



COMMISSION INTERNATIONALE DE L'ÉCLAIRAGE  
INTERNATIONAL COMMISSION ON ILLUMINATION  
INTERNATIONALE BELEUCHTUNGSKOMMISSION

# NEWS

NUMBER 47

Sept. 1998

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**United States** National  
Committee of the CIE

## Come to Warsaw!

The 24th Session of the CIE is approaching. In about 9 months we hope to meet you in Warsaw.

The organisers are in full preparation of all the practical arrangements that are needed when you host an international congress and I can assure you that they are not only preparing the venue for technical sessions and poster presentations but also for an interesting social programme.

More than 220 papers from 30 countries are accepted based on the abstracts sent in. As always the whole of CIE fields of activity are represented but the largest number is related to Division 3 Interior Environment and Lighting Design.

Japan is the most active member country at the moment with by far the highest number of contributions but also Poland, the host country, has proposed a large number of papers.

A problem for the Board when making the detailed time plan is the limited time that is available for the paper presentations. The time is limited because participants want the congress to be reasonably short as many of the participants have to be away for quite a number of days to be able to participate both in the congress part and the Division meetings following.

To still give as many as possible a chance to make an oral presentation in a session the number of what is called a presented poster has been increased compared to the previous Session. There will also be a number of work-shops on important issues giving not only the authors but all participants the possibility to be active and take part in discussions that will help guiding the CIE work in the future.

At the Warsaw Session you will be introduced to the new area of activity that the CIE is starting: Image Technology, where CIE has been challenged with the task of leading joint research and development of international standards.

During the Division Meeting days all are invited to visit the meetings to hear about what is happening in the more than 100 active technical

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## IN THIS ISSUE

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committees and what is planned to happen in the coming years. Taking part will give much more information than reading the short reports that you find in the CIE News. As a guest you don't have a voting right but are free to take part in the discussions.

We hope that the Session will attract participation also from many non member countries and from professions not so active in the CIE work today. As the CIE covers practically all aspects of light and lighting both basic research and application, experts from many areas are needed. To be truly international we would also like to have more countries active as members especially from developing countries. The representation from Africa, Asia and South America is also too small today.

So come to Warsaw in June 1999 and meet colleagues from many countries and learn about the CIE. And take the chance to influence the activities in the direction you feel is most important for the future.

Hans Allan Löfberg  
CIE Vice-President Technical

## **News from the Divisions**

### **Division 1 - Vision and Colour**

<http://nml.csir.co.za/~cie1>

Next meetings:

- Sept. 28-30, 1998 – Baltimore, USA
- June 28-29, 1999 - Warszawa, Poland

### **Division 2 - Physical Measurement of Light and Radiation**

<http://nml.csir.co.za/~cie2>

The following new TCs have been established:

TC 2-45: *Measurement of LEDs* - Revision of CIE 127 (Chair: K. Muray, US)

*Terms of Reference:* To revise Publication CIE 127-1997 to include improved definitions of quantities and methods of measurement for total flux and partial flux of LEDs and to

reevaluate other parts including spectral and colour measurements of LEDs.

TC 2-46: *CIE/ISO standards on LED intensity measurements* (Chair: J. Scarangelo, US)

*Terms of Reference:* To prepare a CIE/ISO standard on the measurement of LED intensity measurements based on publication CIE 127-1997.

TC 2-47: *Characterization and calibration methods of UV radiometers* (Chair: Xu Gan, SG)

*Terms of Reference:* To prepare a CIE recommendation on methods of characterization and calibration of broad-band UV radiometers in the spectral ranges of UVA and UVB for industrial applications.

TC 2-48: *Spectral responsivity measurement of detectors, radiometers and photometers* (Chair: G. Eppeldauer, US)

*Terms of Reference:* To rewrite the technical report CIE 64-1984 "Determination of the spectral responsivity of optical radiation detectors" to update device and measurement technology, and include the spectral irradiance responsivity measurement for radiometers and photometers from UV to near IR.

TC 2-49: *Photometry of flashing light* (Chair: Y. Ohno, US)

*Terms of Reference:* To produce a technical report for photometric measurements of flashing light, including derivation of the photometric quantities applied to flashing light, measurement of light sources, and calibration of photometers for flashing light.

Detailed minutes of the last meeting of CIE Division 2 are to be found on the Division's website.

Next meeting:  
June 30, 1999 - Warszawa, Poland

### **Division 3 - Interior Environment and Lighting Design**

<http://ciediv3.entpe.fr>

The following new reporterships have been established:

- *Lighting in developing countries* (Reporter: R. Henderson, ZA)
- *Calculation of utilisation factors* (Reporter: P. Topalova, US)

Detailed minutes of the last meeting of CIE Division 3 are to be found on the Division's website.

Next meeting:  
June 28-29, 1999 - Warszawa, Poland

## **Division 4 - Lighting and Signalling for Transport**

<http://www.cie.co.at/cie/>

The following new reportership has been established:

*Crime and public lighting* (Reporter: K. Painter, GB)

Next meetings:  
- Oct. 22-27, 1998 – Bath, Great Britain  
- June 29-30, 1999 - Warszawa, Poland

## **Division 5 - Exterior and other lighting applications**

<http://www.cie.co.at/cie/>

The following new reportership has been established:

*Illumination and city beautification* (Reporter: S. Stiözen)

Next meeting:  
June 28, 1999 - Warszawa, Poland

## **Division 6 - Photobiology and Photochemistry**

<http://129.6.177.5/cie/>

The following new TC has been established:

TC 6-48. *Typical minimal erythema doses* (Chair: J.Z. Beer, US)

*Terms of Reference:* To propose typical minimal erythema doses for different skin types, for use in the evaluation and revisions of different standards for UV-emitting appliances and in educational efforts related to the risk of UV exposure.

Next meeting:  
June 28, 1999 - Warszawa, Poland

## **Division 7 - General Aspects of Lighting**

<http://www.cie.co.at/cie/>

Next meeting:  
June 30, 1999 - Warszawa, Poland

### **New publications**

New publications available from the Central Bureau:

### **The CIE 1997 Interim Colour Appearance Model (Simple Version), CIECAM97s**

**CIE 131-1998** ISBN 3 900 734 89 5

TC1-34, Testing Colour Appearance Models, was established to test various models for the prediction of the colour appearance of object colours. Later, TC1-34's terms of reference were extended to include the recommendation of a single colour appearance model to be used until a demonstrably better model could be formulated. The committee decided to formulate a single model with a simple version for many practical applications and a comprehensive version for a wide range of viewing conditions and phenomena. TC1-34 will continue its work testing this and other models.

This report summarizes the formulation of the simple version of the CIE Interim Colour Appearance Model, CIECAM97s. The extension of this model to a comprehensive version, CIECAM97c, will be formulated and published in the future.

The publication contains 18 pages.

### **Road Traffic Light - 200 mm Roundel Signals Photometric Properties**

**CIE Standard S 006/E-1998**

National and international standards for road traffic signal lights usually specify requirements for the luminous intensity of the lights to ensure that the signals will be visible in adequate time for an approaching driver to safely

and efficiently respond to the signal on roads where speeds are low.

The official guidance of the CIE for traffic signal luminous intensity (CIE 79-1988: *A Guide for the Design of Road Traffic Lights*) has been widely followed as providing sound direction for standard development. This guidance was based on a comprehensive review of the subject published as a CIE Technical Report (CIE 48-1980: *Light Signals for Road Traffic Control*).

The CIE undertook a major review of its recommendations in the period 1989 to 1994 (see CIE 107-1994: *Review of the official recommendations of the CIE for the colours of signal lights* and CIE DS004.4-1998: *Colours of light signals*) and this Standard is based on that review. Technical Committee 4-29 (Standard on Road Traffic Lights) of Division 4 of the CIE (Lighting and Signalling for Transport) was responsible for the review and the drafting of this Standard. This Standard deals with the colour, luminous intensity and luminous intensity distribution for 200 mm road traffic signals. The serious problem of sun phantom, which can affect the correct recognition of the light, is included in the Standard.

It should be noted that this Standard considers only a few of the topics covered in CIE 79-1988. These are the topics for which supporting research and practical experience were strong enough to support standardisation. For topics not covered in this Standard, such as guidance concerning higher speed roadways and traffic lights using symbols, the user is advised to follow the guidance provided in CIE 79-1988.

This Standard has been approved by the CIE and replaces the recommendations made on 200 mm roundel signals in CIE Publication 79-1988.

#### **Proceedings of the CIE Expert Symposium '97**

### **Colour Standards for Imaging Technology**

**21-22 November 1997, at the Radisson Resort, Scottsdale, Arizona, USA**

**CIE x014-1998**

ISBN 3 900 734 90 9

This Symposium was the third in a series of meetings of colour experts to discuss colour standards for imaging technology and the

second to be organized by the CIE. It was a follow-up to the very successful Symposium on the same topic held in Vienna, Austria in 1996. The purpose was again to inform users of imaging technology on new standard methods and to provide international standard-writing organisations with the necessary feedback from the community of imaging technologies on their requirements and needs. The Symposium began with a joint session with the IS&T/SID Fifth Color Imaging Conference and ended with a discussion in which conclusions and action plans were formulated. The goals of the Symposium were:

- to share information on the technical content and status of projects involving the characterisation or definition of the colour of images,
- to review progress on various issues identified as priorities during the 1996 Symposium,
- to identify areas requiring new technology or knowledge and to recommend needed activities of CIE, industry and other standards groups to provide the necessary solutions.

We began with a session in which members of various CIE Technical Committees preparing standards for colour in imaging technology reported on progress and issues in their work. There were also reports from other organisations working in this field. Following this first session, there were four separate, non-overlapping sessions which dealt with the following sub-topics:

- Metrology of displays
- Viewing conditions
- RGB colour space
- Colour appearance models (in this session the CIE 1997 Interim Colour Appearance Model (Simple Version), CIECAM97s, and the underlying scientific research were introduced).

Ample time was included for open discussion. The final session was an open session (general discussion and formulation of some action plans for the future).

The Proceedings contain on 140 pages the text of the papers read as well as reports on the roundtable discussions.

## **Digital Color Management**

**EJ Giorgianni - TE Madden**

Addison-Wesley Co. 1997  
ISBN 0-201-63426-0

The book, a publication by Eastman Kodak Company, deals with an up to date problem of colorimetry and imaging technology. It presents in a very readable and understandable form the fundamentals of colour imaging, digital colour encoding and colour management. The authors, who are members of the team who developed the Kodak Photo CD and its colour description paradigm, handle this issue from first hand and provide an excellent insight in its development. Nevertheless the book discusses also a number of other techniques used in modern colour imaging technologies.

The book, with many pictures in colour, can be used as a tutorial material in this subject of increasing importance.

Also the terminology used in the book conforms to CIE terminology and this makes the reading easy for those who are accustomed to CIE literature. The only point where the referee would question this terminology is where the authors discuss original scene luminance. The book uses also in this case the term "luminance factor". This comes probably from their photographic background where the original scene might be a photographic print and the scene luminance factor might be a proper descriptor.

Another item where the referee could envision an improvement is that some of the examples discussed in the book could have been better explained if the book would have been accompanied by a CD, where the direct effect of the different encoding paradigma could be easily demonstrated.

In summary the book is an interesting reading, written by experts in the subject field in a form of introductory material. It is highly recommended for everybody interested in colour imaging.

## **WELC '99**

**28 June – 3 July 1999, Moscow, Russia**

After a 22-years interval, the World Electrotechnical Congress (WELC'99) will take place in Moscow. The main problems of the Congress, having the motto „On the boundary of centuries; the results and prospect“ are: the discussion of the world problems in the areas of electrical engineering, electrical energy and electronics, the forecast of the world electrical energy and electrical products consumption; exchange of scientific and technical information; international co-operation and investing in electrical engineering.

WELC'99 will be held in the form of plenary and division meetings. There will be 11 divisions, including the division of lighting engineering (energy saving, comfort and ecology), having the Vavilov Russian Lighting Research Institute (VNISI) as the basic organisation. The main questions of the topics, being under consideration, are:

- the problems of energy saving and their realisation in sources of lighting, lighting devices and installations; electronic adjusting and control systems;
- physiological aspects of lighting ecological aspects of lighting;
- effective phototechnologies industry, agriculture and medicine.

Deadline for registration forms: 30 September 1998.

Deadline for abstracts (400-600 words): 31 October 1998.

In the volume of abstracts the publishing of advertisements concerning products and services in electrical engineering, electrical energy and electronics, will be provided.

For further information, please contact:

WELC executive committee:  
AES, Krasnokazarmennaya St., 14,  
Moscow 111250, Russia  
Tel./Fax : +7 (095) 2735311

## **Liaison Matters**

IEC has sent us the following documents:

### **31/264/D**

IEC 62013-2: Caplights for use in mines susceptible to firedamp - Part 2: Performance and other safety related matters  
Deadline for comments: 1998-10-15.

### **34A/830/CD**

Draft amendment to IEC 60357: Tungsten halogen lamps (non-vehicle)  
Deadline for comments: 1998-10-15.

### **34A/831/CD**

Draft Amendment 2 to IEC 60809: Filament lamps for road vehicles - Dimensional, electrical and luminous requirements  
Deadline for comments: 1998-11-02.

### **34A/834/CDV**

Draft Amendment 2 to IEC 61195: Double capped fluorescent lamps - Safety specifications  
Deadline for vote: 1998-12-31.

### **34A/835/CDV**

Draft Revision of IEC 61199 - Single capped fluorescent lamps - Safety specifications  
Deadline for vote: 1998-12-31.

### **34D/503/CDV**

Draft amendment 2 to IEC 60598-2-3 (1993): Luminaires - Part 2: Particular requirements - Section 3: Luminaires for road and street lighting (parallel IEC CDV/CENELEC enquiry)  
Deadline for vote: 1998-11-30.

### **35/1066/CDV**

Amendment to IEC 60086-4 including safety standard for primary lithium batteries for high drain consumer use (parallel vote IEC/CENELEC)  
Deadline for vote: 1998-11-16.

## **From the Lighting Journals**

### **Color Research and Application**

*Volume 23, Number 4, August 1998*

A new whiteness formula  
H. Uchida

Color gamut of cholesteric liquid-crystal films and flakes by standard colorimetry

E. M. Korenic, S. D. Jacobs, S. M. Faris, L. Li

Derivation of the 1964 colorimetric standards

P. W. Trezona, R. P. Parkins

Toward a more accurate and extensible colorimetry. Part IV. Improved weighting functions. Preliminary results

W.A. Thornton

Color memory matching: Time effect and other factors

J. Pérez-Carpinell, R. Baldoví, M. D. de Fez, J. Castro

### **International Journal of Lighting Research and Technology**

*Volume 30, Number 2, 1998*

Thirty years of Lighting Research and Technology

A. M. Marsden

Future trends in lighting

Global and diffuse horizontal solar illuminance: Month-hour distribution for Athens, Greece in 1992

H. D. Kambezidis, T. Muneer, M. Tzortzis, S. Arvanitaki

Archaeological museum showcase lighting

I. G. Iliadis

Examination of the limitations of predicted glare sensation vote (PGSV)

T. Iwata, M. Tokura

Unified glare rating (UGR): Merits and application to multiple sources

H. D. Einhorn

### **Luce (in Italian)**

*Volume 37, Number 2, April 1998*

Venezia: una nuova luce sulla Serenissima

G.P. Bellomo

La fibra ottica nel cinema multisala Maestoso di Lanciano

C. Marcotullio

La chiesa metropolitana di S. Pietro a Bologna

C. Ferrara, M. Süß

L'ippodromo del galoppo di San Siro

A. Benussi

Illuminazione e spettacolo: Quando il viaggio fu interrotto

S. Raccanello

Illuminazione pubblica e sicurezza

F. Prono

Illuminare la moda

G. Pollice, M. Pollice

L'illuminazione dello scalone San Gottardo a Bergamo

A. Pedrini

Let there be light 1.0 - La luce in numeri

G. G. Mongiello

*Volume 37, Number 3, June 1998*

Il tempio di Luxor

P. Ceregioli

Treviso, Piazza dei Signori: il fascino antico del governo comunale

R. Zambon, S. Vianello, L. Allibardi

Accendere sculture di vetro: La mostra a Bergamo di Libensky e Brytchova

M. Iuliani

Ottimizzazione dei requisiti di un'aula per centro congressi

M. Vignola

L'illuminazione delle postazioni di lavoro con videoterminale

C. Aghemo, A. Pellegrino

Controllo dell'illuminazione:

Una nuova generazione di sistemi per gestire la luce

P. Ceccherini

**Lys (in Danish)**

*Number 2, July 1998*

Nye vejbelysningsregler til høring

V. Clausen

Vejbelysningsreglerne för og nu

K. Sörensen

LTS' høringssvar

V. Clausen, J. Klausen

Forslag til nye vejbelysningsregler - Diskussion

V. Clausen, J. Klausen

Euroluce 98

G. Hansen

Weber-prisen

J. Klausen

Første lyspris gik til lyskunstner

J. Klausen

Lys gör synlight

J. Klausen, A. M. Lund

Profession lysdesigner

L. Dithmer

Test af HF-forkoblinger m.v.

P. E. Pedersen

**The Lighting Journal**

*Volume 63, Number 4, July/August 1998*

Light & Life

M. Archer

Retail lighting design: where do you begin ?

R. Stewart

Super Supermarkets

M. Pinniger

Looking over blue water

M. Major

 **For your Diary**

Date	Title of Meeting	Organizer	Place of Meeting
<b>1998</b>			
Oct. 2 - 4	ISCC Annual Meeting	ISCC, 11491 Sunset Hills Rd., Reston VA 20190 iscc@compuserve.com	Baltimore, MD, USA
Oct. 4 - 6	OSA meeting	OSA	Baltimore, MD, USA
Oct. 8 - 11	Colour between Art and Science - Oslo Intern. Colour Conference	NCAD Institute of Colour Ullevålsveien 5, N-0165 Oslo	Oslo, Norway

<b>Oct. 22 – 27</b>	<b>CIE Division 4 Meeting</b>	<b>CIE Division 4</b>	<b>Bath, Great Britain</b>
Nov. 1 – 3	Biologic effects of light	Light Symp.Found., POB 35 CH-4125 Riehen/Basel	Basel, Switzerland
Nov. 5 – 7	Farb-Info '98	Deutsch. Farbzentrum Berlin Bozener Str. 11-12, D-10825 Berlin	Vienna, Austria
Nov. 17 - 20	IS&T/SID 6th Colour Imaging Conference	IS&T	Scottsdale, Arizona, USA
Nov. 26-27	2 <sup>nd</sup> National Lighting Congress and Exhibition	S. Onaygil, ITÜ Elektr. Fak., Ayazaga Kampüsü Maslak 80626 Istanbul Fax: +90 212 285 36 79	Istanbul, Turkey
Dec. 14 - 18	Int. Conf. on Optics and Optoelectronics	A.K.Gupta Instr. Res. Dev. Est. fax:91-135 687161, 687128, root@drirde.ren.nic.in	Dehra Dun, India
<b>1999</b>			
April 25 - 28	Image Processing, Image Quality Image Capture Systems	IS&T, 7003 Kilworth Lane Springfield, VA 22151 info@imaging.org	Savannah, GE, USA
<b>June 24- 30</b>	<b>CIE 24<sup>th</sup> Session</b>	<b>Session Secretariat</b> <b>Fax: +48 22 660 5616</b> <b>CIE99@ee.pw.edu.pl</b>	<b>Warszawa, Poland</b>
June 28- July 3	World Electrotechnical Congress – Welc'99	AES, Krasnokazarmennaya Str., 14 Moscow 111250 Fax: +7 (095) 2735311 & +7 (095) 2870891 (Lighting Div.)	Moscow, Russia
Oct. 6 - 8	Balkan Light-99, 1st Balkan Lighting Conference & Exhibition	Bulgarian NC-CIE fax: +3592 654883, e-mail: denima@omega.bg	Varna, Bulgaria

CIE NEWS is published by the

CIE Central Bureau  
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