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KONICA MINOLTA

XVII CdC - CONFERENZA DEL COLORE

12-13 September 2022

Istituto di Fisica Applicata “Nello Carrara” del Consiglio Nazionale delle Ricerche IFAC-CNR

**IN COLLABORAZIONE CON
IN COLLABORATION WITH**

Associação Portuguesa da Cor (PT)
Centre Français de la Couleur (FR)
Colour Group (GB)
Forum Farge (NO)
Suomen väriyhdistys SVY ry (FI)
Swedish Colour Centre Foundation (SE)

**CON IL PATROCINIO DI
WITH THE PATRONAGE OF**

Associazione Italiana di Archeometria – AIAR
Associazione Italiana di Illuminazione – AIDI
Gruppo Italiano International Institute for Conservation – IGIC
International Colour Association – AIC
Società Italiana di Design – SID
Società Italiana di Ottica e Fotonica – SIOF

PROGRAMMA / PROGRAM

12 September 2022

SESSIONE PLENARIA 1 / PLENARY SESSION 1 (AULA TORALDO)

Chairs: **Andrea Siniscalco / Marcello Picollo**

Online moderators: Albana Muco / Gianluca Guarini

8:30 Registrazione partecipanti - Avvio collegamento / Attendee registration - Connection initiation

9:30 - 9:45 Benvenuto - Welcome greetings - Ricordo di Mauro Boscarol

- **Marcello Picollo**, President of GdC - Associazione Italiana Colore
- **Andrea Siniscalco**, Vice-president of GdC - Associazione Italiana Colore
- **Alessandro Rizzi**, Past president Gruppo del Colore

09:45 Invited Lecture: *On different approaches to Environmental Colour Design*. **Verena M. Schindler**

10:30 Invited Lecture: *Color = Shape = Space: Sol LeWitt's Wall Drawing #736 "Rectangles of color"*. **Renata Pintus**

11:15 - 11:30 **Coffee break**

11:30 Invited Lecture: *COLOURING IN ARCHITECTURE: problems involving nocturnal representation*. **Emanuela Chiavoni**

12:15 - 13:00 Premio/Award Colore 2022 GdC - Associazione Italiana Colore: **Grazia Varisco**

13:00 - 14:00 Break

TEMI DI INTERESSE

1. **Colore e misura/strumentazione.** Colorimetria, fotometria e atlante dei colori: metodo, teoria e strumentazione; controllo qualità e coloranti alimentari, tinture, colore biologico e sostenibile.
2. **Colore e digitale.** Riproduzione, gestione, correzione digitale del colore, elaborazione delle immagini, grafica, fotografia, produzione di film e video, stampa e stampa 3D, visione artificiale, realtà virtuale, imaging multispettrale, visualizzazione dei dati. Imaging del campo luminoso. Fusione multi-sensore. Localizzazione del colore, riconoscimento, imaging HDR, sistemi ADAS.
3. **Colore e illuminazione.** Metamerismo, resa cromatica, adattamento, costanza cromatica, apparenza, illusioni, memoria e percezione del colore, colore in ambienti extra-atmosferici, lighting design, tecnologia dell'illuminazione, comfort visivo.
4. **Colore e fisiologia.** Meccanismi della visione nei loro aspetti sperimentali e teorici, visione e apparenza del colore, deficit, anomalie, aspetti clinici e biologici, sinestesia, salute, benessere.
5. **Colore e psicologia.** Fenomenologia dei colori, armonie cromatiche, colore e forma, aspetti percettivi, emotivi, estetici e diagnostici.
6. **Colore e produzione.** Alimenti e bevande, agricoltura, tessile, materie plastiche, ceramica, vernici, gemmologia, colore nell'industria alimentare.
7. **Colore e restauro.** Archeometria, materiali pittorici, diagnostica e tecniche di conservazione, restauro e valorizzazione dei beni culturali.
8. **Colore e ambiente.** Rappresentazione e disegno, urbanistica, progetto del colore, architettura, design degli interni, paesaggi e orticoltura, colore e sintassi architettonica, identità territoriali, biodiversità.
9. **Colore e design.** Arredo, CMF design, moda, tessuti, texture, cosmetici, food design, museografia.
10. **Colore e cultura.** Arts and Crafts, storia, filosofia, estetica, etnoantropologia, graffiti, geologia, sociologia, lessicologia, semantica, antropologia della visione, patrimonio e cultura del cibo, denominazione dei colori.
11. **Colore e educazione.** Pedagogia, didattica del colore, educazione estetica, educazione artistica.
12. **Colore e Comunicazione/Marketing.** Grafica, comunicazione, packaging, lettering, visibilità, pubblicità.
13. **SESSIONE SPECIALE: Colore per la bellezza, cosmetica e acconciatura.** La bellezza è un argomento ampio studiato nell'ambito dell'estetica, della cultura, della psicologia sociale e della sociologia. La scienza e tecnologia cosmetica mirano alla bellezza ed è sono parte fondamentale nella nostra società.

TOPIC OF INTERES

1. **Color and Measurement/Instrumentation.** Colorimetry, photometry and color atlas: method, theory and instrumentation; quality control and food coloring, dyes, organic and sustainable color.
2. **Color and Digital.** Reproduction, management, digital color correction, image processing, graphics, photography, film and video production, printmaking and 3D print, artificial vision, virtual reality, multispectral imaging, data visualization. Light field imaging. Multi-sensor fusion. Color localization, recognition, HDR imaging, ADAS systems.
3. **Color and Lighting.** Metamerism, color rendering, adaptation, color constancy, appearance, illusions, color memory and perception, color in extra-atmospheric environments, lighting design, lighting technologies, visual comfort.
4. **Color and Physiology.** Mechanisms of vision in their experimental and theoretical aspects, color vision and color appearance, deficiencies, abnormalities, clinical and biological aspects, synesthesia, health, well-being.
5. **Color and Psychology.** Phenomenology of colors, color harmonies, color & form, perceptive, emotional, aesthetic and diagnostic aspects.
6. **Color and Production.** Food and beverages, agriculture, textiles, plastic materials, ceramics, paints, gemology, color in the food industry.
7. **Color and Restoration.** Archaeometry, painting materials, diagnostics and techniques of conservation, restoration and enhancement of cultural heritage.
8. **Color and Environment.** Representation and drawing, urban planning, project of color, architecture, interior design, landscapes & horticulture, color and architectural syntax, territorial identities, biodiversity.
9. **Color and Design.** Furniture, CMF design, fashion, textiles, textures, cosmetics, food design, museography.
10. **Color and Culture.** Arts and crafts, history, philosophy, aesthetics, ethno-anthropology, graffiti, geology, sociology, lexicology, semantics, anthropology of vision, food culture and heritage, color naming.
11. **Color and Education.** Pedagogy, didactics of color, aesthetic education, artistic education.
12. **Color and Communication/Marketing.** Graphics, communication, packaging, lettering, exposure, advertising.
13. **SPECIAL SESSION: Color for beauty, cosmetic and hairstyle.** Beauty is a wide topic studied as part of aesthetics, culture, social psychology and sociology. Cosmetic science and technology aim at beauty and is a key part in our society.

SESSIONE ORALE 2 (ITA)

Temi di interesse: 1, 7, 8, 10, 11, 12

(AULA TORALDO - CHAIR: FRANCESCA VALAN)

14:00 Paper n° 13

Filippo Cherubini, *Andrea Casini, Costanza Cucci, Marcello Piccolo, Lorenzo Stefani and Maurizio De Vita*
Applicazione di camera iperspettrale per misure spettroscopiche e colorimetriche su superfici policrome in esterno con luce naturale

14:15 Paper n° 86

Giovanna Panarese, *René Bozzella*
La salvaguardia della testimonianza documentale, l'evoluzione delle tecniche di coloritura e la modellazione del cavo urbano nel trattamento delle facciate sull'antica via Magistrale in Benevento.

14:30 Paper n° 9

Thomas Bisiani
Architettura, il colore della grande dimensione tra ritmo e paesaggio.

14:45 Paper n° 80

Alessandro Spennato
Emotional Color Design

15:00 Paper n° 84

Rossella Menegazzo
I colori del Giappone: gradazioni, accostamenti, sovrapposizioni.

15:15 Paper n° 6

Andrea Maffia, Liliana Silva and Alessandro Rizzi
Problemi aperti relativi all'uso dei colori nella didattica della matematica.

15:30 Paper n° 74

Marcello Scalzo
I manifesti di Leonetto Cappiello e Jean d'Ylen: il colore diventa protagonista.

15:45 Paper n° 27 (short presentation)

Giorgia De Toni, *Elena Pedrotti and Sotirios Papadopoulos*
IL COLORE DEL VASTU – Progettazione di un appartamento in India

ORAL SESSION 3 (ENG)

Topic of interest: 8

(AULA FERMI - CHAIR: ALICE PLUTINO)

14:00 Paper n° 10

Vittoria Umani
Colors in Architecture: matter and communication tool

14:15 Paper n° 41

Luca Martelli, *Laura Carnevali and Fabio Lanfranchi*
Eidomatic experimentations on the alteration of spatial perception using colours

14:30 Paper n° 49

Ana Sutlovic, *Martinia Glogar and Vedrana Gašpić*
Felting wool dyed with natural dyes

14:45 Paper n° 56

Margarida Gamito and Fernando Moreira da Silva
UrbanCroma, Chromatic Methodology, the results of a post-Doctoral research

15:00 Paper n° 65

Siren Elise Wilhelmsen
Plants out of place? A design-driven investigation of colour and material possibilities within a group of "invasive alien plant species" in a Norwegian context

15:15 Paper n° 66

Kine Angelo and Alex Booker
Colour Composition and Visual Tectonics in Facades; Adapting Colour Teaching to Current Architectural Practice

15:30 Paper n° 77

Mette L'Orange and Bent Erik X Myrvoll
The Face of Molde High Street

15.50 - 16.10 Coffee break

ORAL SESSION 4 (ENG)

Topic of interest: 1, 4

(AULA TORALDO - CHAIR: MARCELLO PICOLLO)

16:10 Paper n° 48

*Marijana Tkalec, **Martina Glogar** and Ana Sutlovic*
Simultaneous contrast in screen printed patterns

16:25 Paper n° 76

Lucia Natali, Alessandro Farini, Elisabetta Baldanzi and John Barbur

Effects of tinted lenses on chromatic sensitivity: changes in colour vision assessed with the CAD test, a preliminary study

16:40 Paper n° 11

*Reiner Eschbach, **Alice Plutino**, Luca Armellin and Alessandro Rizzi*

The gray side of Ishihara bubbles

16:55 Paper n° 25

***Luca Armellin**, Alice Plutino and Alessandro Rizzi*
Online games for colour deficiency data collection

17:10 Paper n° 37

***Marisa Rodriguez-Carmona**, Qais Bastaki and John L Barbur*
Loss of colour and flicker sensitivity in subjects at risk of developing diabetes

17:25 Paper n° 50

***Emily Patterson**, Angelos Kalitzeos, Thomas Kane, Navjit Singh, Mark Pennesi, Alison Hardcastle, Jay Neitz, Maureen Neitz, Michel Michaelides and Joseph Carroll*
Foveal cone structure in patients with blue cone monochromacy

17:40 Paper n° 58

John Barbur, Benjamin Evans, Marisa Rodriguez-Carmona, Elisabetta Baldanzi, Alessandro Farini, Alessia Fava and Regina Comparetto

Changes in the 'conspicuity' of coloured objects caused by coloured lenses and / or pre-receptor filters in the eye

17:55 Paper n° 75

***Benjamin Evans**, Gordon Plant and John Barbur*
The value of colour in clinical diagnostic dilemmas

ORAL SESSION 5 (ENG)

Topic of interest: 3, 7, 10, 11

(AULA FERMI - CHAIR: METTE BYE)

16:10 Paper n° 83

***Costanza Vittoria Fiorini**, Francesca Merli, Elisa Belloni, Buratti Cinzia, Ann M. Anderson and Mary K. Carroll*
Colorimetric analysis and color rendering performance of a small-scale glazing system with thin monolithic aerogel in the interspace.

16:25 Paper n° 46

***Alice Pertica**, Andrea Casini, Costanza Cucci, Marcello Picollo, Lorenzo Stefani and Muriel Vervat*
Colorimetric and spectroscopic analysis of a 19th-century impressionist painting with reflectance hyperspectral imaging.

16:40 Paper n° 68

***Eva Mariasole Angelin** and Marisa Pamplona*
Colors in computer heritage: investigation of "Graphite" and "Indigo" Apple iBooks from the Deutsches Museum

16:55 Paper n° 19

Ollier Xaviere
Serial architecture and geopoetic of the territory, indexed color at the service of enhancing a vernacular heritage.

17:10 Paper n° 85

Albana Muco
Compound words with colour terms in Albanian

17:25 Paper n° 8

Anna Piotti
When a student asks: Was ist Black auf Deutsch?

13 September 2022

SPECIAL ONLINE SESSION 6 (ENG)

Color for beauty, cosmetic and hairstyle

(AULA TORALDO - CHAIR: ALESSANDRO RIZZI)

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| 09:00 | Paper n° 4 |
| Helene De Clermont-Gallerande Mineral pigments in make-up products: classification, formulation, and sensorial properties | |
| 09:15 | Paper n° 17 |
| Simone Liberini, Roberta Suardi, Alessandro Rizzi and Giannantonio Negretti Assessment of base color influence on the chromatic appearance of hair colorants | |
| 09:30 | Paper n° 44 |
| Sumin Park, Boram Kim, Hyun Choi, Moonha Kim and Hyeon-Jeong Suk Hair-dye experience at home using a customer journey map | |
| 09:45 | Paper n° 45 |
| Boram Kim, Juhyun Lee, Sungmi Park and Hyeon-Jeong Suk The method and analysis of color changes of facial skin after a skin makeup | |
| 10:00 | Paper n° 57 |
| Daniele Fusari and Michele Scisci Course of Color Technician in the Cosmetic Industry | |

ONLINE ORAL SESSION 7 (ENG)

Topic of interest: 4, 7, 9

(AULA FERMI - CHAIR: ALESSANDRO FARINI)

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|--|-------------|
| 09:00 | Paper n° 20 |
| Kazim Hilmi Or Can "blue blocking" eye glasses be clinically really effective? | |
| 09:15 | Paper n° 42 |
| Julian Rennie and Alessandro Premier A piece of New Zealand Heritage: Colour Design and Conservation of Grey Lynn Library | |
| 09:30 | Paper n° 64 |
| Leticia Díaz-Mata, Miquel Àngel Herrero-Cortell and M. Antonia Zalbidea-Muñoz Veiling under the magnifying glass: observation of historical pigments by surface microscopy | |
| 09:45 | Paper n° 73 |
| Maurizio Aceto, Angelo Agostino, François Pacha-Miran and Maria Labate Between West and East: a non-invasive study of colourants on Syriac manuscripts | |
| 10:00 | Paper n° 55 |
| Lia Sossini, Romina Santi and Barbara Del Curto The colours of sustainability: how materials cmf design can guide sustainable perceptions and behaviours | |

SHORT SESSION 8 (ENG)

Topic of interest: 4, 7, 8,10, 12

(AULA TORALDO - CHAIR: EVA MARIASOLE ANGELIN)

10:15 Paper n° 47

Megan Vaughan, Nicole Tay, Angelos Kalitzeos, Thomas Kane, Nav Singh, Adrian Zheng, Bishwanath Pal, Ranjan Rajendram, Konstantinos Balaskas, Pilar Martin-Gutierrez, Jose Artiaga, Hanan Nussinovitch, Khadra Adnan, Marisa Rodriguez-Carmona, John Barbur, Michel Michaelides and Emily Patterson

Subclinical changes detected in diabetes mellitus using high resolution retinal imaging and colour vision assessment

10:20 Paper n° 72

Andrea Siniscalco, Alessandro Bortolotti and Maurizio Rossi

Do colour and light affect physiology and psychology in proportional ways?

10:25 Paper n° 12

Dongqing Zhang, Eletta Naldi and Linding Liu

Exploring the colors used in renovation of interior space: a survey on post-use of higher educational classrooms

10:30 Paper n° 79

Mette Bye

Colours of a Northern city in past and present - tradition and current practices of facade colour in the historical architecture of Trondheim, Norway

10:35 Paper n° 22

Marcello Di Gregorio and Martin Bellander

Quantifying colors in culture: color trends in Italy (1960 to 2020) through album covers

10:40 Paper n° 78

Annie-Dominique Denhez

Colours and Daguerreotypes: how to forget colours? «La couleur y est traduite avec tant de vérité qu'on oublie son absence.»

10:45 Paper n° 2

Alessandro Bortolotti, Loreta Cannito, Stefano Anzani and Riccardo Palumbo

The psychological association between product's color and consumer's color preference in marketing

10.50 - 11.10 Coffee break

SESSIONE ORALE ONLINE 9 (ITA)

Temi di interesse: 7, 9, 11, 12

(AULA TORALDO - CHAIR: LUCA MARTELLI)

11:10 Paper n° 63

*Aranzazu Llácer-Peiró, Miquel Àngel Herrero-Cortell, **Maria Antonia Zalbidea-Muñoz** and Laura Fuster-López*
Trasparenze naturali. Velature storiche prodotte con pigmenti-lacca e coloranti organici

11:25 Paper n° 70

Raffaella Trocchianesi

Allestimenti immersivi: quando la sinergia tra suono e colore contribuisce a potenziare l'esperienza di visita

11:40 Paper n° 69

*Berta Martini, **Monica Tombolato** and Paola Pedrini*

Verso un modello di progettazione didattica STEM/STEAM al confine tra Didattica generale e disciplinare

11:55 Paper n° 71

*Alessandra De Nicola and **Franca Zuccoli***

Il colore, un alleato delle sezioni educative museali. Un viaggio tra casi, tecniche e approcci.

12:10 Paper n° 34

Maria Martone** and **Laura Carnevali

Gli effetti 3D nella cartografia di Leonardo da Vinci. Dal chiaroscuro al colore

12:25 Paper n° 16

Anna Marotta

Colore per una fortezza dalla guerra alla Pace

12:40 Paper n° 61 (online short presentation)

Greta Attademo

Luce e colore come elementi narrativi nei Cultural Games

12:45 Paper n° 29 (online short presentation)

Luca Scappin

"Armonizzare il nuovo con l'antico": toni chiari e toni scuri sulle superfici lapidee di restauro a Venezia

12:50 Paper n° 30 (online short presentation)

Luca Scappin

La riproduzione su intonaco del paramento lapideo: variazioni e tecniche tra monocromie e pentacromie

12:55 Paper n° 31 (online short presentation)

Luca Scappin

Trattamenti policromi su pietra tra Medioevo e Rinascimento: una componente, quasi, perduta dell'immagine di Venezia

13.00 - 14.00 Break

ONLINE ORAL SESSION 10 (ENG)

Topic of interest: 1, 3, 10

(AULA FERMI - CHAIR: ALICE PLUTINO)

11:10 Paper n° 39

*Laura Bellia, **Francesca Fragliasso**, **Claudia Graiff**, **Mariagioia Petratretti**, **Antonino Pollio** and **Marianna Potenza***
Evaluation of chromatic alterations due to Ag-functionalized nanocrystalline cellulose on Whatman and Amalfi paper

11:25 Paper n° 21

Kazim Hilmi Or

A possible new method for Forensic Document examination: Plasmonic colors

11:40 Paper n° 32

Birgit Schulz

Twilight | Spatial Experiments

11:55 Paper n° 1

Larissa Noury

Colour Harmony in Design and Architecture: theory, practice, education.

12:10 Paper n° 3

Kévin Bideaux

The "Pink Mask Affair": Why did Italian police refuse to wear pink FFP2 masks?

12:25 Paper n° 5

Hannah Matangos

Grey Zones: On Photography & Progress

12:40 Paper n° 7

Nicholas Lourantos

Reversal film transparencies and their colours: examining the medium of an era

ORAL SESSION 11 (ENG)

Topic of interest: 9, 12

(AULA TORALDO - CHAIR: REINER ESCHBACH)

14:00 Paper n° 24

Claudio Germak and Stefano Gabbatore

Fly in color. A chromatic "model" for the cabin of a commercial aircraft.

14:15 Paper n° 28

Cristina Caramelo Gomes and Margarida Gamito

Chromatic identity of the urban tile panels: the scenario of Lisbon subway stations.

14:30 Paper n° 51

Agata Kwiatkowska-Lubańska

Research on Colour in Industrial Design: Brief History, Overview of Methods and Stories of Successful Products

14:45 Paper n° 67

Valentina Cognini and Federica Vacca

Chromatic Vocabulary: the colour design research according to Gianfranco Ferré

15:00 Paper n° 40

Jada Schumacher

Go Somewhere Glossies: Experiential Color in Magazine Design

15:15 - 15:35 Coffee break

ONLINE ORAL SESSION 12 (ENG)

Topic of interest: 2, 3, 4, 6, 8, 9, 10, 11, 12

(AULA TORALDO - CHAIR: MARCELLO PICOLLO)

15:35 Paper n° 43

Rui Pessoa Vaz de Figueiredo Vasques, António José Macedo Coutinho da Cruz Rodrigues and Diamantino Abreu
A New Paradigm for the Definition and Universe of Static Colors and Dynamic Colors

15:50 Paper n° 62 (online short presentation)

Gianluca Guarini and Maurizio Rossi

Color consistency in BIM systems and in the visualization of the project in Real Time - An overview of possible solutions

15:55 Paper n° 59 (online short presentation)

Maurizio Rossi

The open issue of color management in circadian interior design between the practice of lighting and color design

16:00 Paper n° 60 (online short presentation)

Francesca Valan and Chiara Scopa

A leap in the dark! How understanding horses' color perception improves their performance and welfare in show jumping

16:05 Paper n° 53 (online short presentation)

Katarina Krstović, Martinia Ira Glogar, Veronika Lovreško and Vesna Marija Potočić Matković

Colour fading of aged knitted materials for swimsuits

16:10 Paper n° 14 (online short presentation)

Lorrain Caumon, Georges Zissis and Céline Caumon

Experience of place: colour and lighting design methods in the process of inclusive housing projects.

16:15 Paper n° 52 (online short presentation)

Rebecka Pires

Color Communication in Home Interior Design: An Analysis of Architectural Digest Covers from the 1980s, 1990s, and 2020s.

16:20 Paper n° 54 (online short presentation)

Ahmed Motie Daiche, Azzedine Belakehal, Safa Daich and Mohamed Yacine Saadi

Color and light in the photography of contemporary architecture

16:25 Paper n° 33 (online short presentation)

Birgit Schulz, Judith Augustinovic and Nayari Castillo-Rutz
Book of Patterns - an ongoing project

16:30 Paper n° 15 (online short presentation)

Svitlana Pryshchenko

Cultural-aesthetic parameters of colour in advertising communication

16:45 Chiusura dei lavori e saluti finali
Closing of the proceedings and final greetings