Would you like to be the next editor of the Newsletter? I will be resigning as editor as of next May when I become President Elect. A full-time job plus the PE duties unfortunately does not allow me time to edit the NL. If you are thinking of it, here are a few random thoughts.

Surprisingly, writing articles takes up less time than you think. Unsurprisingly, most of our contributors are very literate and you will soon learn the ones that aren’t. The more articles you can get from other people, the less you have to write. If you were good at précis at school, you won’t have any problems. Being able to recognise a good picture and knowing how to tweak it is pretty important as well. It’s quite good for the ego being able to express your opinion in the Editorial to several thousand readers. Of course, what they think of your opinion is beyond your control. Being organised makes life easier – if you regularly update your Outlook calendar, the lighting year is a doddle.

Write to me at slleditor@cibse.org if you are interested or have any questions. The Newsletter Committee & I will still be around to help out, so don’t think you will be totally alone.

Moving on to the content of this issue, we have quite a mixed bag. The Next Generation Lighting conference contained a lot of really substantial material and gave me much food for thought. There were some excellent speakers from industry and the lighting design profession discussing topics that will affect us all.

There was also another conference devoted to OLEDs. These have some way to go before they match the LED phenomenon and, in my opinion (Please Note: a benefit of the editor’s job) it will be some time before they are useable for regular installations.

At their last convention, the PLD-A released a statement declaring their intention to give lighting design the status of a profession. This is something that affects us all and is particularly relevant as all the professional bodies are moving towards greater co-operation. The full statement is in this Newsletter.

The reporting of LR & T sometimes suffers because it is published four times a year and synchronising the issue with that of the NL is difficult. The good news is that the publishers are working towards it being available online. Details are being finalised but you can read the current position elsewhere in the Newsletter.

I urge you to read the article by Henrietta Lynch on research by UCL into the energy being wasted by office lights remaining on unnecessarily. It cannot be said enough times that the most efficient light source wastes 100% of the energy if it needn’t be on in the first place.
Secretary’s Column

As a member of SLL, I was always under the impression that nothing happened between the AGM in May and the events starting again in September. That illusion has well and truly been shattered and I’d like to thank all the members of the various committees who give up their valuable time to make sure that SLL is the success it is.

By the time you read this, the Masterclasses will have begun again, kicking off in Liverpool, before heading to Belfast in October. This year’s theme is “The Drivers of Design” and this year, you can book your place online at the SLL website – www.sll.org.uk – I can’t emphasise just how great these events are, especially as this year, we will be joined by guest speakers from the PLDA and at a cost of less than £40, they also represent terrific value for money. Places are limited so sign up now!

The 2009 Young Lighters Competition promises to be one of the best ever – we had an unprecedented number of entries this year and the judging panel had their work cut out in reducing the entries to a short-list of eight who are now busy writing their papers.

As most of you are aware, we had some teething problems with the publication of the new LG2: Lighting for hospitals and health care buildings. I’m pleased to say that these have now been resolved and the publication will be available any day. It’s an excellent guide and I encourage all of you who are involved in the specification of lighting in these buildings, to purchase a copy.

Finally, in a bid to improve its internal and external communications, the Society has expanded the remit of the existing Newsletter Committee to embrace all communications. The new committee had its inaugural meeting last month under the guidance of President Elect, Stephen Lisk – I’ll keep you updated as to its progress. If you want to join this – or any other committee, please contact me, we’re always looking to add fresh faces to the teams.

Liz lpeck@cibse.org

Next Generation Lighting

Summary

Ice stations, cathedrals, airports and media walls, all in one day. Lighting is exciting – do other professions have the same enthusiasm? I can’t imagine how they can.

Introduction

This was a series of presentations by leading figures on innovation, not only products and technology, but also the ways in which it is specified. It was an opportunity to learn what products and techniques are available and what is in the pipeline.

There were very many excellent speakers and what follows is a random selection from the day. An omission does not mean that other presentations were inferior.

Martin Valentine and Professor Josephine Arendt

A once in a lifetime project was described by Martin Valentine of Faber Maunsell and Professor Josephine Arendt of the Centre for Chronobiology at the University of Surrey. This involved the lighting of the British Antarctic Survey settlement, Halley VI. The Antarctic is a pretty extreme place being the: coldest, highest, windiest and driest place on earth. Temperatures reach -56C. More
seriously for human health, is that there is no sun at all for 105 days a year. Bearing in mind that the major body clocks and circadian rhythms are triggered by the frequency and intensity of light, no natural light for almost a third of the year puts great demands on the artificial lighting. Since our body clocks are more responsive to shorter wavelength light, most of the lighting was blue enriched with a CCT of 10,000K.

Mike Simpson

There followed a series of presentations by lamp and luminaire manufacturers. As ever, Mike Simpson’s was so naturally presented that you didn’t realise how many facts had been absorbed. After showing a range of 7w LED lamps which were intended to replace 20w & 40w gls lamps in its various guises, it was interesting to hear him say that maybe we needed a separate conference devoted to the CRI of LEDs. Most of his talk was devoted to LEDs as replacements for filament lamps. The other development he showed was low wattage (20w) metal halide as replacement for T/H.

Dave Ellis

Dave Ellis of Osram spoke mainly of all the new developments in T5. For example, they can have turned back electrodes so that you can achieve continuous lines of light. Life is now rated at 24,000 hours. The other big development was highly efficient mains voltage halogen lamps. These will leap-frog the gls ban (strictly speaking, it is a low efficacy ban rather than a restriction on lamp type).

Interesting to note that neither speaker from Osram or Philips mentioned CFLs. Do they know something we don’t?

Graham Whittaker

Graham Whittaker of Zumtobel noted that the shape of the luminaire follows that of the light source and speculated on the form of future fittings. He also pointed out that LOR was increasing in leaps and bounds. Generic fluorescent units used to be around 60%. Now it is not uncommon for it to be >80%.

Michael Parker

of Artemide showed some really interesting luminaire designs. A bit far out for your auntie in Tunbridge Wells or Winchester, but if you want modern, then he’s your man.

Mark Major

For me, the highlight of the day was a presentation by Mark Major talking about three huge airport projects: Heathrow T5, Madrid Barajas and Beijing. The passenger terminal in the latter being 2.6km long. He started the original concept work for T5 over seven years ago. One of the problems for his designers was at what point do you finalise the equipment choice? Even the technology of relatively mature products like fluorescent lamps change over such a long period. Quite how you would specify a rapidly developing source such as LEDs is difficult to say.

The other issue was how to deliver the concept when so much of it is delivered by other parties. Just about all the luminaires for Beijing were manufactured locally. Explaining the concept and result to be achieved was a major challenge. Similarly, T5 had luminaires from just one supplier which put the onus on them to achieve SAM’s concept.

Mark considered that large structures such as airports must be illuminated directly using “downlights”. Indirect lighting reflected off the roof was too inefficient in terms of energy use.

James Morse

An interesting contrast to Mark’s presentation on T5 was the talk by James Morse on the relighting of Salisbury cathedral. This was built all in one go and took a mere 40 years.

Andreas Schultz

Contrast yet again with the talk by the founder of Licht Kunst Licht on one of the best know media facades, the Uniqa tower in Vienna. Andreas also described the Post Office tower in Bonn and the Chanel store in Tokyo.

The event was organised by Lighting magazine and supported by: SLL, ILE, PLDA, IALD and the LA

Report by Alan Tulla
Background

This conference was organised by the PLD-A and the UK Displays and Lighting Knowledge Transfer Network. The purpose was for UK lighting designers to learn about the latest technology in the field of OLED and PLED. Equally, the researchers were given feedback as to what lighting practitioners expect from this technology.

The UKDL KTN is a government funded group set up to promote and finance pioneering British research and product development in the lighting technology market. The UK is currently a world leader in Organic and Printable LED’s, an area that many believe will be the future of lighting through its seamless integration into the building fabric and having a high degree of control. Membership of UKDL is open to anyone; more details are at www.ukdisplaylighting.net.

Before now there has been a huge gap between the lab and the application. There has been very little dialogue between the lighting designers and the scientists who are developing these new technologies.

What do OLEDs do?

The major difference between OLEDs and conventional light sources is that they are large area, low luminance sources. In addition, they can be made very thin, <1/3 mm or flexible and you can print on plastic ones. Glass is a more robust and longer lasting substrate, but the fun really lies with the flexible polymer ones.

Another really attractive feature is that they can be made transparent. The big market would be switchable windows. These have been around for 20 years using liquid crystals but OLEDs should provide a more robust solution. Mind you, the cost would still be too high for day to day applications. For lighting designers, they would be ideal for stained glass. Transparent by day and the glass is illuminated by the sun. At night, the OLED film is switched on, turning the stained glass into a light source.

OLEDs also hope to replace the displays used in mobile phones. Current light sources are very bad for the environment, being both poisonous and carcinogenic.

There were lots of highly technical presentations from researchers where most of us in the audience just managed to get the gist of what was being said. I heard the phrase “eye toe” several times before I realised it was “ITO”, indium tin oxide. My notes mention multi-chromaphore polymers as a better way of producing white light compared to blue emitters plus yellow down converters. That said, the researchers were undoubtedly very enthusiastic about their work.

Afternoon session

The afternoon started with an excellent presentation by Tim Whittaker of LEDs magazine speaking on the challenges that conventional HB LEDs face. Interesting to hear from him that the problem of droop, where efficacy drops with increasing power, may never be solved; certainly not in the foreseeable future. It was then the lighting designers’ turn to explain what they want from these sources. We had some very fact-filled and inspiring presentations from: Kevan Shaw on LED data, Chris Jackson of UCL on architectural LED installations, Doug James on architectural integration and finally, a flight of fancy by Sam Neuman with the killer comment that everything shown in his presentation was already possible.

Summary and Q&A Session

This was when we got down to real business. For example, in the field of displays, life is quoted as the 50% initial luminance value which is taken as 1000 Cd/m2. Whilst this luminance is OK for a display, it is pretty dim for a light source. Once you calculate the life for 25% lumen depreciation and a usable lumen output, the rated life drops dramatically.

In effect, the life of OLEDs is not yet good enough for general use.

However, both designers and researchers alike were keen to avoid the fiasco we have had with HB LEDs where the technology was launched into the market without proper consideration of what the customers required. The event was worth holding for that message alone.

Thanks are due to the PLDA and UKDL for arranging the event.

Report by Alan Tulla
There were eight categories this year. Middle East projects always attract Europe and America’s top designers. In part, this is because they work in conjunction with global architects. As well as greater budgets, there is the advantage that, in many ways, there is more freedom for the designer. New cities have less cultural baggage.

Further details are at www.palme-middleeast.com/melda/

The winners in each category are as follows.

Public Buildings
Sheikh Zayed Bin Sultan Al Nahyan Mosque Abu Dhabi by Speirs & Major Associates

Exterior
Aspire Tower Qatar by Kevan Shaw Lighting Design

Hospitality
Four Seasons Golf Resort, Dubai by NeoLight

Restaurants & Bars
Junsui, Burj Al Arab Dubai by dpa Dubai

Temporary Installations
Chantal Live at the Pyramids by Luz Lighting Design

Luminaires/Supporting Lighting Tech
LivingColour by Royal Philips Electronics

Project of the Year
Sheikh Zayed Bin Sultan Al Nahyan Mosque Abu Dhabi by Speirs & Major Associates
Is Lighting Design a Profession?

At their convention last October, the PLDA agreed to declare lighting design as a profession. Here is the full text of their declaration.

PLDA Declaration of the Official Establishment of the Architectural Lighting Design Profession

Adopted and proclaimed by the plenary session of the Professional Lighting Design Convention, in London, UK, on October 27, 2007

On October 27, 2007 the plenary session of the PLDC (the Professional Lighting Design Convention) adopted and proclaimed the Declaration of the Official Establishment of the Architectural Lighting Design Profession, the full contents of which appears in the following text. Following this historic act, the plenary session calls upon all lighting and lighting related associations, organizations and publications to publicize the text of the Declaration and to “cause it to be disseminated, displayed, read and expounded in international, national and local government circles, in all official educational authorities, in schools of various design, architectural and engineering disciplines and among the memberships of the same associations and organizations.

Preamble

Whereas the special qualities, knowledge, know-how, expertise and experience constitute the foundation of the profession; Whereas the understanding of light, lighting, its tools, its control and manipulation have become very complex and multifaceted; Whereas the impact of light on human beings is known today to have many more ramifications than just the visual/perceptual one, intricate as that alone may be; Whereas the responsibilities of those dealing with designing and specifying lighting for the human environment have become very significant; Therefore, the Plenary Session of the Professional Lighting Design Convention proclaims the Declaration of the Official Establishment of the Architectural Lighting Design Profession a fact to be officialised by individual governments and by all international bodies dealing with the recognition of professions and independent disciplines.

Article 1 Lighting Design is the art and science of lighting the human environment. Lighting Designers are the professionals who have the ability to apply that art and science to projects thus helping these to successful conclusions.

Article 2 Lighting Design is a profession and a discipline distinct from all others in the fields of Architecture, Interior design, Landscape design, Urban design as well as Electrical engineering.

Article 3 Lighting designers are part of the Design chain of an architectural project. They cooperate and coordinate their work with all other relevant disciplines on a same project to ensure its holistic success.

Article 4 Lighting designers are responsible for the design of part of the human environment and in extension, responsible for the appearance of their design and of its impact on the design of others, the well-being of people using the designed spaces, their appropriate feeling in it, their efficiency in carrying-out the visual tasks, their safety and security, all of these within the limitations of the influence of the designed lighting on the space and its users or on the lit objects and their viewers.

Article 5 Lighting designers are accountable for the sustainability of their design.

Article 6 Lighting designers are not part of the chain of supply of a project. Nevertheless, they have a very strong link to it. Lighting designers cooperate with the different players in that chain, manufacturers, contractors, agents, representatives and installers within the strict limitations of their code of ethics, for the benefit of the end-user, the client and the project as a whole.

Article 7 Lighting Design has all attributes required for its official recognition: It is taught at academic level, it has a critical mass of practicing professionals, it has its codes of deontology and professional practice.
IALD Awards

Ginza Onsen Fujya, Japan

I like to devote quite a bit of space to these awards. It benefits and inspires the rest of us to see what the best of the profession can do. However, due to loads of unforeseen circumstances, we don’t have much space available. Again, these circumstances mean that other journals have already published the winning schemes. So instead, I have just chosen one project that is a bit out of the ordinary and included photos that you won’t have seen elsewhere.

The Ginza Onsen is a traditional Ryokan – a Japanese inn. It is located in the Ginza hot springs in the mountainous region of Northern Japan. The client’s intention was to combine the time-honoured Ryokan service with the modern conveniences of a 21st century hotel. The main building materials used are stained glass, rice paper walls and delicate bamboo screens. The lighting designers chose to give the interior a soft, diffused interior light reminiscent of traditional Japanese buildings.

The front cover shows the interior in detail. The following are some snapshots.

Lighting Design was by Takeshi Konishi of Takeshi Konishi + Architectural Lighting Group, Yamagata. Architects were Kengo Kuma & Associates. Photography by Daichi An.

BANNING THE INCANDESCENT BULB

A POSITION STATEMENT FROM THE INTERNATIONAL ASSOCIATION OF LIGHTING DESIGNERS 3 MARCH 2008

From Australia to California and across Europe, there are proposals to ban the incandescent lamp. The recently enacted energy legislation in the United States will phase out certain types of incandescent lamps. While the IALD strongly supports the development and use of technologies, methods and appropriate regulation to minimize the energy use of lighting systems, we believe that “incandescent bans” must be carefully conceived or they are likely to be ineffective.

There are several points connected to the phasing out of incandescent lamps that should be addressed:

• Where established and enforced, existing energy codes have already effectively banned inefficient incandescent lamps from new commercial installations.

• There is presently no lighting technology that can replace certain types and uses of incandescent lamps. There are still drawbacks such as poor color, bad dimming performance, and high cost, that make replacement technologies ineffective replacements for incandescent in some applications. A grace period is needed to allow the development of light sources that can replace incandescent in all applications.

• Energy-efficient replacement light sources must be adapted to suit the existing electrical infrastructure. Those with simple and clear-cut applications must be made available as soon as proven, but there will be cases in which an efficient source is not ready for a particular use. When products cannot achieve appropriate goals, continuance of incandescent technology specific to those situations should be permitted.

• The complete environmental impact and life-cycle carbon footprint of each replacement technology must be understood. Incandescent lamps should not be banned until their replacements are proven to be an overall environmental improvement.

• Replacement lamps must be cost-effective. Because replacement light sources are often more expensive than incandescent sources, conversion cost is a concern. Subsidies may be needed to help low-income consumers.

• Phasing-out of inefficient light sources is one step in reducing lighting energy use. The most efficient electric light source is the one that is turned off. Effective use of daylight and aggressive use of lighting control technologies will be needed to significantly reduce lighting energy use.

• The IALD supports all efforts to reduce electric lighting’s negative environmental impacts through careful design, daylighting integration, lighting controls and more efficient sources. We urge consideration of the full ramifications of proposed regulations, and possibly the continued use of some unique types of incandescent lamps until truly better alternatives are available. Through our design choices and expertise, IALD Lighting Designers have an opportunity and an obligation to make a great contribution to energy use reduction and global CO2 goals. We are fully prepared to offer our technical and design expertise to help reduce the negative environmental impact of lighting while producing quality lighting solutions for effective working and living.
Lighting Research and Technology

Volume 40, Numbers 1 & 2, 2008

People

There are changes in the Editorial Board as Ron Simons, the Technical Editor for the past ten years, steps down (from the end of March) to enjoy more time in his retirement. The LR&T Editorial Board would like to record their thanks, as would the SLL Executive and Council. Ron has served the lighting research community of Great Britain and overseas very well indeed for many years and will be greatly missed.

The good news is that Dr Peter Boyce will take over as Technical Editor. Peter has carried out research in many areas of lighting, in particular those concerned with human factors. He spent many years as a senior member of the team at the Lighting Research Institute at the Rensselaer Polytechnic Institute in the USA. He has written many research papers as well as his book Human Factors in Lighting. He now works as an independent consultant. He can be contacted at prb.lrt@btinternet.com. At the 2008 agm, he was awarded the SLL Lighting Award.

Free on-line access.

More good news is that on-line access to LR & T will be available to SLL members free of charge in the near future. In addition, there will be the option for members to receive a printed copy (four issues per year) for a fee. Details are still to be finalised. Thanks are due to David Loe, Prof. John Swaffield (President of CIBSE), Marie Dignan and Wendy Truran of Sage Publications.

Next year’s papers

The Editorial Board is planning to have a special issue of LR & T focusing on energy efficiency in mid-2009. As a pre-run of the material, the authors concerned will be taking part in a one day symposium in conjunction with the NPL on 9 October this year. See the NPL website for details www.npl.co.uk.

Vol 1’s Papers

This edition contains a number of papers on the issue of energy efficiency. The paper by Newsham et al draws attention again to the fact that people are not all the same when it comes to choosing their required task illuminance. When given a choice, they will select different values.

There are three papers from India, Canada and the UK considering different aspects of daylighting in conjunction with electric lighting. These three studies from widely different parts of the world show the need for a holistic approach to daylighting to achieve acceptable solutions. More research is required, especially in conjunction with builders, architects and lighting providers.

The remaining paper by Fotios and Cheal examines side-by-side brightness ranking tests of four different light sources. The research considers different approaches to testing and analysis, which is followed by two in-depth discussions. It is recommended that these trials are followed up by field studies to provide guidance which others can follow.

Contents Vol 1

Robust control and optimisation of energy consumption in daylight-artificial light integrated schemes. – CP Kurian, RS Aithal, J Bhat, and VI George

Individual control of electric lighting in a daylit space. – GR Newsham, MBC Aries, S Mancini and G Faye

The effect of a stimulus frequency bias in side-by-side brightness ranking tests – SA Fotios, and C Cheal

Electro-chronic glazing and façade photovoltaic panels: A strategic assessment of the potential energy benefits. – J Mardaljevic and A Nabil

Cost-effective controlled illumination using daylight and electric lighting in a dual-function prism light guide. – A Rosemann, G Cox, P Friedel, M Mossman and L Whitehead


Vol 2’s papers

Most of the papers in this issue explore different aspects of the way in which light affects us. The first paper by G Tonello highlights a problem common to much research into psychological responses to light – the difficulty in isolating the effects of light from other influences such as temperature and humidity as well as less directly measurable influences such as personality traits. She argues for a more holistic approach to the research.

Veitch and her co-researchers take such an approach to test the proposition that the effects of lighting and health and well-being are mediated by other variables such as mood, motivation and visual comfort.

Figueiro, in her two papers, explores aspects of lighting design to improve the quality of life for older people. In particular, avoidance of falls and improving sleep patterns. One aspect of both these papers is that they demonstrate practical applications emerging from the new knowledge we have about the ways in which light affects our health. As this knowledge improves, and our understanding of issues such as the relationship between the dose, duration and time of day for the application of blue-rich light for circadian entrainment becomes clearer, we can look forward to good lighting design not only improving performance & productivity, but also the overall quality of life.

Contents Vol 2

Seasonal affective disorder: lighting research and environmental psychology – G Tonello

A novel night lighting system for postural control and stability in seniors – MG Figueiro, L Gras, R Qi, P Rizzo, M Rea and MS Rea.

A method for detecting incorrectly evacuated filament lamps – PM Edwards, RI Grosvenor and PW Pickett

Lighting appraisal, well-being and performance in open-plan offices: A linked mechanisms approach – JA Veitch, GR Newsham, PR Boyce and CC Jones.

A proposed 24 hour lighting scheme for older adults - MG Figueiro

Book Reviews: LG 4 SLL, Review by Malcolm Richards. Light for Cities, review by David Moore

UPDATE: It is hoped that LR&T will be available online by Christmas.
In Brief Sept/Oct

A few contrasting newspaper articles

I read in one of the broadsheets that the EC is seriously considering using concentrating solar panels, CSPs, in the Sahara to generate energy for Europe. These work by concentrating all the reflected sunlight onto a central array of water pipes which then produce steam etc etc. The article continues “… Just 0.3% of the light falling on the Sahara and Middle East deserts would meet all of Europe’s energy needs”. Read that again and do the arithmetic.

I also read that one of the Middle East airlines has just placed an order for a hundred of the latest A380 Airbus jumbo jets with an option of another hundred. One attractive feature of these planes is the extra 500Kg of water carried so that the 1st Class passengers can have a shower. Maybe if someone would produce an electric plane, we might kill two birds with one stone.

Anyway, it is reassuring to learn that Hummer have introduced an economy version with a small 3.6 litre V6 engine.

Overheard at an LED conference

From a well known lighting designer, “With rgb mixing you can produce 16 million colours – and there isn’t one I want”.

CIE Mid-term meeting and Conference

This is being held in Budapest between 27 and 29 May 2009. The title is “Light and Lighting Conference” and there will be special emphasis on LEDs and Solid State Lighting and the Medical Aspects of Light”.

Further details are to be found at -
WWW.CIE-HUNGARY.HU

PLDA Convention – Call for Papers

The 2nd Professional Lighting Design Convention will be held in Berlin from 28 – 30 October 2009. This follows in the footsteps of the immensely successful first one held in London last October. Again, this will be a three day conference with invited papers, presented papers, a poster session, small exhibition from the sponsoring manufacturers and a Gala Dinner with Awards.

Papers are invited for the following topics: Lighting Application research, Lighting Application case studies, Daylighting and Sustainability, Professional Practice issues. Abstracts should be submitted before 15 November ’08. Entry forms can be downloaded from www.pld-c.com. Authors of selected papers and posters can receive help with travel and accommodation.

What a Waste

by Henrietta Lynch

Recent research carried out as part of the CaRB (Carbon Reductions in Buildings) programme, at the Bartlett School of the Environment, UCL (University College London) has shown that there may be the potential to save around 1.4 – 1.6 TWh of electricity each year in the UK, just by turning office lights off when they are not needed after working hours. This corresponds to about 1 million tonnes of CO2 and would be enough to light about 1.5 million homes a year.

The research which was undertaken in conjunction with Worcester Polytechnic Institute, Massachusetts, USA, looked at a sample of around 140 office buildings in the West End of London between the hours of 10pm and 3am in January and February this year. The study involved an analysis of lights being left on during this period with this information being used to generate useful profiles to estimate 24 hour use of lighting in UK office buildings.

Typically offices are only occupied for between 25-30% of the hours in a week so a small percentage of lights left on overnight and through the weekend wastes a huge amount of energy. This study shows that of the total lighting use in offices between 24-30% is being wasted.

There is confidence that the results of this research provide a typical picture of ‘after hours’ office lighting in the UK and could potentially be applied to other similar industrialised nations such as the USA, Australia, New Zealand and Japan where anecdotal evidence points to similar situations.

Imagine therefore the huge potential for energy and CO2 savings that could be achieved by turning unnecessary night-time office lighting off! What is more, these savings could be relatively easily achieved through simple and cost effective systems lighting control systems, as well as through a general awareness of the problem.

In today’s environmental and economic climate surely turning unwanted lights off when they are not needed is a no-brainer!

The CaRB project is a £3million project funded by the EPSRC (Engineering and Physical Sciences Research Council) and the Carbon Trust under the Carbon Vision Buildings (CVB) programme. The Bartlett at UCL is part of a consortium of five UK Universities involved with three projects with a total of £5million of CVB funding. For further details of the CaRB programme visit –
www.carb.org.uk. Contact Harry Bruhns – h.bruhns@ucl.ac.uk

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What a Waste

by Henrietta Lynch

Recent research carried out as part of the CaRB (Carbon Reductions in Buildings) programme, at the Bartlett School of the Environment, UCL (University College London) has shown that there may be the potential to save around 1.4 – 1.6 TWh of electricity each year in the UK, just by turning office lights off when they are not needed after working hours. This corresponds to about 1 million tonnes of CO2 and would be enough to light about 1.5 million homes a year.

The research which was undertaken in conjunction with Worcester Polytechnic Institute, Massachusetts, USA, looked at a sample of around 140 office buildings in the West End of London between the hours of 10pm and 3am in January and February this year. The study involved an analysis of lights being left on during this period with this information being used to generate useful profiles to estimate 24 hour use of lighting in UK office buildings.

Typically offices are only occupied for between 25-30% of the hours in a week so a small percentage of lights left on overnight and through the weekend wastes a huge amount of energy. This study shows that of the total lighting use in offices between 24-30% is being wasted.

There is confidence that the results of this research provide a typical picture of ‘after hours’ office lighting in the UK and could potentially be applied to other similar industrialised nations such as the USA, Australia, New Zealand and Japan where anecdotal evidence points to similar situations.

Imagine therefore the huge potential for energy and CO2 savings that could be achieved by turning unnecessary night-time office lighting off! What is more, these savings could be relatively easily achieved through simple and cost effective systems lighting control systems, as well as through a general awareness of the problem.

In today’s environmental and economic climate surely turning unwanted lights off when they are not needed is a no-brainer!

The CaRB project is a £3million project funded by the EPSRC (Engineering and Physical Sciences Research Council) and the Carbon Trust under the Carbon Vision Buildings (CVB) programme. The Bartlett at UCL is part of a consortium of five UK Universities involved with three projects with a total of £5million of CVB funding. For further details of the CaRB programme visit –
www.carb.org.uk. Contact Harry Bruhns – h.bruhns@ucl.ac.uk
Letter from Malcolm Richards

In response to the CIBSE President’s email, I would like to offer the following comments.

I believe we need a single lighting body, representing the interests of all those who are involved in lighting, whether wholly or just as a part of their activity. There are a number of reasons why I hold this view. As a member of both SLL and CIBSE, and having been involved in all aspects of lighting in my career: - interior, flood, aviation and road lighting.

1. We do not have a powerful enough voice to influence other bodies, particularly government.
   For example, the EuP proposals on energy reduction cover interior, exterior and domestic lighting. Whilst LIF and LA were officially approached, I do not believe SLL or ILE were. If that is so, it says a lot for our lack of visible status to the decision makers. Another example, astronomers succeeded in influencing the UK Government on light pollution where we were not so effective. Consequently we have in some areas, a poor outcome e.g. HA and flat glass luminaires.
   There are views being separately expressed on the CFL debate – we should be speaking with a single voice. Otherwise we just confuse the outside world.

2. We do not have the resources that we would like to tackle all the research, papers and publications and keep them up to date. This is because there are fewer people with less time than there used to be to take on this work. Split them between two bodies and whilst they do a sterling job, it is a less efficient use of this limited resource.

3. There is much common ground in lighting - vision, colour, lamps, controls, equipment, emerging technologies, legislation (e.g. WEEE, CDM) for example which a single body could deal with in a much more effective way.

4. There is also much uncommon ground - many members specialise in interior or street lighting, for example. Yet it is likely that they will end up becoming involved in another lighting discipline, move into it during their career, or will simply broaden their knowledge by being exposed to it. No doubt there would be special interest groups to cater for specific tastes.

5. The rest of the lighting profession seems all encompassing - LIF and CIE for example. It would be much better if all the professional lighting people were one body so they could liaise with and make representations to these groups.

6. It would surely be better if regional meetings were to be also all-embracing - likely to get both better attendances and easier to find good speakers. Conferences and exhibitions could be improved in a similar way.

7. The SLL newsletter is an excellent publication but the membership badly needs a good lighting magazine. LJ is pretty good, and certainly a good vehicle for the future, but would benefit from having the whole profession as subscribers and particularly as contributors. No doubt it would attract better support from advertisers.

8. I fully understand the feelings of both CIBSE and ILE wanting to retain their traditional memberships. However, neither can realistically cover the ground of the other, nor should it try. We must remember that the institutions exist solely for the benefit of their members; their interests, not the institutions, must come first. I don’t know of another country where the split we have exists. We should recognise that a single body is inevitable at some point and commit to working towards that as quickly as possible. There is no ideal solution, so we should find the best compromise.

9. I note in your arguments that you stress the importance of lighting in the built environment. True - but this is not all that lighting is about. The external environment, lighting technologies, vision, legislation, research and so on are vital to a sustainable profession.

Best wishes!

Malcolm Richards BSc MCIBSE MSLL MILE

Letter from Michael Clark

I was the last President of the much lamented Illuminating Engineering Society. To remind me, the date inscribed on the obverse of my presidential miniature is 1997 – 1998. I continued for a further term as the first chairman of the Lighting Division of CIBSE. It was virtually a full time job at the time to deal with all the members’ queries and to visit many of them throughout London and the Regions – I remember it well. So, it was not the end of 1974 when the merger took place although you do record correctly, in the current edition of the Newsletter, that the IES merged with the IHVE to form CIBSE.

David Loe’s obituary of WR Stevens was much appreciated. Steve, as he was known to all with affection, was a regular attendee for many years at the annual dinners, later the luncheons, of past presidents. He was a great friend of us all, particularly us younger ones, as we were once upon a time. He may not have appreciated your reference to the Institute of Electrical Engineers. There has never been such an Institute. As a proud fellow of the Institution of Electrical Engineers I noted that even the Journal of the Institution of Lighting Engineers got that correct in their own obituary of Steve.
Events September October 2008

7 – 10 Sept  Plasa08
Earl's Court
London
www.plasashow.com

9-10 Sept  LIF Certificate Course
Balham

16 Sept  Joint SLL/ILE sessional meeting
London

18 Sept  Masterclass
Tate Liverpool

18 – 21 Sept  100% Light
With 100% Design
Earl's Court
www.100percentdesign.co.uk

24 – 26 Sept  ILE Annual conference
Bristol
www.ile.org.uk

29 Sept  PLDA Workshop
Alingsas
www.alingsas.se

7 Oct  Joint SLL/ILE afternoon session
“Inside Out”
Speaker from Trilux
Afternoon session
London

14-15 Oct  LIF Certificate course
Balham

14 Oct  London Sessional
The Future of Road Lighting
Steve Fotios and Peter Boyce
London

22 Oct  Low Carbon Design conference
Cavendish conference Centre
London
www.low-carbonlighting.co.uk

23 Oct  Masterclass
Belfast

18 Nov  London Sessional
Topic tbc

20 Nov  Masterclass
Imperial War Museum
Duxford

27 Oct – 1 Nov  PLD-A Workshop
“Light and Scale”
Liverpool
www.via-verlag.com

27-28 Nov  7th National Lighting Conference
Istanbul,
Contact alpin.yner@itu.edu.tr
or www.atmk.org.tr

9 Dec  London Sessional + Drinks
LEDs & Installations
Penny Hatzi – Bartlett & Mo Islam – Osram
Venue tba

Masterclasses are kindly sponsored by Holophane, iGuzzini,
Philips and Thorn. Topics covered this year: “Optic design & Technology”,
Circadian Rhythms & Dynamic Light”, LED update and Lighting controls”, Light pollution”. For details,
see the website (www.sll.org.uk).

Mid Career College runs various courses across the whole spectrum of lighting and at sites across the UK. For the full list, see www.mid-career-college.ac.uk for details.

LIF Courses: Details from John Hugill, Tel 0208 529 6909, or email training@lif.co.uk