

Volume 3. Issue 3. May/June 2010

Newsletter

The Society of Light and Lighting
Part of the Chartered Institution of Building Services Engineers



- **Boyce: a radical response to energy saving**
- **Ready Steady Light, Trotter Paterson Lecture**



Secretary

Liz Peck
Tel: 020 8675 5211
Fax: 020 8673 3302
lpeck@cibse.org

Editor

Jill Entwistle
email: jentwistle@cibse.org

Communications committee:

Stephen Lisk (chairman)
Jill Entwistle
Alan Tulla
Iain Carlile
Ruth Kelly
Liz Peck
Richard Forster
Kevin Theobald

All contributions are the responsibility of the author, and do not necessarily reflect the views of the society. All contributions are personal, except where attributed to an organisation represented by the author.

Copy date for NL4 is 3 June

Published by

The Society of Light and Lighting
222 Balham High Road
London SW12 9BS
www.sll.org.uk
ISSN 1461-524X

© The Society of Light and Lighting

The Society of Light and Lighting is part of the Chartered Institution of Building Services Engineers, 222 Balham High Road, London SW12 9BS. Charity registration no 278104

Produced by  **MATRIX**
PRINT CONSULTANTS

Printed in UK

Without doubt the most important issue facing the lighting profession concerns energy usage. As we've seen from the widespread ban on the incandescent bulb, it is a highly visible and relatively easy target when it comes to crowd-pleasing political gestures. At the same time it is clearly an area which can be more easily and rapidly addressed than others when it comes to cutting energy consumption in our buildings and cities. As CIBSE president Mike Simpson said in his interview in the last issue, lighting could make 'the largest contribution to energy reduction in the built environment'.

What is needed, however, is the full involvement of the lighting community if rash and ill-informed gestures are to be avoided. But what if the lighting community itself hasn't got a robust enough solution? That is the contention of author and academic Peter Boyce (see p9). In a piece originally published as his editorial in the latest issue of LR&T of which he is technical editor, he argues that the current strategies for energy saving that are habitually trotted out – more daylight, more use of controls and so on – are completely inadequate. More radical and more immediate action is needed, he contends, if lighting is to meet energy saving pressures and carbon reduction goals.

Kevin Theobald also looks at an energy issue (p10), in this case the WWF's



now annual Earth Hour campaign to simultaneously turn off the lights around the world for one hour at a designated time. It achieves precisely nothing, says Theobald, and implies that lighting is a Bad Thing to boot.

What both pieces highlight in different ways is that there is a lot of wishful thinking, good intentions and grand gestures, but that what is required is perhaps something rather more fundamental and immediate.

Jill Entwistle
jentwistle@cibse.org

Irish Lighters call for entries

Entries are invited for both the Irish Lighter and Irish Young Lighter competitions, sponsored this year by LED specialist Enlighten and supported by CIBSE (ROI), SLL, Dublin Institute of Technology (DIT), ILE and BS News.

■ The Irish Lighter competition is being held for only the second year with a first prize of €1000, and €500 each for the runners-up. It is aimed at experienced lighting designers or engineers who can present a paper about a finished Irish project or piece of research.

■ The Irish Young Lighter competition, open to any Irish designer/engineer who is 30 or under, began in DIT in 2003 with the first graduates of the programme in Electrical Services Engineering. SLL announced in 2009 that entry to the Young Lighter competition for 2011 (see p8) would require the Irish entrant to come through an Irish heat which this will comprise.

Both events require a 200-300-word proposal by 14 June. The finals take place at DIT in September. Email proposals to Dr Kevin Kelly at kevin.kelly@dit.ie

Front cover: Bel Air House, California, by Mexican architect Legorreta + Legorreta. From *The Architecture of Natural Light* (see book review p11)

It's always encouraging to be able to reflect on successful society events and activities, and it seems that month on month we have more good news to report. Hot on the heels of the success of Young Lighter and Arc in February, has come the Trotter Paterson Lecture and Ready Steady Light – ironically on consecutive days.

Professor John Barbur delivered a stimulating and thought-provoking Trotter Paterson Lecture on mesopic vision on 16 March (see p5). Founded in 1951, the event is named after two of the Illuminating Engineering Society's founder members and past presidents: Alexander Trotter (1917-1920) and Sir Clifford Paterson (1928-1929).

As for Ready Steady Light (see p6), it never ceases to amaze. Now in its eighth year, it continues to attract a very high calibre of teams and impressive displays of imagination and creativity. Considering we revisit the same sites each year, the interpretation seems to evolve continuously. It's not possible to reproduce all of the photographs in the Newsletter but there is a link to them all from the SLL homepage (www.sll.org.uk). I'd like to add my personal thanks to the team at Rose Bruford College for all of their efforts both before and on the day, and to Mike Simpson and Amber Perry who put everything together in advance.

Our collaboration with Rose Bruford College now extends beyond Ready Steady Light, as together we are hosting a workshop, entitled 'A theatrical approach to architectural lighting'. The day will consist of four keynote speakers from the field of theatre lighting and a practical workshop in the afternoon where delegates will be challenged to light a scene from a play. There are a few tickets left and you can book online through the SLL website or by telephoning Veron Williams on 020 8772 3613.

The 2011 Young Lighter of the Year Call for Papers has now been issued



(see p8). In order to keep modernising – and to reflect the truly international nature of the competition – we have now introduced a video-blog round where entrants will have the opportunity to record a short piece to camera explaining their paper. This can be done using a webcam so no expensive recording equipment is needed; the judging for that round will purely be based on the content, not the quality of the video. We will then show these on the SLL website for people to comment – and perhaps even vote.

As always, we welcome entrants from both members and non-members. If you would like to participate, or work with someone who perhaps should, then full details and an application form can be found on the SLL website, but please note that the deadline for entries and the 300-word synopsis is 21 June 2010.

I hope to see as many of you as possible at the AGM, awards night and Alan Tulla's presidential address on 18 May. We are always looking for feedback so if you have any questions about the society – or suggestions about how we can make it work better for you, please do drop me a line.

Liz Peck
lpeck@cibse.org

Contents

Editorial	2
Secretary's column	3
News	4
Events reports	5
Ready Steady Light	6



Fourteen teams, six fittings, three hours and three prizes: this year's event at Rose Bruford

LR&T essentials	8
Alan Tulla summarises the latest issue	

The energy solution: look on the less bright side	9
Peter Boyce calls for a radical response to the energy issue	

Our darkest hour	10
Kevin Theobald questions the WWF's annual energy gesture	



Book review	11
Martin Lupton on The Architecture of Natural Light	

Events	12
---------------	-----------

Trotter Paterson Lecture: redefining mesopic vision

This year the Trotter Paterson Lecture was given by John Barbur, professor of optics and visual science, and director of the Applied Vision Research Centre at City University. The lecture was on mesopic vision and covered a series of interesting points that helped us understand its mechanisms and how visual performance changes in the mesopic range.

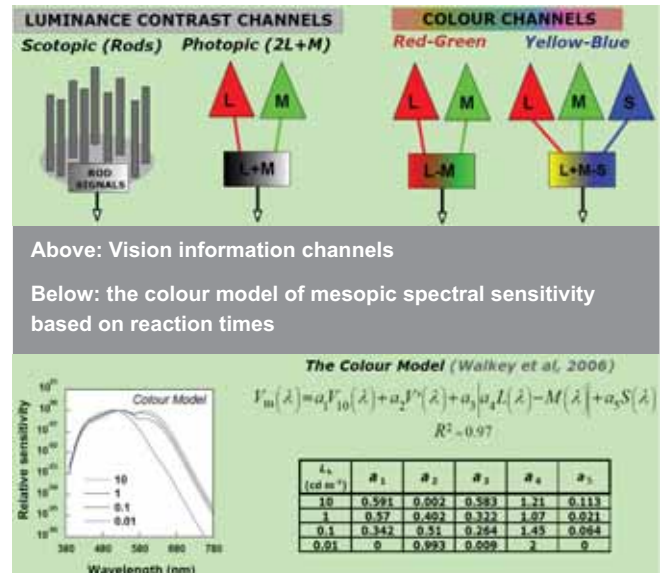
Classically mesopic vision has been defined as the range where both cones and rods play an active part in vision typically associated with luminances in the range 0.001 to 3 cdm⁻². However, Barbur argued in his talk that this simple definition may not be appropriate, since for the same level of illumination it is often possible to have photopic response in central vision and low mesopic in the periphery.

He started by discussing the mechanisms in the retina that form a number of different channels to extract the information contained in the retinal image. The efficiency of these channels depends on the amount and the spectral composition of the illuminant.

He then went on to discuss the interactions between the rod and cone signals, and how even at very high luminances rods can play a role in vision. These interactions involve both the addition of rod and cone signals, when cone signals are low, and the blocking of rod signals by cone signals, when the light level is high. Barbur's experiments suggest that rod signals can make an important contribution to visual responses, even at the very high luminances that are normally associated with photopic vision.

In addition to the well-recognised visual channels he went on to postulate the mechanism of a light flux channel where the signals from rod cells combine with signals from intrinsically photoreceptive retinal ganglion cells (ipRGC) to provide a system that can function over a very wide range of luminances. Important to the functioning of this system is the fact that rods and ipRGCs have similar spectral responses.

Barbur reported on a series of experiments that assessed effective contrast and reaction times in the region of 0.0025 to 10.0 cdm⁻², and how they had given rise to a model of mesopic performance which depended on photopic and scotopic



luminance together with extra terms that were a function of the colour channels.

He concluded the lecture by discussing the compromises needed to produce a functional model of mesopic vision and the need to optimise the spectral power distribution of illumination so that each visual information channel can extract the information available in the scene. Best performance requires extraction of information through all vision information channels, but this is not possible at very low light levels or through inappropriate choice of illuminant spectral composition.

In other words, any light source designed for the mesopic range needs to ensure that both rods and cones can operate. The consequence of these multiple requirements is that a spectrally narrow band source may not provide the level of visual performance that can be achieved in the mesopic range. ■

Peter Raynham

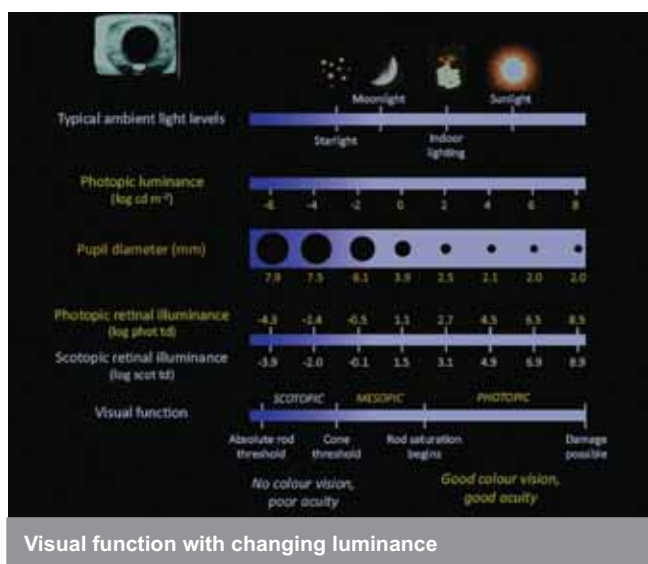
Glowing west

In spite of an inauspicious 1 April scheduling, the first SLL event in Bristol for some time attracted 25 people. Held at The Mercure Brigstow Hotel on the river, it featured two speakers: Martin Valentine, former lighting group director at Aecom, and Iain Macrae, lighting applications manager at Thorn Lighting and vice-president of the SLL.

Valentine's presentation looked at how film has influenced architectural lighting, and the ways in which it has been an inspiration for his own designs. Macrae, who sits on the SLL technical and publications committee, spoke on LG5, Lighting for Education, due to be published in the next few months.

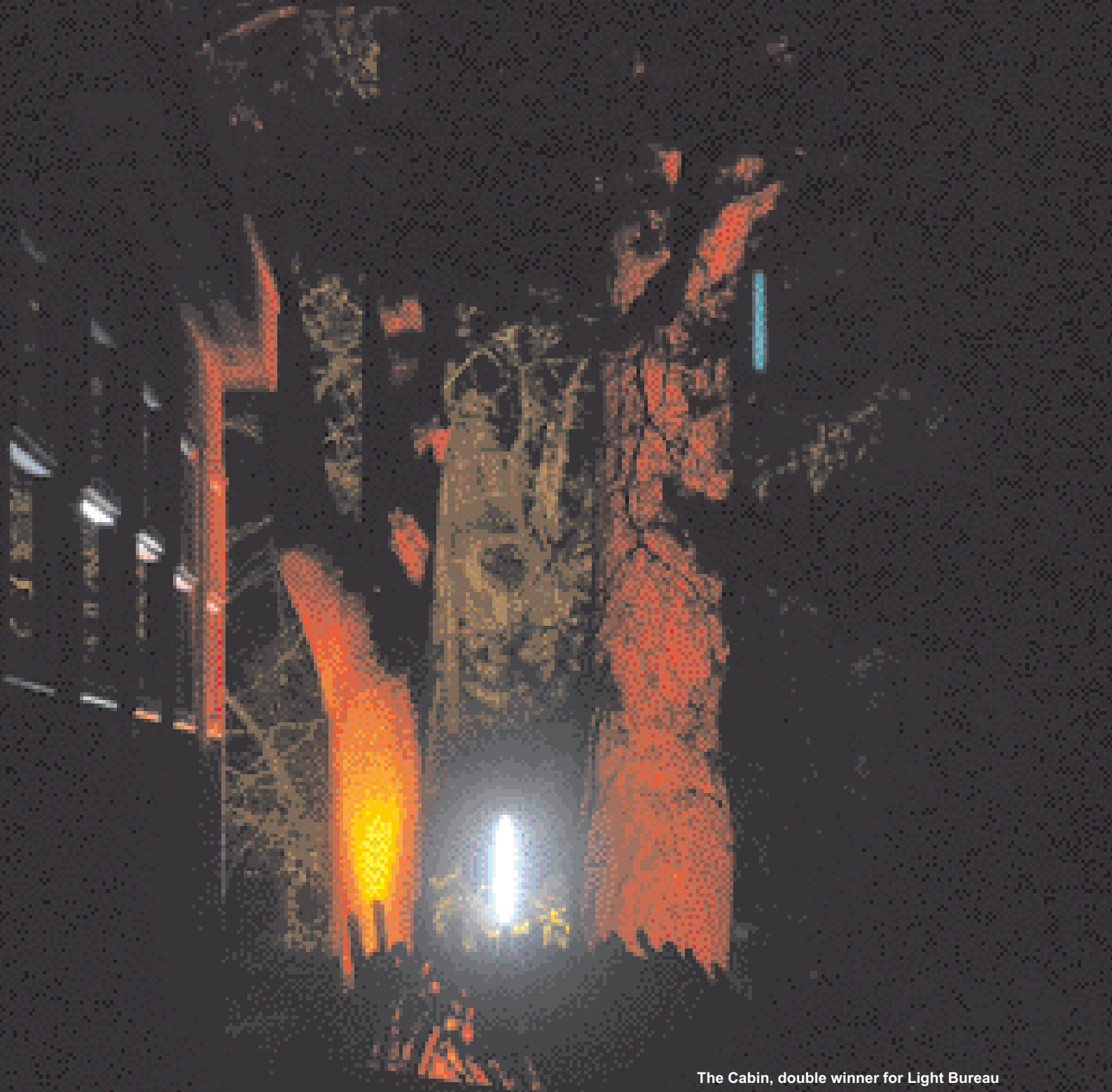
He outlined changes in the new document, which not only concerns classrooms, but also sports areas and emergency lighting, as well as covering daylight, new lamp efficacy and product design in terms of efficiency.

Sponsors were Artemide, DW Windsor, iGuzzini, oneighty and Thorn.



Cabin fever

Design team gets the double for second year running



The Cabin, double winner for Light Bureau



Arup's scheme for Fag Alley was highly commended



New Courtyard by Holophane, contender for the peer prize

Light Bureau again stole the show at this year's Ready Steady Light, scooping both the technical and artistic awards for its clever use of perspective and depth of view at The Cabin site. It's the second year running that the independent lighting consultant has walked off with two prizes (last year it was the peer and artistic awards). Kevin Theobald, who led the artistic panel, praised the scheme for its 'simplicity and visual impact' in a 'notoriously difficult site to interpret'.

Fourteen professional and student teams competed in the SLL's annual event in March at Rose Bruford College. Each one drew a random site within the college grounds and as usual was given a selection of lighting equipment (a maximum of six) and three hours to create a masterpiece.

Rose Bruford gives the society tremendous support for this event, having adopted Ready Steady Light as part of its

own lighting design course. Mike Simpson was helped this year by Peter McGregor Milloy and Rhian Kennedy, who led a team of students coordinating the entire event on the day.

The technical judges were SLL president Stephen Lisk, president elect Alan Tulla, CIBSE president elect Rob Manning and Newsletter editor Jill Entwistle. They gave highly commended to Fag Alley (Arup Lighting) and commended to The Barn (Urbis Lighting). Stephen Lisk, who was particularly concerned about awareness of energy use this year, commented that although the winning Light Bureau scheme used a high energy (250W) luminaire, it was thoroughly justified for this particular application.

Kevin Theobald, representing the IALD which sponsors the artistic prize, was joined by luminaries from the theatre lighting world: Durham Marengi, Declan Randall and Adam Carree. The panel gave highly commended to The Old Stables (Rose Bruford College) and commended The Old Courtyard (Zumtobel). Members of the winning Light Bureau team were each given copies of the Architecture of Natural Light by Henry Plummer (see book review p11).

The peer prize, as the name suggests, is awarded by fellow competitors. This was possibly one of the closest fought peer prizes for a number of years and The New Courtyard (Holophane Europe) and The Old Stables were just pipped to the post by Urbis Lighting for its interactive scheme at The Barn.

All the teams should be congratulated, though, for making the competition tougher than ever – every year sees new, highly imaginative ideas.

Finally, sincere thanks to our sponsors. An event of this magnitude simply could not take place without them. ■

Liz Peck



Urbis's peer prize-winning scheme for The Barn played with the effects of people walking through parallel beams of light

Participating teams

Arup
Bartlett
DW Windsor
Havells Sylvania
Hilson Moran
Holophane
iGuzzini
Light Bureau
Light IQ
Philips
Rose Bruford
Urbis
YLP
Zumtobel

Sponsors

Holophane
iGuzzini
Philips
Sill
Thorn
Urbis
Zumtobel

Level pegging

Alan Tulla digests the latest LR&T

Peter Boyce, as technical editor of LR&T, has written one of the most important editorials I have read for a long time, concerning energy saving, lighting quality and illuminance. Such is its significance that it has also been published in full in this edition of the Newsletter (see opposite).

Turning to the papers in the latest issue, the most relevant to designers is the one by Kit Cuttle which he presented last year at UCL as part of the SLL's centenary. This paper has already been covered in depth both in the Newsletter and elsewhere. Suffice it to say that it is an important contribution to the discussions on the future of the profession.

Evans et al describe how lighting affects the ability of people with low vision to do everyday tasks. One conclusion is that subjective preferences for lighting level do not correspond with actual visual performance. Although most older people with reduced vision preferred higher levels of illuminance, their performance was often better at lower levels.

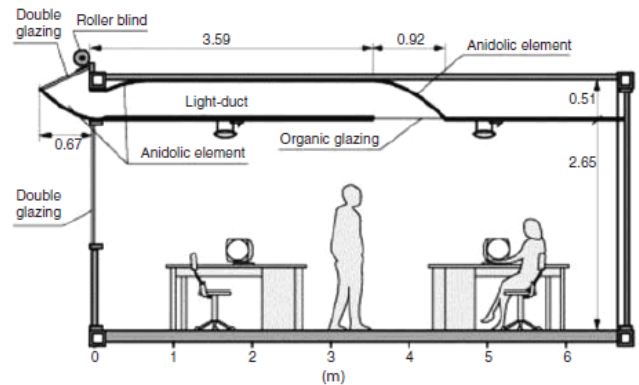
Hubalek et al outline an experiment in Switzerland on how the level of visible light and the blue spectral component affect sleep quality and mood. They conclude that sleep quality is positively associated with total luminous exposure.

Mayhoub and Carter give an update on hybrid lighting systems where one unit delivers both daylight and electric light. One version uses anidolic (non-imaging) daylight optics, together with a dropped ceiling with conventional electric luminaires linked to the daylighting. The systems detailed also include heliobuses and heliostats.

Reinhart and LoVerso describe a simple design sequence for diffuse daylighting in side-lit spaces.

For a complete change, there is a paper from Agrawal and Menon setting out a mathematical link between the mass loss of a filament and its in-service life.

Finally, Lou Bedocs reviews the SLL Lighting Handbook which he describes as being 'brilliantly put together'. ■



The anidolic ceiling principle (Mayhoub and Carter)

LR&T Vol 42 No 1 Contents:

- Editorial: Peter Boyce
- A rules of thumb-based design sequence for diffuse daylight: *CF Reinhart, VRM LoVerso, J-L Scartezini and C Cuttle*
- Office workers' daily exposure to light and its influence on sleep quality and mood: *S Hubalek, M Brink and C Schierz*
- Towards hybrid lighting systems – a review: *MS Mayhoub, DJ Carter and TM Chung*
- Towards the third stage of the lighting profession: *C Cuttle, L Bedocs, KP Mansfield and HM Brandston*
- A relation between mass loss and life of incandescent lamps: *DC Agrawal and VJ Menon*
- A pilot study of lighting and low vision in older people: *BJW Evans, H Sawyerr, Z Jessa, S Brodrick and AI Slater*
- Correspondence: David MacGowan
- Book review: The SLL Lighting Handbook 2009 by P Boyce and P Raynham. Reviewed by *L Bedocs*

Young Lighter of the Year 2011

Once again the Society of Light and Lighting is running the Young Lighter of the Year competition to help promote the younger element in the lighting profession. The competition provides a unique platform for young lighters, whether or not they are society members, to hold forth on a lighting subject, hone their presentational skills and win the considerable professional kudos of being chosen as the SLL Young Lighter of the Year. In addition to free SLL membership for one year, each finalist receives a cash prize, a certificate and a free lighting publication.

If you are under 30 on 1 January 2011 you should consider entering. If you know of someone, please encourage them to enter the competition. Applicants can choose any lighting subject of their choice. Following the submission of the written synopsis, a video-blog round has been introduced for the 2011 competition. This is a short piece to camera for entrants to further explain the premise of their paper. Entries may be based on previously prepared work, such as a thesis, and must be capable of being presented in 15 minutes at the final, using visual aids as appropriate. ■

21 June 2010:	Closing date for applications and 300-word synopses
5 July:	Entrants notified whether they have reached the preliminary shortlist
2 August:	Closing date for video blog submission
23 August:	Final shortlisted entries asked to submit written papers
1 November:	Closing date for written paper submission
1 December:	Finalists notified so that they can prepare presentations
12 January 2011:	Finalists present papers at Arc 2011, Business Design Centre, London

For an application form contact:

Liz Peck, Society of Light and Lighting, 222 Balham High Road, London SW12 9BS.

The energy solution: look on the less bright side

Lighting is under pressure from energy savers and our response simply won't do, argues Peter Boyce

There can be little doubt that lighting is under pressure. Most of this pressure is coming from those who are concerned about global warming/sustainability. What these people want to see is a reduction in the use of electricity, particularly electricity generated through the burning of fossil fuels. Their impact is evident in the de facto banning of the incandescent lamp in many countries. But why lighting? Are there no other users of electricity to be considered? There undoubtedly are, but what makes lighting an attractive target for electricity savings are four characteristics.

Lighting installations constitute a major user of electricity; they have a much shorter life than buildings; they are easy to modify in existing buildings, and, finally, they are conspicuous, so changes in lighting makes it obvious that the authorities are doing something.

Faced with this onslaught, the initial response of the lighting community is usually to emphasise the importance of maintaining lighting quality. This is followed by suggestions about how to lower electricity consumption.

There are usually three possibilities suggested: a greater use of daylight combined with better controls on electric lighting, the development of more energy efficient lighting technology and a higher proportion of carbon-free electricity generation in the fuel mix. Unfortunately, these three possibilities will not do. They are, respectively, too slow, too uncertain and too expensive. The only honest answer to a demand for rapid and major reductions in the electricity consumed by lighting is a reduction in the illuminances used in new and existing installations.

Would this be a disaster? The first thing to say in answer to this question is that illuminance recommendations are not written in stone. There have always been differences in illuminance recommendations between countries and, even for the same country, the recommendations have varied over the decades. The second is that, as regards visual performance, illuminance is a second-order effect relative to visual size and contrast. This means that if you are concerned that reducing illuminance will lead to deterioration in visual performance, you can always offset it by increasing either the size or contrast of the target details. The third is that for self-luminous computer displays, decreasing illuminance will improve visibility. A more serious difficulty is that people like what they are used to and may consider any reduction in illuminance to be a backward step. This objection might be overcome by ensuring the brightness of the space is maintained either by choosing an appropriate light spectrum or light distribution. In any case, it is important



'The only honest answer to a demand for rapid and major reductions in the electricity consumed by lighting is a reduction in the illuminances used in new and existing installations'

to appreciate that the reduction in illuminance need not be very large to have a significant effect on electricity use. The fact is the response of the human visual system to illuminance is broadly logarithmic while the influence of changing illuminance on electricity demand is broadly linear.

As the Chinese say, 'May you live in interesting times'. We do, and they look like becoming even more interesting. The lighting community needs to consider how it is going to respond to the pressure upon it; to fight for current standards, to accept defeat and take whatever the politicians impose, or to use our knowledge to maximise the benefits of lighting while minimising the environmental costs.

You choose. ■

Author and academic Peter Boyce is technical editor of LR&T where this first appeared as an editorial and is reproduced courtesy of Sage Publishing

Our darkest hour

Kevin Theobald on why he finds the WWF's Earth Hour a total turn-off

I don't want you to get me wrong – I am not against the aims of the WWF's Earth Hour initiative which invites people around the globe to switch off their lights at a given time. The purpose of the gesture is to focus people's attention on waste and the production of CO₂, and any initiative which raises awareness about saving energy is to be applauded.

However, I have particular reservations about WWF's premise that turning off lights around the world for one hour each year is actually meaningful. My worry is that it is nothing more than symbolism and leads to people thinking that they are doing more good than they really are. It also opens the door for shallow political gestures as landmark buildings fall dark.

There is a misguided perception that you the 'householder' can save a polar bear or some other benighted species simply by turning off your 11W compact fluorescent lamps (because, of course, you have all replaced those nasty energy inefficient tungsten lamps haven't you?).

Sadly it doesn't work like that. Even if large buildings turn off their lights for one hour, little or no significant energy savings can be achieved. Power stations, be they coal, nuclear or even earth-friendlier energy sources, still carry on producing electricity. They don't have any battery-type facility to store the power that is being saved by turning off that light.

The national grid is a complex animal and has to cope with peaks and troughs of demand, so there is no magic option of turning off power generation to account for such a small and relatively short drop in consumption such as that encountered during Earth Hour.

Another argument against this international switch-off is the implication that lighting is a bad thing. We all know the picture is rather more complicated than that and as a lighting community we should not be encouraging this negative view.

Perhaps it would be more to the point if the WWF and its allies could launch a campaign to create a greater awareness of lighting controls. They do not have to be costly and complex – the simplest form of control is the light switch. This could also be a platform for individuals to encourage their employer, local authority, shops, sports venues and any other places they occupy during their daily life to look at reducing power load from lighting. If a sustained, predictable drop in consumption could be achieved, then the generating authorities could reduce the amount of electricity being produced with the associated benefits in CO₂ reduction.

If you did take part in the turn-off in March, can I make a plea from the heart that you don't think of it as having done your bit for the planet and that you don't have to do anything else until Earth Hour 2011. I for one certainly did not turn off 'non-essential lights' on the 27th as, by definition, if they are not essential they are not on in the first place.

We should try and create a long-term programme that would make a real difference by changing the way we conduct our lives rather than a futile gesture which will change nothing. I would be one of the first to sign up for

'There is a misguided perception that you the "householder" can save a polar bear or some other benighted species simply by turning off your 11W compact fluorescent lamps'



a more meaningful initiative. You can start by writing to your local MP and your MEP and ask them to raise issues regarding energy saving in their respective parliaments.

The points I have raised here do not mean that I want to see building facades and landscapes left in darkness. There are very good aesthetic and commercial drivers for providing such lighting, though of course it must be well designed to avoid light pollution and unnecessary excessive use of electricity. But I certainly would support initiatives to dim or turn off public lighting after an agreed curfew time. That would be a more meaningful beginning. ■

Kevin Theobald, until recently associate at NDYLIGHT, is now principal of Kevin Theobald Lighting Design

Journey into light

Martin Lupton reviews an inspiring exploration of daylight in buildings

At first glance, Henry Plummer's *The Architecture of Natural Light* appears to be a large, glossy, coffee table book full of stunning pictures of beautiful architecture from some of the world's most renowned architects. However, a closer inspection reveals it to be a poetic and informative journey through a series of inspirational architectural spaces, where natural light has been used in a multitude of different ways.

After an introductory chapter, which takes a brief look at the history of architecture, the book is divided into seven themes, which each deal with either a different characteristic of natural light or a different method for introducing it into architectural spaces:

- **Evanescence** – the deliberate use of the movement of natural light and its change through time.
- **Procession** – the arrangement of architecture to create moments of mesmerising light effect in a journey through space.
- **Veils of glass** – using glass, not as a simple transmitter of plain light, but as a modifier of light character in order to introduce refraction, reflection and diffusion.
- **Atomisation** – the use of perforated or porous materials to modify and texturise light.
- **Canalisation** – using architectural surfaces, deep reveals and form to bounce and channel light.
- **Atmospheric silence** – how natural light reacts with surface and creates moods in spaces that have a single unified material.
- **Luminescence** – using materials to create luminous surfaces, both by diffusion and also by application of finishes to opaque materials to give them lustre.

Each chapter is preceded by its own introductory essay which considers the particular quality of light in question, supported by a number of images. In some cases the small supporting pictures offer only a tantalising glimpse into an inspirational use of light which is unfortunately not included in the more in-depth case studies that follow each introduction and which make up the majority of the book.

What is most appealing about this thoughtful and well-structured book is that it is not just about daylight in architecture, and nor is it just about glass, windows and skylights as devices to get natural light into buildings. It is a philosophical and insightful review of buildings that use natural light in a truly magical way.

The examples given cover the works of a wide range of architects including Stephan Holl, Tadao Ando, Rem Koolhaas, Peter Zumthor, Herzog and de Meuron,



Above: Barcelona Museum of Contemporary Art (Richard Meier)

Below: Caplutta Sogn Benedetg, Switzerland (Peter Zumthor)



and Alberto Campo Baeza. The projects are mainly contemporary and the book is up to date. Diverse buildings are used to form the case studies, ranging from the obvious choices of religious buildings and museums to domestic projects, and even the City Morgue in León, Spain.

This is an inspirational and visually stunning book that has a well-earned place on the library shelf (or coffee table) of anyone who is fascinated by light and architecture. The author is both a photographer and architect which might explain his sensitivity to both light and architecture, but as the book was researched and developed for more than 30 years, it is quite obviously a labour of love. ■



18 May: SLL AGM, Royal College of Physicians, Regent's Park, London

2010

12-14 May

Lightfair trade show and conference
Venue: Las Vegas Convention Center, Las Vegas
www.lightfair.com

13 May

IALD Lighting Design Awards 2010
Venue: Renaissance Las Vegas Hotel, Las Vegas
www.iald.org

16 May

Lighting Association/WEEE Lite seminar on WEEE and battery compliance (half day)
Location: Telford
margaret@weeeco.com

18 May

SLL AGM, presidential address and awards reception
Venue: Royal College of Physicians Regent's Park, London NW1
Time: 6pm-9pm

26 May

Lighting Association/WEEE Lite seminar on WEEE and battery compliance (half day)
Location: Heathrow
margaret@weeeco.com

27 May

Lighting Masterclass
Guest speaker: Mark Sutton-Vane, Sutton Vane Associates
Regular speakers: Chris Wilkes, Steve Langford, Anthony Martindale, Iain Macrae
Location: London
Time: 10am-4pm

2 June

Lighting Association/WEEE Lite seminar on WEEE and battery compliance (half day)
Location: Newcastle
margaret@weeeco.com

9 June

Lighting Association/WEEE Lite seminar on WEEE and battery compliance (half day)
Location: Welwyn
margaret@weeeco.com

9-10 June

Guangzhou International Lighting Exhibition
Guangzhou, China
www.light-building.messefrankfurt.com

16 June

Lighting Association/WEEE Lite seminar on WEEE and battery compliance (half day)
Location: Heathrow
margaret@weeeco.com

21-22 June

OLED Lighting Design Summit Europe
Venue: Hilton Kensington Hotel, London W11
www.oledinsider.com/lighting-design/

30 June

Joined Up Lighting
Sponsor: iGuzzini
Lighting vs nature?
Speakers: Martin Hicks, Hertfordshire Biological Office; Andrew Webb, landscape

architect, Halcrow; Tom Webster, DW Windsor
Venue: BDP, Brewhouse Yard, London EC1.
Time: 2.30pm
www.ile-events.org.uk

30 June

Lighting Association/WEEE Lite seminar on WEEE and battery compliance (half day)
Location: Telford
margaret@weeeco.com

12-15 September

Plasa 2010
Venue: Earls Court 2, London
www.plasashow.com

11-12 November

Colour and light in architecture
Venue: Universita IUAV, Venice, Italy
www.iuav.it/colour&light

Lighting Masterclasses:

Masterclasses are kindly sponsored by Holophane, Philips and Thorn. Guest speakers courtesy of the IALD. For venues and booking details, see www.sll.org.uk

Mid Career College: the

college runs various courses across the whole spectrum of lighting and at sites across the UK. Full details at: www.cibsetraining.co.uk/mcc

LIF courses: details from John Hugill, 0208 529 6909, or email training@lif.co.uk