



CIE Division 1
Vision and Colour



ISO Technical Committee 130
Graphic Technology

Workshop on Colorimetry, Graphic Arts and Colour Management

4 July 2013, University of Leeds, UK



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- Objective:
 - To enable issues around CIE colorimetry that could affect the communication of colour information in graphics arts colour reproduction to be discussed.

Discussed Items

- Colour difference metrics: CIEDE2000
 - Standard CIE S 014/E:2013, Colorimetry - Part 6: CIEDE2000 Colour-Difference Formula
 - Implementation, Neutral regions, Magnitudes,
- Colour rendering of white light sources
- Real colour gamuts
- Measurement of fluorescence
- Recent work on blackness

- 08:55 Opening Session
- 09:00 Concerns and current work:
 - ISO TC130 – Danny Rich
 - ICC – Phil Green
 - CIE D1 – Mike Pointer
- **10:00 Coffee/Tea Break**
- **10:30** CIE/ISO new standard: CIEDE2000 – Manuel Melgosa
- 10:45 CIEDE2000 applications in graphic arts (1)
 - The problem of implementation – Andreas Kraushaar (by telecon)
 - Implementation guidelines – Ronnier Luo, Guiha Cui
- 11.20 Discussion
- 11:40 CIEDE2000 applications in graphic arts (2)
 - Problems with near-neutral colour differences in CIEDE2000 – Danny Rich
 - How predictions can be improved in near-neutrals: recent work – Guihua Cui
 - What difference in sizes between CIELAB and CIEDE2000: recent work – Ronnier Luo
- 12:10 Discussion – Chaired by Phil Green
 - What more should be done to improve and implement colour difference equations?
- **12:30 Lunch**
- 14:00 The industrial requirement for consistent and reproducible colour rendering indices – Danny Rich
- 14:15 Status quo of CIE work on colour rendering indices – Hirohisa Yaguchi
- 14.40 Discussion
- 14.55 Work in ISO TC 130 and ICC on digital exchange gamuts – William Li (by telecon)
- 15:10 A spectral based colour gamut for real objects – Changjun Li
- **15:30 Coffee/Tea Break**
- 15:45 Issues with black
 - New ISO CD for defining black point – Marti Maria ...
 - Measuring blackness – Stephen Westland
- 16.15 Measurement of fluorescence, over-range L^* – Robert Hirschler
- 16:30 Overall discussion – Chaired by Mike Pointer
- 17:00 Close
- **18:30 Banquet (Maxi's, 6 Bingley Street, Leeds LS3 1LX)**

Helpers

Dr. Yuan Li

Ms Chrysiida Kitsara

Ms Maria Georgoula

Ronnier Luo

Vien Cheung