

## AIC Colour Congress 2009 in Sydney, Australia

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### Summary

AIC congresses cover all academic and professional fields of colour research from the arts, through to design and philosophy, and the sciences. The papers which are included in this special issue of *Colour: Design & Creativity* reflect the multi-disciplinary theme which was created at the AIC Colour Congress 2009 with specific reference to colour in art, architecture, design, education and the environment.

### AIC Congress

The 11th Congress of the Association Internationale de la Couleur (AIC) was held in Sydney, Australia, between 27 September and 2 October 2009 at the University of New South Wales. Over 330 delegates from a total of 34 countries attended the congress of which more than 200 travelled the long distance from overseas. Some 135 oral and 80 poster papers were presented covering a diverse range of colour research and applications topics. For the first time at an AIC congress, authors were given the opportunity to have their papers peer-reviewed prior to the event; these papers are identified in the AIC 2009 Congress Proceedings (available for purchase from [www.aic2009.org](http://www.aic2009.org)).

Delegates to the congress were welcomed at the opening event by haunting Aboriginal music. The traditional 'Cleansing Ceremony' was performed by the Diramu Dancers, Glen Timerri and Walangari Karntawarra. The traditional owners of the land, the Aboriginal peoples of Australia, were acknowledged with particular reference to the Wallangang Tribe whose land converges into Sydney Harbour. A feature of the congress was a traditional sand painting created by Walangari Karntawarra with the assistance of congress delegates.

The keynote address, 'Why are animals colourful? Sex and Violence, seeing and Signals', was given by Professor Justin Marshall, head of the Visual Ecology Laboratory of the Sensory Neurobiology Group at the School of Biomedical Sciences, University of Queensland.

The organising committee's goal for the 11th AIC congress was to create an environment for the meeting of minds across all disciplines of colour research. AIC congresses traditionally cover a wide range of topics. The topic headings for the Sydney congress were:

- Colour in nature
- Colour physics – light sources, optics

- Colour chemistry – colorants, dyestuffs and pigments
- Colour vision – physiology, neurology
- Colour measurement
- Applications of colour science – food, medicine, forensics
- Colour imaging – reproduction, management, vision models
- Colour psychology – perception, emotion
- Colour communication – meanings, semiotics, language
- Colour theory – history, philosophy
- Colour in art, design and the built environment
- Colour in textiles, fashion and cosmetics
- Appearance measurement – surface quality, texture, gloss
- Colour education.

In addition to providing a forum for specialists to share the latest findings in their specific field of colour research, the congress format was designed to promote greater dialogue between people working in different academic disciplines and to provide opportunities for delegates to broaden their understanding of colour. To meet this goal a number of special features were included in the congress programme:

1. Pre-congress workshops
2. Interdisciplinary symposia
3. Topic review papers
4. Invited speakers

### **Pre-congress colour skills workshops**

These sessions were designed to provide an introduction to current issues in colour in art and design:

- Colour: Meaning and Communication, presented by Associate Professor Dianne Smith
- Master Class for Artists and Designers, presented by Professor Lois Swirnof
- Introduction to Colour Psychology and Statistics, presented by Professor Byron Mikellides.

Each of these workshops, which were well supported, ran for two hours.

### **Interdisciplinary symposia**

Two symposia themes were selected, the themes of which were approached from the perspective of the arts, nature and the sciences:

- ‘Good’ and ‘bad’ colours: conservation and reproduction of artworks
  - This symposium illustrated the interdependence of the art and science of colour. Those who restore and conserve artworks need the skills of an artist and the knowledge and insights of an art historian combined with an understanding of the physics and chemistry

of the materials used by artists past and present. Especially they need to know the circumstances which lead to the deterioration of materials and how appearances can change over time. They need to be able to use sophisticated equipment in a process equivalent to forensic science.

- Contributors, brought together to discuss the issues, included: a paintings conservator, Dr Maria Kubik; an imaging specialist, Professor Roy Berns; and an art historian, Dr. John Gage. The symposium was chaired by Dr Paul Green-Armytage.
- Appearance in nature and design: phenomena and measurement
  - Aspects of appearance other than colour, such as interference, texture, gloss and transparency, are of increasing interest to designers with the advent of new and exciting effect pigments. These new materials are challenging the ingenuity of designers in their use and those who devise measuring instruments for their control. The aim of this symposium was to look at the palette of effect colours in nature and to raise awareness of the possibilities and challenges to designers and scientists.
  - Contributors included: a designer, Chalisa Morrison; an industrial engineer, Gabi Kigle-Boeckler; and a cardiologist, Dr Kevin Hellestrand, who has a particular interest in appearance phenomena in the natural world. The symposium was chaired by Nick Harkness

## Review papers

The aim of the review papers was to give delegates an overview of the topics to be addressed during the congress and to introduce the latest developments in understanding and research:

- Colour Vision, presented by Professor Paul Martin
- Colour Technology, presented by Professor Roy Berns
- Applications of Colour in Art and Design, presented by Associate Professor Karin Fridell Anter

AIC Study Groups are an important part of AIC activities and each of the AIC Study Groups was given a session for their group. Each dedicated Study Group Session included a presentation by an invited speaker:

- Study Group on Colour Education (CE), chaired by Berit Bergström: invited speaker, Associate Professor Galen Minah, 'Between knowledge and fairy tales: A methodology for teaching color and design'
- Study Group on Environmental Color Design (ECD), chaired by Verena M. Schindler with co-chair Leonhard Oberascher: invited speaker, Professor Maria João Durão, 'Colour as a pathway of light: Searching the shadow in Luis Barragán'
- Study Group on Visual Illusions and Effects (VIE), chaired by Professor Osvaldo da Pos: invited speaker, Professor Akiyoshi Kitaoka, 'A brief classification of colour illusions'
- Study Group on Color Perception of the Elderly (CPE), chaired Professor Katsunori Okajima: invited speaker, Professor Mitsuo Ikeda, 'A neglected but an important color perception of elderly people'.

## Invited speakers

Maintaining the multi-disciplinary theme for the congress, three speakers were invited to present topics which we believed would be of interest to all delegates:

- Colours of Aboriginal Australia, by Walangari Karntawarra, Aboriginal Australian artist and educator
- History of Japanese Colour View from Traditional Natural Dyeing Methods, by Sachio Yoshioka, a textile dyer and textile historian working in Kyoto, Japan
- The Early History of White's Illusion, by Professor Michael White; presented as the closing keynote address, with additional comments from Professor Osvaldo da Pos, Dr Branka Spehar and Dr Paul Green-Armytage

Roger Bacon the 13th century philosopher aptly described the objectives of the 11th AIC congress when he commented so many years ago:

'I now wish to discuss some principles which belong to optics. If the consideration just mentioned (mathematics) is noble and pleasing the one in hand is far nobler and more pleasing, since we take especial delight in vision, and light and colour have an especial beauty beyond the other things that are brought to our senses.'

Our interest in colour and light continues 800 years on.

## CD&C Special Issue

The Colour Society of Australia and the AIC 2009 congress organising committee very much welcomes the opportunity of sharing a selection of papers from the 11th AIC Congress with the Society of Dyers and Colourists in this special issue of the journal *Colour: Design & Creativity*. Papers were selected from each of the sessions to give an overview of the topics covered at the congress, with the full content listing given here:

- A Brief Classification of Colour Illusion, *by Akiyoshi Kitaoka* (review article)
- History of Japanese Colour, *by Sachio Yoshioka* (gallery)
- Colours of Aboriginal Australia, *by Walangari Karntawarra* (gallery)
- Preserving the Painted Image: The Art and Science of Conservation, *by Maria Kubik*
- Using Cellarium Software as a Creative Tool, *by Linda Huber*
- Between Glare and Abysmal Dark, *by Juliet Albany*
- Chromatic Harmony in Architecture and the Work of Artacho Jurado, *by João C O Cesar*
- Colour as a Pathway of Light: Searching the Shadow in Luis Barragan, *by Maria J Durão*
- Glazed Tiles as an Improving Element for the Environmental Quality of Urban Landscape, *by Carla Lobo*
- The Early History of White's Illusion, *by Michael White*
- Why are Animals Colourful? Sex and Violence, Seeing and Signals, *by Justin Marshall*
- Shifting Interpretations of Interiors and Buildings: The Impact of Colour, *by Dianne Smith and Nur Demirbilek*

- Measurement of Design Impact, *by John Hutchings and M Ronnier Luo*
- A Colour Alphabet and the Limits of Colour Coding, *by Paul Green-Armytage*
- How Colour Rhetoric is Used to Persuade, *by José Luis Caivano and Mabel Amanda López.*