by Beichen Yu.

COLOURFUL LANDSCAPE / VIBRANT CITY

Underpinned with examples ranging from the mid-18th century to the most recent times, the seminar entitled “*Colourful Landscape / Vibrant City*” explored theories and trends in landscape and urban design in which colour is a leading conceptual element.

Mira Engler, Emerita Professor of Landscape Architecture at Iowa State University, inquired into ‘*Colour Concepts in Landscape Architecture: From Camouflage to Activism*’. She critically engaged in analysis and discussion of colour in landscaping. Although she argued that landscape architects have largely remained silent about colour, she provided insightful evidence and stunning examples. Thereby, garden festivals, installations in public gardens, social and political activism as well as botanical, technological, material, aesthetic, lighting and digital innovations have been crucial for a rapid and spectacular development of colour over the last two centuries.

The presentation by **Zena O’Connor** on ‘*Linking Heritage and Contemporary: Managing Heritage Values with Contemporary Colour Palettes*’ discussed colour palettes as a tool for dealing with highly contrasting architectural styles to enhance the overall visual aesthetics and amenity of an urban landscape. Using a digital methodology, a series of colours (in terms of hue, value and saturation) is produced that can be rearranged into colour-scheme options for façades for practical application.



SG ECD Meeting at AIC 2024 São Paulo, including the three presenters in the centre surrounded by participants.

Beichen Yu dealt with a highly topical subject ‘Towards Urbanisms of Colour: Exploring New Colour Trends in Landscape Architecture’. Her talk was truly informative as she analyzed the use of saturated or bold colours in the urban environment over the last twenty years. In her research, she did not focus on the context but on individual projects or, in terms of Gestalt psychology, not on the ‘background’ but on the ‘figure’. She argued that the reasons for this colour phenomenon, where the ‘Instagrammable spots’ become the coolest moments of a city trip, is the introduction of social media and thus the changing interaction between users and urban space. She claimed that a new kind of cosmopolitan lifestyle and the globalisation of colour expressions in branding have boosted the semiotic role of colour.

The seminar was organized on the initiative of **Beichen Yu** together with the SG ECD chairs, **Verena M. Schindler** and **Juan Serra**, and the Universitat Politècnica de València, Spain, on the occasion of the International Colour Day.

SG ECD MEETING AT AIC 2024 BRAZIL

During the AIC 2024 Midterm Meeting in São Paulo, Brazil, an SG ECD meeting took place on 17 September.

It was a unique occasion to meet in person three influential book authors.

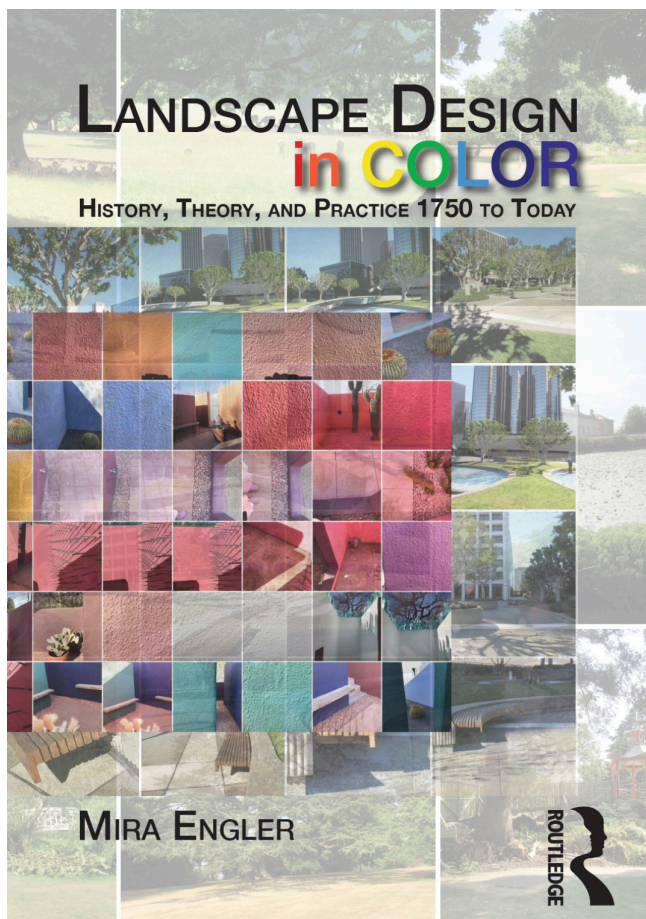
Mira Engler discussed her highly recommended book on *Landscape Design in Color: History, Theory, and Practice 1750 to Today* (Routledge, 2023). Colour in the landscape has been influenced not only by landscape and garden designers but primarily by architects and artists. Botanical and technological developments, commercial and industrial design as well as cultural forces such as consumerism, fashion and trends had an impact on colour expressions ranging from complementary colour concepts and artificial lighting to the use of digital projections.

Gareth Doherty, editor of *New Geographies 03: Urbanisms of Color* (Harvard University Press, 2010), presented the volume containing a collection of twenty-six articles. One of them is a paper by SG ECD member Jianming Song (with co-authors Yin Di and Yifan Li) on the colours of Macao.

Juan Serra presented his book *Color for Architects* (Princeton Architectural Press, 2019). The book not only deals with the basics of colour and perception theory, but also contains exercises. Using examples,

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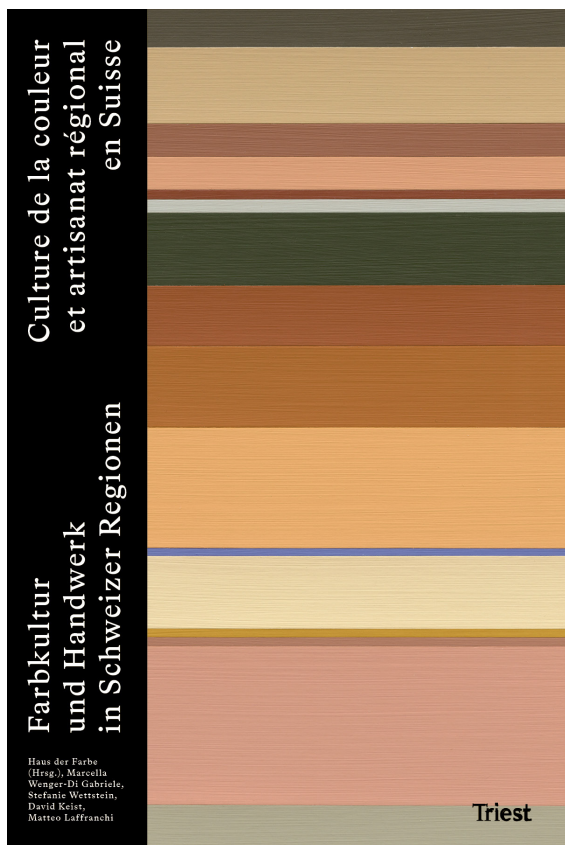
Mira Engler (2023) Landscape Design in Colour.

colour concepts of renowned buildings are analyzed and colour harmonies for architectural projects are discussed. The indispensable digital tools for architects are described in the third part of the book, for example, how to calibrate a monitor, edit digital photographs and print them in the correct colours.

ONGOING PROJECT

In 2024 the Special Collection on Environmental Color Design Research of the journal *Color Research and Application* has been enlarged with three articles:

- **Francesca Valan**, Pietro Paglierani (2024): Connecting the new to the past: The Color-Material-Finish design approach applied to the Fortezza da Basso. *Color Research and Application*. 2024; 49(4): 384-400. <https://doi.org/10.1002/col.22923>
- **Esra Küçükkılıç Özcan**, Kasım Çelik (2024): Environmental color analysis and facade color design in a street rehabilitation: Adana, Kayalıbağ. *Color Research and Application*. 2024; 49(5): 433-448. <https://doi.org/10.1002/col.22926>



Haus der Farbe, ed. (2024) Farbkultur.



ark 4 (2024) Special issue on colour design.

- **Katia Gasparini** (2024) Urban Color Plan: The case study of the Ledro Valley (Italy). *Color Research and Application*. 2024; 49(6): 618-634. <https://doi.org/10.1002/col.22947>

Scholarly articles can be submitted on the journal's website: [https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1520-6378.environmental-color](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1520-6378.environmental-color)

PUBLICATIONS BY SG ECD MEMBERS

- Haus der Farbe, Ed. (2024), **Stefanie Wettstein**, et al. *Farbkultur und Handwerk in Schweizer Regionen. Culture de la couleur et artisanat régional en Suisse*. Zürich: Triest Verlag.
- **Alexandra Loske** (2024) *Mary Gartside c.1755-1819: Abstract Visions of Colour*. London: Paul Holberton.
- ark - Finnish Architectural Review 4 (2024) Colour. It includes 'Short Syllabus in Colour Research', an inspiring article by **Saara Pyykkö**.

New SG ECD members joining in 2024 include:

- Alexandra LOSKE (UK)
- Amber SCOTT (US)
- Anamaria REZENDE (BR)
- Faten HUSSEIN (TN)
- Gareth DOHERTY (US)
- Jaeun CHO (KR)
- Lauren Nicole GONÇALVES DUARTE (BR)
- Lina SCHMIDT (DE)
- Maria Fernanda PILOTTO BRANDI (BR)
- Monica TAVARES (BR)
- Monique DENONI (BR)
- Natalia NAOUMOVA (BR)
- Nicole HARTMANN (CH)
- Sharon AVITAL (IL)
- Shigeki NAKAUCHI (JP)
- Sonia VAN DE HAAR (AU)

STUDY GROUP ON THE LANGUAGE OF COLOUR



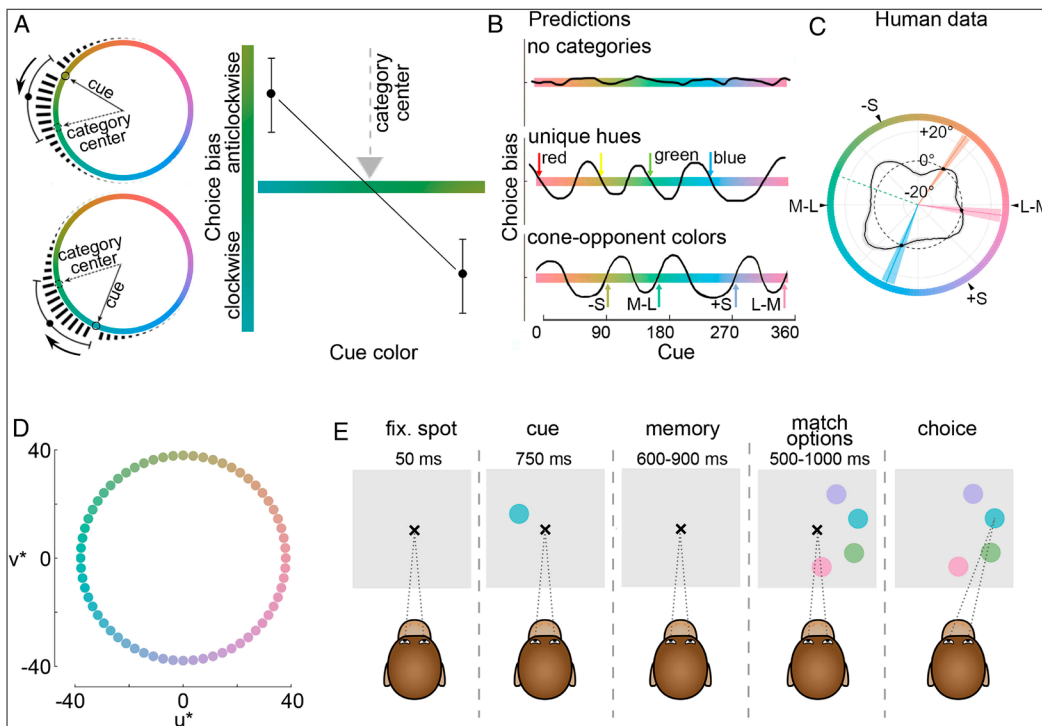
CHAIR: A. PROF. DIMITRIS MYLONAS (UK)
CO-CHAIR: PROF. GALINA PARAMEI (UK)
WWW.LANGUAGE-OF-COLOR.AIC-COLOR.ORG

The purpose of the AIC Study Group on the Language of Colour (SGLC) is to share information on and discuss studies on psycholinguistics, computational linguistics, semantics and semiotics of colour names, and the relation of these to perception of colour and its underpinning cognitive and neural mechanisms. Currently the SGLC has 225 registered members from 63 countries. Social networking platforms of the SGLC in X (@aic_lc) and Facebook (@languageofcolour) have currently 993 and 571 followers respectively. Our new LinkedIn group is growing fast with 67 member at <https://www.linkedin.com/groups/12923723/>

In 2024, SGLC members made key contributions to our field.

Notable publications are listed below.

- Garside, Daniel J., Audrey L. Y. Chang, Hannah M. Selwyn, Bevil R. Conway. 2024. "The origin of color categories." *Proceedings of the National Academy of Sciences of the U.S.A.*, 122(1): e2400273121. <https://doi.org/10.1073/pnas.2400273121>
- Sinkeviciute, Akvile, Julien Mayor, Mila Dimitrova Vulchanova, Natalia Kartushina. 2024. "Active language modulates color perception in bilinguals." *Language Learning*, 74(S1), 40–71. <https://doi.org/10.1111/lang.12645>



Nonverbal paradigm to recover colour categories in nonhuman primates compared to human colour category data. Garside et al. 2024.

- Griber, Yulia A., Tatiana Samoilova, Abdulrahman S. Al-Rasheed, Victoria Bogushevskaya, Elisa Cordero-Jahr, Alexey Delov, Yacine Gouaich, James Manteith, Philip Mefoh, Jimena Vanina Odetti, Gloria Politi, Tatyana Sivova. 2024. "Playing" with color: How similar is the "geometry" of color harmony in the CIELAB color space across countries?" *Arts*, 13(2): 53. <https://doi.org/10.3390/arts13020053>
- Bogushevskaya, Victoria. 2024. "A study in scarlet: Cultural memory of the tropes related to the color red, female countenance, and onstage makeup in the Sinophone world." *Semiotica*, 261, 209-225. <https://doi.org/10.1515/sem-2023-0186>

Furthermore, Dimitris Mylonas, Galina Paramei and Jules Davidoff are co-editors of the Special Collection on Color Cognition launched in June 2023 in the journal *Color Research & Application*, Wiley: <https://onlinelibrary.wiley.com/page/journal/15206378/homepage/color-cognition>

We invite members of the SGLC to submit their articles for publication in the Special Collection.

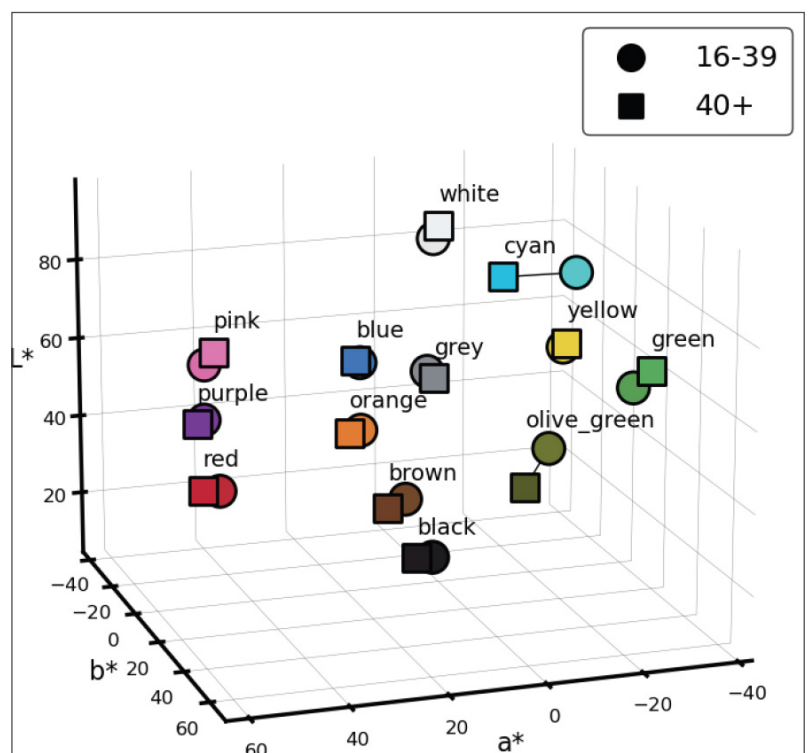
In 2024, the Special Collection was expanded by 5 publications of members of the SGLC:

- Minoru Ohkoba, Tomoharu Ishikawa, Kota Kanari, Shoko Hira, Sakuichi Ohtsuka, Miyoshi Ayama, "Color representations of normals and congenital red-green color deficiencies based on differential scaling of color-names and color-naming experiments".
- Humberto Moreira, Leticia Álvaro, Julio Lillo, "Color blindness and semantic knowledge: Cognition of color terms from elicited lists in dichromats and normal observers".
- Camilla Simoncelli, Philippe Gréa, Maria Kihlstedt, "From color naming to color perception: Cross-linguistic differences of the chromatic information processing in monolingual and bilingual speakers".
- Wakui Elley, Dimitris Mylonas, Serge Caparos, Jules Davidoff, "Categorical color perception shown in a cross-lingual comparison of visual search".
- Epicoco Déborah, Christine Mohr, Mari Uusküla, Michael Quiblier, Maliha Bouayed Meziane, Eric Laurent, Giuffa F.M. Spagnulo, Domicela Jonauskaitė. "The PURPLE mystery: Semantic meaning of three purple terms in French speakers from Algeria, France, and Switzerland."

Several members of the SGLC gave presentations at the 27th Symposium of the International Colour Vision Society held on 5th-9th July 2024 in Ljubljana, Slovenia,

STUDY GROUP ON THE LANGUAGE OF COLOUR

CHAIR: A. PROF. DIMITRIS MYLONAS (UK)
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Centroids of basic and non-basic colour terms for two age groups (Sinkeviciute et al.).



Galina Paramei and Dimitris Mylonas at AIC 2013 in Newcastle upon Tyne, UK.

as part of the Colour Cognition session. Among these were presentations by:

- David L. Bimler, “Which is more basic, ‘light’ or ‘neon’? English color-term modifiers examined with color-survey data”
- Akvile Sinkeviciute, Heather Ferguson, Dimitris Mylonas, “Ageing and colour language in English speakers” (supported by the WD Wright Award from the Colour Group GB)

January 2025 marks a significant milestone as we celebrate 10 years as Chairs of the Study Group on the Language of Colour (SGLC) within the AIC. Over the past decade, we have focussed on expanding the membership, maintaining our custom website and social media presence, organising SGLC sessions at the annual AIC meetings, and authoring annual reports. We also actively participated in organising international conference *Progress in Colour Studies* (PICS 2016, London, and PICS 2022, Tallinn), as well

as in preparing collective monographs based on the PICS presentations (published by John Benjamins) and serving as co-editors of the aforementioned Special Collection on Color Cognition.

While we remain committed to promoting the language of colour, we believe it is time to step down in January 2025 to allow fresh ideas and perspectives to drive this work forward. The existing website (available at: <http://language-of-color.aic-color.org/>) of our study group will be archived, but the dedicated page on the AIC website will continue to be used.

We sincerely thank the AIC Executive Committee for their trust and support over the years and look forward to the announcement of our successors.

Thank you again for the privilege of serving this vibrant colour community.

Dimitris & Galina

STUDY GROUP ON COLOR IN GAMES AND TOYS

CHAIRS: ALESSANDRO RIZZI (ITALY)
ANDREA SINISCALCO (ITALY)

In February 2024, the AIC executive committee approved the formation of the AIC Study Group on Color in Games and Toys. The page of the study group has been published on the AIC website (<https://aic-color.org/sg-cgt>), and the group made its official debut during the AIC mid-term meeting in September in São Paulo, Brazil.

The AIC Study Group in Games and Toys focus on analysing colour in gaming contexts, with particular emphasis on games, video games, and toys. Its goal is to bring together researchers, experts, and enthusiasts in the field to explore the role and impact of colour in these applications in greater depth.

The group's primary activity involves examining how colour choices influence the gaming experience, exploring the psychology of colour in toys, and analysing how colour palettes can stimulate creativity and support learning processes in both children and adults. Special attention is also given to accessibility for colour-blind users.

The group serves as a platform for professionals from various fields to exchange ideas, opinions, findings, and best practices related to the use of colour in play. The group is new and expanding and invites anyone interested in these topics to join (sg-cgt@aic-color.org). The Study Group organised a special session on Colour in Games and Toys in the mid-term meeting AIC2024, which was held in September in São Paulo,

Brazil (<https://aic2024.org/>). Five papers presented issues related to board games and video games in the session.

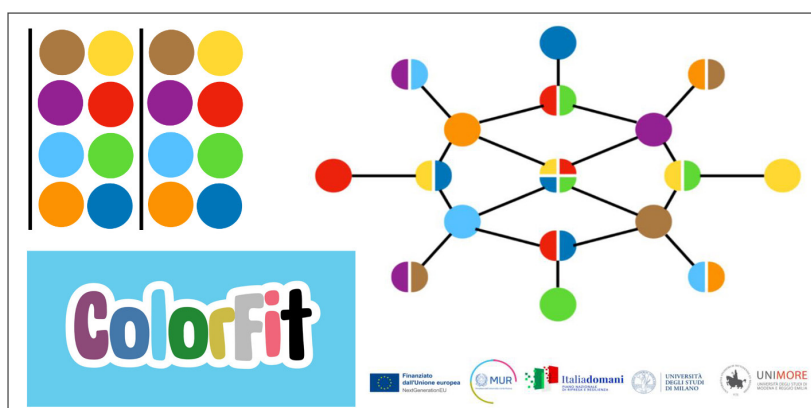
The study group also organised a special session on colour in Games and Toys during the Color Conference CdC2024 of the Associazione Italiana Colore (Italy), which was held online in November (<https://www.gruppodelcolore.org/portfolio-articoli/online-2024/>). Three papers focused on colour in board games and role-playing games were presented in this session.

Another ongoing activity of the study group revolves around a financed project of the Italian government. The Italian Ministry of University and Research has funded a project called Game4Ced (Gamification for colour blindness early detection), which aims to design board games to be used in primary school classes to discover, as soon as possible, the presence of colour-blind children and, at the same time, to raise awareness among teachers about what colour blindness is and how to manage it in the classroom.

In detail, the project Game4CED combines board games and research on colour blindness with the objectives of 1) developing a board game as an educational instrument for colour blindness early detection, 2) increasing people's awareness of colour blindness, and 3) Improving inclusivity. This project belongs to the human well-being strategic theme since it provides new tools for teachers and educators to create a more inclusive school practice. In particular, teachers will be involved in the development and use of project tools.



Alessandro Rizzi, one of the Chairs of the AIC Study Group on Color in Games and Toys speaks during the dedicated special session at AIC Midterm Meeting 2024 in São Paulo, Brazil.



Images taken from the ColorFit board game, developed in the frame of the Game4Ced, Gamification for color blindness early detection, granted by the Italian Ministry of University and Research (MUR PRIN PNRR, CUP Master G53D2300721-0001)

One of the main goals is the development of ColorFit, a new board game for children that can be used to detect colour blindness early and preemptively.

ColorFit development is performed after analysing the most diffused games and the accessibility metrics derived from the study of board games' inclusivity. The diagnosis of colour blindness in children leads to a better understanding of this condition, improved well-being, and decreased risk of discrimination.

ColorFit print&play file can be downloaded from here: <https://boardgamegeek.com/boardgame/427602/colorfit>





IN MEMORIAM

BY INGRID CALVO IVANOVIC - UNIVERSIDAD DE CHILE, CHILE

IN MEMORIAM




Angela Wright (1939–2024) advanced colour psychology, revealing how colour profoundly influences emotion and behaviour. Through her Colour Affects theory, she decoded colour's universal language, making it accessible and practical. Focusing on its unconscious effects, she showed how colour shapes moods, decisions, and lives in unnoticed ways. Her groundbreaking theory demonstrated that colour is not just aesthetic but has intrinsic psychological effects. In the early 1990s, mathematical analysis confirmed her findings that harmonious colour interplay influences personality and behaviour. Her book, *The Beginner's Guide to Colour Psychology*, continues to guide readers in using colour to transform spaces and lives. Beyond writing, her London-based consultancy, *Colour Affects*, became a trusted resource in branding, design, and personal expression. Her teachings have shaped environments from offices to homes, inspiring designers, artists, and thinkers. Angela's legacy is one of insight and empowerment, reminding us that colour is not just seen but felt. Those who knew her speak of her generosity and wisdom. Her influence endures through the professionals she inspired, continuing to colour the world in ways still being discovered.



Annamaria di Cara Santos (1962–2024), Honorary Member of the Colour Society of Australia, passed away on April 30 after a long battle with cancer. A dedicated CSA member since 1993, she served in various roles, including Chair of the NSW Division (1999–2001) and National President (2001–2005). Annamaria contributed significantly to CSA and AIC conferences, helping organize the 1999 CSA Biennial Conference, the 2009 AIC Congress in Sydney, and the 2021 CSA online conference. She also gave many local presentations on colour education and design. Annamaria's career began in heritage and conservation architecture before she founded Studio DC Disegno Colori in 1994, specializing in colour and design solutions for urban spaces and architecture. She was also a magnificent teacher and served as a Sessional Lecturer and Tutor in Colour Theory and Design, Architectural and Design History, and Restoration Studies, in Interior Design course programs at TAFE Sydney Institute, Enmore Design Centre from 2000 to 2018. In 2010 Annamaria's contributions were formally recognised by the Design Institute of Australia (DIA) with the award of a 10-year Citation for her career achievements, and in 2013 she was awarded the recognition of Fellow Member of the DIA.




ANDRÁS NOVEMBER (1936-2024) Swiss designer and co-author (with Jean-Paul Favre) of *'Color and, und, et Communication'* (Zurich 1979).




ANDREAS HÜNEKE (1944-2024). German art historian, editor and educator and editor of *'Der Blaue Reiter: eine Geschichte in Dokumenten'* (Stuttgart, 2011).



FLOYD LANIER GRAHAM (1940-2024) was a North American historian, museum curator, and educator. An expert in art and design, he edited *The Rainbow Book* (1975) and authored several works on American painting.



JUDITH LEWIS-CRUM (1945-2024). North American colour consultant and co-author (with JoAnna Nicholson) of *'Color Wonderful: The Revolutionary Color 1 Associates Wardrobe and Makeup Program'* (New York, 1986).



LLOYD KAUFMAN, (1927-2024). North American cognitive psychologist and educator and author of *'Sight and Mind: An Introduction to Visual Perception'* (London and New York, 1974) and *'Perception: The World Transformed'* (1979).



LOTHAR GERICKE (1937-2024). German painter, designer, graphic designer and architect; author of *'Das Phänomen Farbe'* (Berlin 1970), and *'Farbgestaltung in der Arbeitsumwelt'* (Berlin 1981).



MARÍA LUISA FAGO FONTANA DE MATTIELLO (1935-2024). Architect, researcher, and educator specialized in colour and visual perception. Co-author of *'Dimensiones y ordenación del color'* (1967), and former president of the Grupo Argentino del Color (GAC)



MICHAEL PETER LEVICK FOGDEN (1941-2024). English photographer, traveller and zoologist and co-author (with Patricia Fogden) of *'Animals and Their Colors: Camouflage, Warning Coloration, Courtship and Territorial Display'* (New York and London, 1974).

IN MEMORIAM



Bride Marie Whelan (1937-2024) passed away peacefully at home on June 8, 2024. Born in Chicago in 1937, the daughter of Barney and Bridie Kielty. She is author of *'Color Harmony 2: More than 1400 New Colour Combinations for the Designer'* (1994) and co-author (with Tina Sutton) of *'The Complete Color Harmony'* (2004). Whelan earned a BA from Mount Mary College and an MA in Art History at the University of Chicago. She then won a Fulbright scholarship and moved to the Isle of Man in the Irish Sea to teach art before returning to Chicago, where she taught at Morgan Park High School. In 1968 Whelan worked on Bobby Kennedy's election campaign, bringing her to Boston where she taught at Brookline High School. There she met and married fellow art teacher Joseph A. Whelan. The couple moved to England and taught at The American Schools in London and Rome. While raising three children, she taught art in the Fairfield Public Schools and developed calligraphy skills under the typographer Ed Benguiat. In 1984, Whelan began teaching Calligraphy, Color Theory and Fashion History at Paier College of Art and Parsons School of Design in New York. She retired to Savannah in 2005 where she became a docent at the Telfair Museum.



Gunnar Tonnquist (1925-2024). A pioneering colour researcher and physicist, Gunnar Tonnquist played a key role in developing the Natural Colour System (NCS). A recipient of the AIC Judd Award, he dedicated his career to colour research, continuing well beyond retirement. After earning a Master's degree in physics, he collaborated with Tryggve Johansson, who formulated an early version of the NCS based on Ewald Hering's theories. Following Johansson's passing, Tonnquist furthered this work, contributing to the establishment of a government-funded colour research institute. He provided the physical expertise within the research group led by Anders Hård, which systematically analyzed the Hering-Johansson colour space. This effort culminated in the 1973 presentation of the Natural Colour System, followed by the release of the NCS Colour Atlas in 1979. Tonnquist was a founding member and vice president of the AIC in 1967, welcoming its first congress in Stockholm in 1969. He remained an active contributor to AIC conferences. His 1995 book *Colour System Analysis*, though published only in Swedish, remains a valuable resource. He emphasized that colour is a psychological and physiological experience rather than a purely physical phenomenon. Despite deteriorating eyesight in his later years, he remained engaged in discussions and research.



Lois Swirnoff (1931-2024) passed away on Tuesday, May 7, 2024, at the age of 92. Born in Brooklyn, NY, she was a renowned colour scientist, visual artist, educator and author. Swirnoff graduated from the Cooper Union School of Art in New York in 1951, and then undertook graduate studies with Josef Albers at Yale University. After receiving her MFA in 1954, she began teaching as an art instructor at Wellesley College in Massachusetts. She later held faculty appointments at Harvard University (1968-75), and was the Chair of the Art Department at Skidmore College, New York (1977-81), and then at UCLA (where she became Emerita Professor of Art and Design in 1990), returning to Cooper Union in 1991, where she held the Feltman Chair in Light, before retiring in 2003. She published two books, 'The Color of Cities: An International Perspective' and 'Dimensional Color'. Her exhibitions included solo shows at the Farnsworth Art Museum, Maine, the National Academy of Sciences, Washington DC, the Swetsoff Gallery, Boston, Galley BAI, New York, the Hathorn Gallery at Skidmore College, as well as in group shows in the US and abroad. She lectured internationally, including Bergen, Norway, and Sydney, Australia.



Ellen Marx (1939-2023) was a German-French artist and designer known for her research on color and optical effects. She authored *Les Contrastes de la couleur* (1973), *La Couleur optique* (1983), and *Méditer la couleur* (1989). Born in Saarbrücken, she studied visual research and design before joining the ZERO Group. After moving to France in 1964, she explored color relativity and optical contrast, culminating in *La Couleur optique* and a solo exhibition at the Centre Georges Pompidou, where her interactive color reliefs responded to the viewer's perspective.



Natasha Eaton (1974-2024) was an English cultural historian and a leading scholar of British and Indian art. Author of *Colour, Art and Empire* (2013), she explored cross-cultural exchange in visual culture. After earning her PhD at Warwick, she held fellowships at Michigan and Manchester before joining UCL as a Lecturer in 2005. A prolific writer and editor for *Third Text*, she received numerous accolades, including the Philip Leverhulme Prize in 2008.



www.aic-color.org