THE COLOUR GROUP (GREAT BRITAIN) REPORT OF THE COMMITTEE FOR THE YEAR ENDED 31 DECEMBER 2015

Presented by the Honorary Secretary (Elza Tantcheva-Burdge) at the 55th Annual General Meeting held at City University, London, on 4th May 2016.

COMMITTEE MEMBERSHIP

On 31 December 2014 the Committee of the Colour Group (Great Britain) consisted of the following:

Chairman: Dr Valérie Bonnardel
Vice-Chairman: Dr Carinna Parraman
Secretary: Dr Elza Tantcheva-Burdge

Treasurer: Dr Vien Cheung

Membership: Mr Dimitris Mylonas (for one year)

Newsletter: Mr Andrew Hanson
Awards Officer: Dr Hannah Smithson
Member: Dr Lynne Bartlett
Member: Dr Caterina Ripamonti
Member: Mr Philip O'Reilly
Member: Ms Marie Claude Cousin
Member: Ms Susan Bellamy

Member: Dr Marisa Rodriguez-Carmona Co-opted Member: Prof John Mellerio (webmaster)

Co-opted Member: Prof John Melle Co-opted Member: Ms Janet Best

After the 54th Annual General Meeting of the Colour Group (Great Britain), held on 6th May 2015 at City University, the new Committee consisted of the following:

Chairman: Dr Carinna Parraman
Vice-Chairman: Dr Valérie Bonnardel
Secretary: Dr Elza Tantcheva-Burdge

Treasurer: Dr Vien Cheung Membership: Mr Danny Garside Mr Andrew Hanson PC Officer: Awards Officer: Dr Hannah Smithson Member: Prof Marina Bloj Member: Dr Caterina Ripamonti Ms Karen Haller Member: Member: Ms Shirine Osseiran Member: Ms Susan Bellamy

Member: Dr Marisa Rodriguez-Carmona Co-opted Member: Prof John Mellerio (webmaster)

Co-opted Member: Mr Philip O'Reilly

Co-opted Member: Ms Marie Claude Cousin

Co-opted Member: Ms Janet Best

MEMBERSHIP

At 31st December 2015 there were:

Ordinary Members: 180
Life Members: 42
Honorary Members: 10
Patron Members: 5
Cooperating Societies: 8

At the AGM two Life Members, Mr Ralph Brocklebank and Prof Mellerio, were presented with Honorary Membership for their exceptional service to the Colour Group (GB) over many years.

The total of individual members was thus 232 as against 319 in 2014, but was still above the average

for the past five years which is 223 members. Despite the decrease of 27.3% when comparing 2014 and 2015, the trend over a five-year period has been a significant increase. Compared to 2011, when there were 155 members, the 2015 membership of 232 indicates overall growth since then of 49.7%.

The Colour Group (GB) ('the Group') cooperates in organising meetings and sponsoring events in the UK and abroad with a number of societies that have similar interests and aims. Informally we call these Cooperating Societies and for the current year these were: Centre Français de la Couleur; CIE, Deutscher Verband Farbe EV; Gruppo del Colore; Groupe Français de l'Imagerie Numerique Couleur; Hungarian National Colour Committee; Society of Dyers and Colourists and the Wool Research Association.

ATTENDANCE

The numbers of people attending public meeting of the Group are shown in the table below:

DATE	MEMBERS	VISITORS	TOTAL
07 January	36	3	39
04 February	11	89	100
21 March	19	68	87
01 April	15	26	41
06 May	43	9	52
20 May	18	1	19
03 June	27	n/a	27
19 June	4	46	50
22 June	n/a	n/a	n/a
23 August	n/a	n/a	n/a
10-11 September	n/a	n/a	n/a
07 October	25	3	28
04 November	20	2	22
02 December	4	21	25
TOTALS 2015	222	268	490
TOTALS 2014	243	511	754
Averages:	20.2 (24.3)	24.4 (51.1)	44.5 (75.4)

In 2015, the overall recorded participation in the Group's events was **490** compared to **754** in 2014 which is a decrease of 35%, but it was still above the average of **450** participants in the period 2011-2015.

The main decrease in the totals was attributable to the 47.5% decrease in visitor numbers compared to 2014 (268 vs 511), but the average for 2015 was still above that for the past five years, namely 225. The overall increase above that average is 19.1%.

When compared by category the total participation by members during 2015 was **222**. This number represents a decrease of 8.6% year on year (243 vs 222), but the participation of the members was well above the average of 164 members for the five-year period. This represents an increase of 35.3%.

These statistics need to be considered in the context of the fact that during 2015 three co-organised meetings took place for which the number of participants was not recorded; a) 22nd June: Professor Robert Fletcher 90th anniversary celebration, meeting co-organised with the City University b) 23rd August: European Conference on Visual Perception, co-organised with the University of Liverpool c) 10th-11th September, co-organised with the Gruppo del Colore.

The overall increase in the number of the meetings in 2015, fourteen, compared to eleven in 2014, reflects the fact that 2015 marked the 75th Anniversary of the Group, which was celebrated at the AGM.

MEETING DETAILS

Wednesday 7 January 2015

COLOUR VISION MEETING, PALMER LECTURE AND CRS SPONSORED LECTURE Institute of Ophthalmology, Bath Street, London EC1V 9EL. Organisers: Galina Paramei and Sophie Wuerger.

Anya Hurlbert, University of Newcastle. Palmer Lecture: The limits of colour constancy.

Valérie Bonnardel, University of Winchester. *Colour symbolism in young adult Indian population.*

Dimitris Mylonas, Queen Mary University of London. *The role of psychological primaries in cognitive colour spaces: a cross-cultural colour naming study.*

Galina Paramei, Liverpool Hope University. *Italian blues: a challenge to the universal basic colour term inventory.*

Gloria Menegaz, University of Verona, Italy. Is colour naming useful in image processing?

Fred Kingdom, McGill University, Montreal, Canada. **CRS Lecture**: *New adventures with dichoptic colours*.

Kathy Mullen, McGill University, Montreal, Canada. *fMRI adaptation to red-green and achromatic contrast in the human visual cortex: evidence for colour and luminance selectivity.*

Alexander Logvinenko, Glasgow Caledonian University. What is colour for?

Wednesday 4 February 2015_

COLOUR IN FILM, City University London, EC1V 0HB. Organiser: Elza Tantcheva-Burdge

Kieron Webb, BFI. Colour and restoration of motion picture film.

Ulrich Ruedel, BFI. Towards a science of colour film restoration: from chemistry to visuals.

Bryony Dixon, BFI. Colour me eclectic: the challenges and opportunities of programming early colour film.

Guy Edmonds, University of Exeter. *Ballet Mécanique - from BW to (hand) colour, a restoration history.*

Mike Pointer, University of Leeds. Public Lecture: The Practical Measurement of Colour.

Saturday 21 March 2015

INTERNATIONAL COLOUR DAY - *COLOUR IN CLAPHAM* – public event open to all Omnibus, Clapham, London SW4 0QW. Organisers: Andrew Hanson and Elza Tantcheva-Burdge.

Elza Tantcheva-Burdge (Hon Secretary) and **Carinna Parraman** (Vice-Chairman), CG(GB) and **Marie McCarthy**, Omnibus. *Introductions*

Lectures and Demonstrations

Andrew Hanson, National Physical Laboratory, UK:

- What is Light? What is Colour? the electromagnetic spectrum.
- Colour as data: thermal imaging.
- Invisible colour: microwave energy.

Nicoline Kinch, Kolormondo, Sweden. Colour Made Simple.

Marie-Claude Cousin, Textile Artist. Colours to dye for...the canvas.

Janet Best, Natfic, UK. Fashion Colour Trends – The Mystery, Magic & Science.

Lynne Bartlett, Jeweller. Colours in Jewellery.

Dimitris Mylonas, Colour Group. *Colournamer – a synthetic observer for colour communication.*

Art Exhibition

POP-UP ART SHOW

Curator: Susan Bellamy, Artist.

Wednesday 1 April 2015

THE TURNER LECTURE and TURNER MEDAL PRESENTATION,

The Great Hall, City University London, EC1V 0HB. Organisers: Valérie Bonnardel and Philip O'Reilly

Four Films about the Life and Work of Carlos Cruz-Diez

Carlos Cruz-Diez, Life in Color, Oscar Lucien, Cine Archivo Bolívar Films C.A., Paris, Caracas, 2006.

Living in Colors, Ana Luisa Silva Bruzual, The International Film School of Paris (EICAR), Paris, 2010.

Power Play, Patek Philippe S.A., The international Magazine, Decembre 2013.

Que tan amarillo es el azul?, Jane Hofileña, Arte en tus Manos, Cl@se TV, Caracas, 2006.

Discussion with Carlos Cruz-Diez

Live video broadcast from Panama

Presentation of the Turner Medal

This was made to the President of the Cruz-Diez Foundation, the artist's daughter **Adriana Cruz** in lieu of **Carlos Cruz-Diez**

Wednesday 6 May 2015

AGM, CHAÍRMAN'S RETROSPECTIVE and CELEBRATION OF THE 75th ANNIVERSARY OF THE COLOUR GROUP (GB), City University London, EC1V 0HB.

Organisers: Valérie Bonnardel, Elza Tantcheva-Burdge.

ANNUAL GENERAL MEETING

Ralph Brocklebank, Past Chairman of the Colour Group (GB),1971-1973. Presentation of Honorary Membership. *Citation by John Hutchings*.

John Mellerio, Past Honorary Secretary of the Colour Group (GB), 2006-2013. Presentation of Honorary Membership. *Citations by John Marshall and Andrew Stockman*.

Celebration of the 75th Anniversary of the Colour Group (GB)

Talks from Chairmen of the Colour Group (GB), past, retiring and incoming

Patrick Forsyth, both, past Chairman and Treasurer of the Colour Group (GB), 1993-1999. *Past, present and future of the Colour Group*

Valérie Bonnardel, retiring Chairman of the Colour Group (GB), 2013-2015. **Valedictory Lecture**: *A brief history of Comb-Filtered Spectra*.

Carinna Parraman, incoming Chairman of the Colour Group (GB), 2015-2017. *The future is bright.*

Wednesday 20 May 2015

WORKSHOP-DEMOSTRATION WITH DAVID HORNUNG, William Road Gallery, 6-7 William Road, London NW1 3ER. Organiser: Susan Bellamy.

The event consisted of a talk followed by a workshop.

Wednesday 3 June 2015

THE EY EXHIBITION: SONIA DELAUNAY and A PRIVATE LECTURE, Starr Auditorium, Tate Modern, London. Organiser: Susan Bellamy.

Private lecture for Group members only and a chance to tour the exhibition.

Wednesday 19 June 2015

LIGHT AND COLOUR IN PARIS, in association with Centre Français de la Couleur. Organiser: Valérie Bonnardel.

Annie Mollard (Chairman of Desfour CFC), Patrick Callet, CAOR-Mines-ParisTech and Valerie Bonnardel (Vice-Chairman of the Colour Group (GB)). Bienvenue and Welcome.

Eloïse Gaillou, Museum of Mineralogy, Mines-Paristech Vice-Chairman. *Diamonds and gems' colours*.

Philippe Porral, Mines–Paristech. *Sky light: spectral and polarised characterizations thanks to a new device.*

Etienne Sandré Chardonnal, Société Eclat-Digital. The extended possibilities of spectral simulation with Ocean software.

Milène Guermont, PHARES, From concrete to light.

Maelys Jusseaux. Colour virtual restitution: the case of Saint Margaret medallion.

Laurence Pauliac, Centre Français de la Couleur. Light and medieval polychromy.

Mirette Hanna & Ilona Gault, concert pianists. *Chromatic Fantasia – piano concert.* Programme included works of: Bach, Schumman, Liszt, Debussy, Ravel, Rahim, Bartok, Herrera and Schubert.

Patrick Callet (Vice-Chairman) and **Laurence Pauliac**, Centre Français de la Couleur. *Medieval polychromy: sunset at Notre Dame de Paris*. Observation tour.

Monday 22 June 2015

PROFESSOR ROBERT FLETCHER: CELEBRATION OF HIS 90[™] BIRTHDAY, City University London, EC1V 0HB. Organiser: Sue Rees.

Prof. Fletcher was Chairman of the Colour Group (GB), 1987-1989.

Prof. Chris Hull, Head of Division of Optometry and Visual Science and **Dr. Janet Voke**, daughter of Prof. Fletcher. *Welcome*.

ON CONTRIBUTION TO OPTOMETRY AND OPTOMETRIC EDUCATION IN THE UK

Dr. Simon Barnard, Lecturer in Clinical Optometry City University 1979 - 1999, Associate Professor Department of Optometry and Visual Science Hadassah University Jerusalem.

ON CONTRIBUTION TO CONTACT LENS RESEARCH AND EDUCATION

Richard Pearson, Senior Lecturer at City University

Ms. Judith Morris, Senior Lecturer Contact Lens Education City University, Senior Optometrist Institute of Optometry London, President for Europe, Africa and Middle East Association of Contact Lens Educators, Past president of College of Optometrists.

ON CONTRIBUTION TO OPTOMETRY AND OPTOMETRIC EDUCATION IN NORWAY

Prof. Gunnar Horgen, former Head of and Pro-Decan of Department of Optometry and Visual Science, Buskerud University College, Kongsberg, Norway

Dr. Magne Helland, Associate Professor, Head of Department of Optometry and Visual Science, Buskerud University College Kongsberg, Norway

Dr. Kiell Inge Daae, Physicist, former Head of Department of Optometry and Visual Science

Buskerud University College Kongsberg, Norway **Dr. Staale J. Hultgren**, Ophthalmologist, Oslo, Norway

ON CONTRIBUTION TO OPTOMETRY AND OPTOMETRIC EDUCATION IN ITALY

Prof. Luigi Lupelli, Professor of Contact Lenses, University of Roma Tre, Rome, Italy. SHORT PRESENTATIONS

Prof. John Barbur, Professor of Optics and Visual Science, Head of the Colour Research Laboratory and Applied Vision Research Centre City University, Representative of the Applied Vision Association, The Colour Group (GB) and the International Colour Vision Society. *On the 74 year association of Prof. Fletcher with the City University.*

Ms. Helen Perry, Colleague. On Prof. Fletcher's assistance with her optometric work at the NOOR Eye Hospital, Kabul, Afghanistan.

Ms. Zuzana Freidin, Colleague from Slovakia.

Dr. Yoon Phin Kon, Colleague from Malaysia.

The College of Optometry and the Worshipful Company of Spectacle Makers.

Saturday 23 August to Thursday 27 August 2015

EUROPEAN CONFERENCE ON VISUAL PERCEPTION 2015, University of Liverpool.

The Group sponsored the session on Thursday 27 August on Colour Constancy. Chair: Alexander Logvinenko.

Alexander Logvinenko, Glasgow Caledonian University. What we mean by colour constancy and how to study it.

David Brainard, University of Pennsylvania, USA. Confessions of a Constancy Index Junkie.

David Foster, University of Manchester. Colour constancy and the challenge of environmental change for perceived surface colour.

Karl Gegenfurtner, Marina Bloj and David Weiss, Giessen University, Giessen, Germany, University of Bradford and Justus-Liebig-University, Giessen, Germany. *Real color constancy.*

Anya Hurlbert, Bradley Pearce and Stacey Aston, Newcastle University. *All illuminations are not created equal: the limits of colour constancy.*

Adam Reeves, Northeastern University, Boston, Massachusetts, USA. *Functional colour constancy.*

Laurence Maloney, New York University. Questions in Surface Colour Perception.

Qasim Zaidi, New York University. *Identifying surface colours across illumination conditions:* neural adaptation, similarity judgments and prior beliefs.

Thursday & Friday, 10 - 11 September 2015

XI CONFERENZA DEL COLORE, Politecnico di Milano, Italy. Joint meeting with the Colour Group (GB), Gruppo del Colore, Centre Français de la Couleur and Groupe Français de l'Imagerie Numérique Couleur.

COLOUR AND MEASUREMENT / PRODUCTION. Colorimetry, photometry and colour atlas: method, theory and instrumentation.

COLOUR AND DIGITAL. Reproduction, management, digital colour correction, image processing, graphics, photography, printmaking, video production, artificial vision, virtual reality.

COLOUR AND LIGHTING. Metamerism, colour rendering, adaptation, colour constancy, appearance, illusions, memory colour, colour in extra-atmospheric environments, lighting design.

COLOUR AND PHYSIOLOGY. Mechanisms of vision in their experimental and theoretical aspects, deficiencies, abnormalities, clinical and biological aspects.

COLOUR AND PSYCHOLOGY. Phenomenology of colour, perceptive, emotional and diagnostic aspects.

COLOUR AND PRODUCTS. Foods and beverages, textiles, plastics, ceramics, paints, gemmology.

COLOUR AND RESTORATION. Archaeometry, painting, materials, diagnostics and techniques of conservation, restoration and enhancement of cultural heritage, coloring and architectural, syntax.

COLOUR AND BUILT ENVIRONMENT. Urban planning, plans of colour, architecture, territorial identities.

COLOUR AND DESIGN. Furniture, design, fashion, graphics, communication, packaging, lettering, cosmetics.

COLOUR AND CULTURE. Art, history, philosophy, aesthetics, representation and design, ethno-anthropology, geology, sociology, lexicology, semantics, anthropology of vision.

COLOUR AND EDUCATION. Pedagogy, colour's didactics, aesthetic education.

Wednesday 07 October 2017

DON PAVEY TRIBUTE MEETING, City University London, EC1V 0HB. Organiser: Elza Tantcheva-Burdge.

Roy Osborne, Artist and Scholar. Aspects of the Life and Work of Don Pavey (1922-2015) – His Multifarious Interests.

Angela Wright, Colour Affects. Colour Harmony - A New Approach?

Neil Parkinson, Royal College of Art Colour Reference Library, The Polychromatic Polymath

Wednesday 12 November 2014

AWARDS MEETING: WDW Awards and Supporting Speakers City University, London, EC1V 0HB. Organiser: Hannah Smithson

Matthew Cranwell, Newcastle University. W D WRIGHT award: Dissociation of chromatic discrimination ability in developmental disorders: Autism Spectrum Disorder and Williams Syndrome.

Mengmeng Wang, University of Leeds, W D WRIGHT award: Investigation of uncertainty of skin colour measurements.

Joseph Hickey, City University, W D WRIGHT award: Chromatic sensitivity and visual search in air traffic control.

John Maule, University of Sussex, *W D WRIGHT award: Accurate estimation of the mean hue of rapidly presented multi-hue ensembles.*

Vien Cheung, University of Leeds. Workflows in digital colour systems.

Marina Bloj, University of Bradford. What the #the dress taught us.

Thursday 19 November 2015

THE SCIENCE OF COLOUR, The Core, Science Central, Bath Lane, Newcastle upon Tyne, NE4 5TF. Organiser: Susan Bellamy.

This event was part of the 2015 Northern Design Festival.

Gabrielle Jordan, Newcastle University. Tetrachromatic colour vision.

Valérie Bonnardel, University of Winchester. Secret language of colour.

Carinna Parraman, UWE, Bristol. Introduction to 2.5 Printing.

Danny Garside, UCL. How do we measure visual pleasantness?

Wednesday 2 December 2015

COLOUR IN PRINT, UWE, Centre for Fine Print Research, Bristol. Organiser: Carinna Parraman.

Paul O'Dowd, Creative Approach to 3D Print for Novel Methods of Fabrication.

Peter Walters, Bioinspired 3D printing

Carinna Parraman, New developments in 3D and 2.5D printing.

COLOUR GROUP AWARDS

In accordance with the Committee decision, from 2014, to be eligible for an award by the Group, the applicant must be a fully paid-up member of the Group.

There were eight applications in total for the W R Wright and Palmer Awards 2015. The Committee reviewed all applications and unanimously agreed three WRW awards, of £500 each, to the following applicants:

Matthew Cranwell, Newcastle University. *Dissociation of chromatic discrimination ability in developmental disorders: Autism Spectrum Disorder and Williams Syndrome* - to be presented at Vision Sciences Society 14th Annual Meeting, Florida, USA, 16-21 May.

John Maule, University of Sussex. *Accurate estimation of the mean hue of rapidly presented multi-hue ensembles* - to be presented at ICVS, Sendai, Japan, 3-7 July.

Joseph Hickey, City University. *Chromatic sensitivity and visual search in air traffic control* - to be presented at ICVS, Sendai, Japan, 3-7 July.

A further two WRW awards, of £250 each, were approved for the following applicants:

Mengmeng Wang, University of Leeds. *Investigation of uncertainty of skin colour measurements*- to be presented at CIE, Manchester, UK, 29 June – 3 July.

Vanessa Volpe, Callistherapy Foundation, *Colour and emotional well-being in the healthcare environment* - to be presented at XI Colour Conference of the ICG, Milan, Italy, 10-11 September. However, the award was not presented as the applicant withdrew shortly after.

The Palmer award of £500 went to **Keith Findlater**, University of Leeds, for *Colour Management for High Dynamic Range Imaging* - to be presented at AIC2015 Interim Meeting, Tokyo, Japan, 19-22 May.

There were no specific applications for the CRS award of £500, but the Committee decided that the award could be made to one of the best applicants for the Group's awards. The award went to **Tushar Chauhan**, University of Liverpool, for *Estimating Discrimination Ellipsoids for Skin Images* - to be presented at Vision Sciences Society 14th Annual Meeting, Florida, USA, 16-21 May.

FINANCIAL REVIEW

Investment and reserves policy

The Directors consider that the overall investment policy meets the objectives of the charity, balancing current income with expenditure to achieve the Group's aims. The investment policy is to achieve a balanced return between income and capital growth from a low level of risk. At present our investments are shared between COIF Charity Funds and a relatively high yield deposit account. This situation has been reviewed and professional advice is being sought to enable the Directors' recommendations to be put into place, so the Directors recommend the following:-

- 1. The Group will seek to maintain a financial reserve of £80,000 which will be invested to maximise any return but at a risk level judged suitable for a charity reserve; any return will be classified as income and shown appropriately in the accounts.
- 2. The remaining funds will be split into:
 - a) a float of some £5,000 or so to be kept as cash at bank in a current account and of some £2,000 or so in a PayPal account for the convenience of international transfers;
 and
 - b) the remaining part to be placed in short term investments judged suitable for charities and to be accessible for recurring expenses.

3. The sums allocated to the Awards will be reviewed and agreed annually before the Awards are publicised.

This policy will allow:

- Provision of income for continuing charitable operation and any associated administrative costs
- 2. Provision for unforeseen contingency costs.
- 3. Compliance with UK charity and accounting law.

The Reserves Policy will be reviewed annually in conjunction with other policies. The Colour Group now has more funds than ever before due to legacies. The trustees' policy is to maintain the level of free reserves to ensure continued financial stability, allowing The Colour Group to meet its aims and objectives as they evolve in the future.

FUTURE PLANS

The Group will be continuing with its policy and strategy in undertaking meetings in support of and in collaboration with other organisations for public dissemination of knowledge in all aspects of colour. These are open to members and non-members of the Colour Group.

Initiatives planned for the next five years include:

- 1. Continuing on an annual basis to advertise and award travel grants to graduate and post-graduate research students to facilitate their attendance at international conferences.
- 2. Encouraging and producing occasional publications.

All these plans and initiatives are in place to ensure that the Group is fulfilling its role as an educational charity, as is the provision of grants.

ACKNOWLEDGEMENTS

The committee would like to thank City University, National Physical Laboratory, UCL Institute of Ophthalmology, Omnibus in Clapham, Cruz-Diez Foundation, Creative Space Management Newcastle, The Centre for Fine Print Research University of the West of England, Musée de Minérologie Paris, Tate Modern and William Road Gallery for their support during the year.