Welcome back; 2009 promises to be an interesting year for lighters. For SLL members, in particular, it is a once in a lifetime occasion to remember our centenary.

Centenary

The Illuminating Engineering Society was founded in 1909 by a small enthusiastic group consisting of lighting engineers, electrical and gas engineers and representatives of other professions. Leon Gaster arranged an informal meeting in February 1909. At this meeting, he said, “In advocating the formation of such a Society we have no desire to do more than provide a common platform where all those interested in illumination may be able to express their views in a free and informal manner, and membership of such a Society cannot, at the present time, be regarded as any claim to professional distinction. We naturally hope that in time to come when the subject of illumination has been thrashed out in detail to a far greater extent than at present, expert illuminating engineers will have a professional existence and will, even though few in number, be entitled to claim the distinction that the name implies.”

The inaugural meeting took place on 18 November 1909, by which time the membership was 157. The Chair was taken by Professor Silvanus P Thompson, the first President. Leon Gaster was appointed Hon. Secretary.

I like the phrase “......all those interested in illumination may be able to express their views in a free and informal manner”. It is particularly pertinent to read of his hope for illuminating engineering to be recognised as a professional discipline. The PLDA recently expressed this as being one of their goals. We are not quite there yet, but as all of us interested in lighting move closer together, I feel we are nearly there.

The list of Centenary events is listed on the back page. Unfortunately, it isn’t complete at the time of writing. Watch the SLL website for further news.

Young Lighters

We have had a really bumper number of entries to Young Lighters; all of them of high quality. Don’t miss the final at the Arc Show.

Health

The discovery in 2002 of a fourth receptor in the eye which did not affect vision, but rather acted directly on the brain to affect wakefulness, means that seeing and health will become a very important aspect of lighting design/illuminating engineering in the coming years. Daylight, which is energy free, also affects health. Energy, health, vision and lighting will become inextricably linked. There are details inside this Newsletter on a full day’s seminar on this topic.

Ready Steady Light

Don’t forget Ready Steady Light, still one of the most exciting lighting events in the calendar. Details of how to form a team or attend are elsewhere in the Newsletter.

The lighting profession

Lastly, I should mention a particularly well attended London Sessional meeting. One of Britain’s leading theatre lighting designers, Paule Constable, gave a talk about “The Language of Light”. A full report is inside. Although the terminology she used was completely different from that in SLL and ILE Guides, we all understood precisely what she meant.

Look underneath the label and you find that lighters all have the same professional genes.
The ARC Show Preview

Before you get on the train, don’t forget that this year it is at Earls Court Two rather than the BDC. Dates are Wednesday and Thursday the 4th & 5th February 2009.

Young Lighters
Young people are the lifeblood of any profession and this, our Centenary year, has a record number of entries. Over 20 entries have been whittled down to five finalists; this includes the winner of the Irish Young Lighter of the Year competition hosted by the Dublin Institute of Technology.

Each finalist receives a cash prize and a free lighting publication from the Society of Light & Lighting. Additional cash prizes are donated by The Worshipful Company of Lightmongers and the Institution of Lighting Engineers.

Decorative Lighting Gallery
The Gallery will incorporate signature pieces being shown by up-and-coming bespoke product designers and established high-profile manufacturers alike. Last year’s exhibitors included companies such as B.Lux, Contract Lighting, Crescent Lighting, Herman Miller, LUXO, and Mike Stoane Lighting.

Finally, don’t forget to take advantage of the late opening hours on Wednesday 4th February when you can enjoy a drink and take the chance to network with colleagues, friends and suppliers at the bar.


Dublin Institute of Technology

Young Lighter Competition
The Dublin Institute of Technology held it’s now annual heat for the Young Lighter competition. Patrick Crowley’s paper on Photosynthesis won the day and he will present his research findings at the final of the Young Lighters in London on February 4th 2009. Patrick was supervised in his research by Keith Sunderland – a lecturer in DIT and deputy SLL representative for the Republic of Ireland.

Our secretary Liz Peck acted as one of the judges and was very impressed with the presentations and enthusiasm of both DIT staff and students for this event. This is all the more remarkable given that DIT does not have dedicated

Patrick Crowley and Jason Higgins. Front Row: Ms Liz Peck (SLL secretary); Prof Brian Norton (President DIT) and Mr Kevin O Connell (Head of Department of Electrical Services Engineering
lighting modules on either its three year degree or four year honours degree programmes. DIT has a dedicated lighting module (accredited by SLL) on its taught MSc in Energy Management but Liz emphasised in her speech to the large audience in the refurbished Gleson Theatre that dedicated modules in lighting science, technology and design were essential to underpin the knowledge of Electrical Services Engineers. She was highly complimentary however of the high quality of graduates that she met on the night and the great work that DIT has done in expanding its Electrical Services Engineering programmes with seventy students graduating in 2008.

Report by Kevin Kelly

London Sessional meeting
18 November

This was one of our best attended sessions with over 60 people in the audience. Not only were there SLL members but also those from the ILE, ALD, IALD and PLDA. The session was introduced by Hugh Ogus who told us about the new Intermediate Level in the LET Diploma course. There was then a short talk by a young Canadian, recently qualified student, Brandy Kay, on her experience of the course and how it had helped her find work. The course is recognised by the Government and helps accrue points towards those required by non-EU citizens.

Paule Constable

The main event of the evening was “The secret language of Light” by one of Britain’s leading theatre and opera lighting designers, Paule Constable. She originally qualified in English & Drama at Goldsmith’s College, but then moved swiftly into rigging lights for pop concerts where her fearlessness at height ensured she was always in work. However, her deep interest in theatre continued and hence her career in lighting design began.

The list of productions on which she has worked looks like a roll call of the most respected plays of the past two decades. One of the most recent was “His dark materials” by Philip Pullman where the lighting, in particular, attracted a lot of favourable comment from the press. For this, she won an Olivier award, the first woman to do so.

She began her presentation by simply speaking about her approach to lighting and for the first 20 minutes showed no images at all. Instead, she spoke of the feel and smell of a lighting design. Of how a production should draw the audience along and get them to place their total trust in it. There is almost no time to experiment with the set lighting nowadays, so she discusses with the other members of the team; the actors, producer, set designer about what atmosphere is required. Just about every descriptive word she used about lighting was non-visual.

She then gave a brief description, with images, of her latest production “Warhorse” at the Olivier Theatre. The story is by Children’s Laureate, Michael Morpurgo and is on until March. Go and see it.

What was most satisfying about her talk was the way in which she used a completely different language from that used by most SLL members but that we all understood her completely. After she had spoken, I was approached by hardened engineers saying that they could have listened to Paule all night. In discussion with a group of them, I described her talk as “absolutely spellbinding” and no-one disagreed.

Thanks are due to was Peter Phillipson and the London Events team for persuading such an eminent speaker to be our guest.

Report by Alan Tulla
This was the last meeting of the year and there were three speakers all presenting on the topic of LEDs.

Penny Hatzi
The first was Penny Hatzi, a PhD student at the Bartlett. The main theme of her talk was LEDs in Leisure. She briefly covered the various types of LED and their construction. She also raised the difficulty of comparing the performance claims by different manufacturers. We then moved on to view some colourful and glamorous installations across the world. Penny described what was happening in the various photos of hotels in Greece and Las Vegas to Washington and Oxford. Almost all of the installations used colour change. It was good to see that Penny credited the lighting designers of each installation. So often, presenters show work which is not their own, but do not credit the originator.

Roger Sexton
Roger Sexton who many of us know from his two decades at Philips Lighting, recently joined a new LED company, Xicato. He started by listing the three main disadvantages of current LED luminaires: thermal issues related to the heat density of the LED chip, inconsistent colour appearance and future-proofing the luminaire. He then proceeded to say how his company had overcome them. I wouldn't normally report on a manufacturer's product development, but the technology is sufficiently different to make it known to a wider audience. In essence, the phosphor is physically separated from the chip, thus it runs cooler — an issue raised by the following speaker from Osram. The cavity thus formed by the separation enabled slight variations on colour to be overcome because the wavelengths combined. Finally, the optical assembly was easily replaceable, thus higher output or lower wattage sources could be used without changing the whole luminaire. The attached diagram shows the construction.

Mo Islam
The final speaker was Mo Islam of Osram who gave a very enthusiastic talk. He spoke a lot about the life of LEDs which he defined as being when the light output dropped to 50% of its initial value. This contrasts with Philips who use 70% of initial lumens as a definition of life. This unwittingly supported Penny's point about the difficulty in comparing manufacturers' claims. Mo also said that it was important to look at the life of the drivers by comparing the Ta and Tc points. The driver life may well be shorter than that of the LEDs.

Mo also referred to colour shift due to phosphor degradation caused by heat. This neatly underlined one of the key issues raised by Roger Sexton.

He then spoke briefly of developments and what we might expect to see in the near future. He referred to some of the major European luminaire manufacturers who had very few LED fittings in their range because they "were waiting for the technology to settle down". This simply wouldn't happen. They would just have to live with a constantly changing product.

Mo's presentation, in particular, raised some spirited questions from the audience. One almost forgot it was the season of goodwill. However, the year-end wine and mince pies quickly mellowed the guests.

Ready Steady Light 2009
The seventh annual Ready Steady Light competition at Rose Bruford College in Sidcup will take place on Wednesday March 25th This year there will be no gimmicks, no gadgets, no props, just good old fashioned lighting design skills will be put to the test this year with the teams having to come up with something original that portrays their allocated site.

In recognition of the centenary of the SLL we would like to have one team of more ‘senior’ lighters to volunteer to construct an installation in a manner representative of the era when the Society was founded, using technology from yesteryear.

There are 14 team slots available plus the centenary team so if you have not already done so, now is the time to get registered. Please contact Liz Peck for further information and a registration pack. The entry fee this year is £15.00 (inc. VAT) per person.

Each team may contain a maximum of six participants. There are likely to be more applications for teams than we can accommodate so we are restricting entry to one team per organisation. We would also like to encourage team organisers to include first-timers to the event in their teams.

There will be three categories for the competition:
Lighting & Health

One-day Conference
Barbican Centre, London, March 17, 2009

Organised by the Institution of Lighting Engineers

Programme

• **Morning**

  Chair: Miles Pinniger, former principal of lighting design consultants, Pinniger & Partners

  9.30-10.10 **KEYNOTE PRESENTATION**
  Professor Josephine Arendt, Emeritus Professor of Endocrinology and Doctor of Medicine Honoris Causa, Founder of the Centre for Chronobiology at the University of Surrey – The Non-visual Effects of Light in relation to Biological Rhythms: a History of Recent Research

  10.10-10.40 Dr Richard Hobday, independent consultant – The Importance of Sunlight to Human Health

  10-40-10.50 – Q & A

  10.50-11.20 Coffee break

  11.20-11.50 Dr Nichol G Clarke, Director, Real-Health Ventures Ltd – Light: a Key Piece in the Real Health Jigsaw Puzzle

  11.50-12.20 Professor Debra Skene, researcher at the Centre for Chronobiology, the University of Surrey - - The Effects of increased intensity and changing spectral composition of light in residential homes for the elderly

  12.20-12.30 -- Q& A

  12.30-1.45 – LUNCH

• **Afternoon**

  Chair: Maida Hot, Lighting Design Director, NDY Light

  1.45-2.05 Luc Schlangen, Programme Manager, Light, Health & Well-being, Philips Lighting -- Report on Philips’ latest field studies of Activiva lamps

  2.05-2.25 Bob Venning, Mary-Clare Race and Roxanna Yarandipour, Ove Arup and Partners International Ltd. -- Is there a link between Health, Well being and Productivity and the use of High Colour Temperature Lamps? -- Results of a Long-term Study

  2.25-2.45 Theo Paradise, Head of Lighting Design, Max Fordham Consulting Engineers – Lighting in Action:
Case Study 1: Lighting Design to Stimulate the Teaching and Learning Environment

2.45-3.00 Q & A

3.00-3.30 – Tea break


3.50-4.10 Alistair Gould, Projects Director, Carbon Free Group and Mary Rushton-Beales, Creative Director, Lighting Design House – Lighting in Action, Case Study 3: Pines Calyx, Probably the Healthiest Conference Centre in the World, Two Years On...

4.10-4.30 Rory Marples, Design & Technical Manager, iGuzzini Lighting – Lighting in Action, Case Study 4: Lighting for night-shift work, using the Sivra dynamic lighting system

4.30-5.00 Q&A and short symposium, involving all the afternoon speakers, on the implications of current findings for future building and lighting design.

Symposium Moderators: Lighting designer and LJ editor, Carl Gardner and freelance writer on lighting, Jill Entwistle

5.00-6.30 – Sponsored reception in the Conservatory [unconfirmed]

Registration at www.ile-events.org.uk after December 10

Book review “Learning to see”

Subtitled, “A matter of Light” by Howard Brandston

Considering the stature and experience of Howard Brandston, this is a surprisingly slim book; a mere 130 pages of A5. He is, after all, the man responsible for lighting the Statue of Liberty and the stainless steel clad Petronas Towers.

The title of the book is based on a quote by Henry David Thoreau “The question is not what you look at, but what you see”. The book is basically a description of how he tackles a project. His guiding principle is to always approach a project with an open mind. “Rules in lighting are a detriment to inspiration” is one of the very many quotations by the author sprinkled throughout the book. Another is to spend a lot of time on research; not only speaking to the client but anyone who might be an expert in a related subject. “The problem with lighting designers is that they have become specialists” is another of his quotes.

He is plainly no fan of lighting guides or standards which he feels limit creativity although, to be fair, he has been consistent throughout his career in what constitutes good lighting. There is an interesting chart showing the IESNA recommended levels of illuminance for offices over the years since 1913 to 1990. His conclusion is that they correspond to the price/availability of energy rather than human visual requirements. The lesson is that rather than follow handbooks, designers should use their own eyes, brains and hearts to do what is ethical not only with lighting, but with all the resources on our planet. “If you don’t practise ethics, there is no virtue in what you do”.

Those readers looking to discover new techniques will be disappointed. However, he does describe how he illuminated the Statue of Liberty. One of the major problems being that it is green. GE developed two new metal halide lamps that produced just the right effect on the patina. Interestingly, the 45m high monument is brightest at the top and has the lowest luminance at the base; no mean feat from ground-mounted floodlights.

Other projects include a lighting masterplan for Detroit and a Benedictine monastery in Indiana. Other projects are mentioned briefly but, unfortunately, there is no index and so you cannot easily find them.


Review by Alan Tulla
The new edition of the Lighting Guide LG2: Hospitals and healthcare buildings replaces the previous 1989 version. This new edition has been produced to ensure that our guidance is up to date with modern lighting practice and to illustrate varying ways of lighting the modern hospital environment. Illumination recommendations have been aligned where appropriate with European Standards on lighting and the Society of Light and Lighting’s Code for Lighting. The provision of guidance on the lighting of hospitals has been available since 1968 (IES Technical Report No 12). There has been continual advancement in medical and nursing procedures during the intervening forty years; this is likely to continue in the future. Lighting technology has developed since the original IES Technical Report, hence the guidance was revised as CIBSE Lighting Guide: Hospitals and healthcare buildings in 1979, with a second edition following in 1989. In principle, the basic requirements for the provision of lighting for hospitals has not greatly changed. However regulations, luminaires and lamps have all developed since 1989. Although based on the 1989 edition, this new edition supersedes it as there have been important developments in legislation, illumination levels and lighting design techniques.

Editor’s Note: The above is the Foreword to the Guide. An interesting new concept in the Guide is DEER, design energy efficiency rating system. It is based on Part L and has three levels. Level C (statutory minimum): 45 – 59 luminaire lumens per circuit watt. Level B (best practice): 60 – 65 luminaire lumens per circuit watt. Level A (exemplary): >66.

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The Pool of Light project, which took place throughout Liverpool from October 31st - November 30th 2008, brought some of the best international lighting designers to the European Capital of Culture for a unique lighting project.

Local people, young professionals and seven lighting designers worked together to deliver temporary lighting installations in eight locations around the River Mersey. The Pool of Light project was supported by Liverpool City Council, Liverpool Vision, Mersey Waterfront Regional Park, Mersey Travel, Northwest Regional Development Agency, Professional Lighting Design Association and Wirral Council.

I have summarized a report on the event by Falk Duning. You can read it in full on the PLDA website, but I have just concentrated on two that appeal to me. The front cover of the Newsletter shows the ventilation shaft of a tunnel. Symbolically speaking, the city of Liverpool “inhales” the commuters every morning and “breathes them out” every evening. There are two speakers left and right from the shaft which can be seen as “nostrils” and through which the fresh air comes into the lung, the tunnel. The shaft is the “throat” through which the bad air is exhaled. The fresh air is cool and so the speakers are lit in a cool blue tone. The bad air is warm, so the shaft is lit in a warm magenta. Lighting the shaft was by Kevan Shaw and his team.

The other is Great Georges Square which was previously dark, unfriendly and lit with SOX. Now pools of light of various sizes line the path and guide you safely through the former empty square. The square is framed on one side by a concrete wall with metal benches. These were lit linearly from underneath and define the one edge. Look carefully at the path and see if you can figure how the pools of light were achieved.

Report by Alan Tulla.
Citation for R H Simons – Silver Medal 2008

Following a brief mention in the last Newsletter, here is the citation in full which was read out at the CIBSE President’s Awards Dinner on 10 October 2008 by David Loe.

"President, Professor John Swaffield, Members and Guests; it gives me great pleasure to read the citation for the award of the CIBSE Silver Medal to Ronald H Simons.

Ron, who until very recently was Editor of Lighting Research and Technology, the Institution’s international lighting research journal; a role he carried out for eight years. Before that he was a member of the Editorial Board and he has now returned to this role to ensure that standards are maintained.

Ron was employed by Thorn Lighting Industries from 1955 until 1993. During that time he worked on the development of lighting equipment and other related matters including lighting research. During his whole lighting career he has been an active member of first the Illuminating Engineering Society, then the Lighting Division of CIBSE and now the Society of Light and Lighting. During that time he has served on working groups tasked with producing lighting information for the development of the profession and in 1992-93 he served as chairman of the CIBSE Lighting Division.

I could go on, but I would like to end with a personal comment on behalf of the LR&T Editorial Board. Ron’s work as the journal’s editor has helped to raise the quality and status of LR&T to the position of the premier lighting research journal world-wide. It has received international acclaim from the CIE and is now included in the ISI Science Citation Index Expanded. These recognitions are of extreme importance to both CIBSE and SLL, and to lighting in general. This makes the award of the CIBSE Silver Medal a small token of all our thanks.

Thank you Ron.

David Loe
Chairman LR&T Editorial Board 2003-08.

SLL IALD ILE meeting

‘An American in London’

In October, Marsha Turner CAE, Executive Vice President of the International Association of Lighting Designers (IALD), visited London and held informal talks with Stephen Lisk (President Elect SLL) and Richard Frost (Chief Executive ILE).

Following the collaboration on the ‘Joined up Lighting’ seminar programme and with the closer cooperation of the SLL & ILE making good progress, it was felt that this was a good time for the IALD to understand the situation in the UK and how it can work closer with the other organizations to represent the lighting design community.

It was interesting to see that many of the challenges facing the UK profession are mirrored globally particularly with regard to ever more stringent energy policies and the abolition of certain lamp technologies. Exchange of information between the organizations can be beneficial to all parties in this respect.

It is hoped that in the future all of the organizations representing the lighting industry can work together to offer a representative voice and information resource for policy makers.

IALD will monitor the progress of the SLL/ILE talks with the hope of continuing mutually beneficial dialogue throughout 2009 and beyond.

Kevin Theobald Ass IALD MSLL
IALD UK Regional Coordinator
IALD Press Release

The International Association of Lighting Designers (IALD) and The U.S. Department of Energy (DOE) signed a Memorandum of Understanding (MOU) in November 2008 to work cooperatively toward improving the efficient use of energy by lighting equipment and systems. The MOU emphasizes the importance of minimizing the impact of energy use on the environment in support of DOE SSL programs on lighting quality.

The MOU is designed to improve energy efficiency in lighting systems through four key areas, including:

- Promoting lighting design principles and technologies that improve lighting quality, energy efficiency, and environmental sustainability.
- Developing and disseminating technical information to assist the lighting design community in the assessment and specification of SSL and other efficient technologies to support DOE programs on lighting quality such as ENERGY STAR® and SSL Quality Advocates.
- Jointly facilitating forums in which lighting designers can exchange ideas and information with DOE and provide input to DOE lighting program planning.
- Encouraging professional lighting designers to participate in DOE lighting projects, such as GATEWAY demonstrations, with particular attention to helping DOE assess lighting quality.

In Brief

Free CFLs
I received four CFLs in the post today, courtesy of British Gas. It's part of a programme to help us save energy. BG is sending out 52 million of them; the equivalent of planting 100 million trees, it says. So far, so good. The only odd note is that if I break one, it says I should ventilate the room for a few minutes. Will this do any good? When I was kid I used to play with liquid mercury, sloshing it around in a tray watching it break up and recombine. One of the shiniest toys I ever had, but it wouldn't have been if it had evaporated in a couple of minutes.

The future is in illuminating engineering says Mandelson
Well, not exactly those words, he omitted “illuminating”. He was speaking to the CBI annual conference. Industry today was “not about mills and smokestacks”, he said. “It is about the next industrial revolution and the low-carbon or post-carbon technologies that will define the 21st century. If you really want to change the world, choose a career in engineering.”

Carbon-hungry crisps, Carbon-hungry LEDs
Someone, who should know, tells me that 25g of crisps takes 32g of CO2 to make them. Can anyone confirm this? Again, someone else who should know; tells me that the CO2 produced in the manufacture of LEDs is absolutely terrible. Rumoured to be worse than the equivalent GLS over life. Is there anywhere one can go to get reliable, factual data on CO2 emissions?

New Zealand lifts ban on GLS
The Energy and Resources Minister Gerry Brownlee confirmed in Parliament today he was not going ahead with the previous government’s decision to phase them out. He said he was “lifting the ban” on traditional light bulbs but Labour MPs said there had never been one and the intention had been to gradually replace them with new energy efficient bulbs that are on the market.

“This government has real concerns about telling people they have to move to energy efficient light bulbs by decree,” he said. “......this government believes it is a matter of consumer choice.”

The only CFL joke I know
How many British homeowners does it take to change a light bulb? From 1 January 2009, probably most of them.
Events NL 1 2009

14 Jan
“The drivers of Design”
Masterclass
Bristol

20 Jan
London sessional meeting
Peter Raynham – 2008 Code

18 – 21 Jan
Interiors show
Birmingham
www.interiorsbirmingham.com

4 Feb
CIBSE Low Carbon Performance Awards

Grosvenor House Hotel,
London
com
www.100hours.co.uk

4-5 Feb
Arc 09, Young Lighters and IALD Enlighten conference
Earls Court Two
www.thearcshow.com

19 Feb
JUL “OLEDs for Lighting”
BDP offices EC1
www.ile-events.org.uk

12 March
Lighting Design Awards
London Hilton Park Lane
www.thelightingawards.com

17 March
Lighting and Health
One day seminar at Barbican
www.ile-events.org.uk

25 March
Ready Steady Light
Rose Bruford College,
Sidcup
mike.simpson@philips.com for details.

26 May
SLL AGM

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. Topics include: emergency lighting/Fire Safety and RRO, Retail & Display, using the 2008 Code for Lighting, BS7671, Part P & Part L.

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

Centenary Events 2009

4 February
At The Arc Show, Earls Court II. Held on the first evening of ARC09 to kick off the Centenary year in style.

25 March
Ready Steady Light: an historical team formed from older members of the lighting profession who will show how things were done using obsolete equipment and dressed to suit the occasion.

19 May
SLL AGM: Launch of the Centenary book written by David Loe covering the history of the IES, SLL, and ILE through the development of the lighting profession. (Personal book signing with proceeds going to charity).

22 September
A celebration of light held at the centre of scientific knowledge - The Royal Institution, with guest speakers talking about the history and design of light.

18 June
LR&T Centenary meeting: a symposium based on a special edition of LR&T covering energy efficiency from the production of power, conversion to light and utilisation of light.

18 November
Centenary Dinner: An anniversary dinner to be held at the Criterion to celebrate the first dinner of the Illuminating Engineering Society held there 100 years ago.