Degrees of separation: the education issue
Ready Steady Light turns ten with a special event
Editorial

It’s almost unthinkable now that we nearly lost the Bartlett MSc Light and Lighting course at one point, a situation precipitated by the withdrawal of its then solitary sponsor. It was a useful juncture in that it galvanised the lighting fraternity into action, ensuring not only that the course was saved but also highlighting the fact that lighting education needed to be put on a firmer footing.

It led, of course, to the establishment of the Lighting Education Trust in 1995, with CIBSE and the ILP as joint trustees, and the tightening of financial security with a spread of sponsors and supporters.

Some 17 years later, the lighting design fraternity has achieved greater recognition but the fact that I hesitated over using the word ‘profession’ speaks volumes. It is, of course, a profession but it needs to be regarded as such by other related disciplines and at the root of that regard are education and recognised professional qualifications. The LET has pursued the establishment of a bachelor’s degree in lighting with admirable tenacity and despite a bit of a sputter at South Bank University where a BSc course was supposed to have begun last autumn, a development seems imminent.

Jeff Shaw and Stuart Bulmer give their views on education, based on the recent LET lecture (P5), and Rachael Nicholls gives the student perspective (P10).

Jill Entwistle
jentwistle@cibse.org

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This limitation was identified when the standard was first published back in 2002 and provided an opportunity for the SLL Code to fill the gaps. I wait to see what the 2011 Code contains.

I wonder whether the emphasis on uniformity is justified. Most occupants of buildings are amazed at the variation in illumination, as demonstrated by a light meter, across a space, which they had perceived as uniformly lit. Have I missed some valuable research into this topic that justifies the ratios given?

Finally I feel there is a need for aspirational goals for lighting designers rather than minimum requirements, expected to be exceeded. By adopting the latest lighting recommendations will the occupants of the space feel that their ‘new’ lighting is an improvement in productivity, safety, comfort, sustainability or health? Or will it pass unnoticed, as this is a simple measure of good lighting?

Richard Forster

LETTERS...

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LETTERS...
Happy New Year. It’s certainly a busy start to 2012, with the biennial Trotter Paterson lecture on 31 January – given by Professor Mark Rea from the Rensselaer Institute in New York – followed quickly after by Ready Steady Light. As you may have heard, the event will be expanded this year – the 10th anniversary – to embrace a Junior Ready Steady Light day for the younger generation. (See P7 for more information on RSL and registration form. Details and form are also at www.sll.org.uk).

More immediately, the much-awaited consultation paper for proposed changes to Part L of the Building Regulations has now been released for comment.

As you know, as a society – and working with our industry partners – we have been very active in lobbying for change in both the 2013 and future editions of Part L. We truly believe that a move to measurement of consumed energy for lighting is the best way forward.

There has been much speculation and comment in the media over the past six months and now is the time for everyone to act. Opinions expressed in the press are all well and good, but it’s imperative that we all now respond directly to the consultation – and that means you.

The government is seeking views not just from companies and organisations, but also individuals. The response needs to be representative of a broad cross-section, so whether you work for a lighting design practice, equipment manufacturer, building services consultant or are a student of lighting, your views count.

Please encourage your company to submit a response, as well as responding directly yourself.

Liz Peck
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**Call for Young Lighter of the Year entries**

Applications are invited for the Young Lighter of the Year 2012 competition, designed to promote and encourage younger members of the lighting profession.

Demanding a combination of research rigour and presentational skills, the competition is open to both members and non-members of the SLL. As well as the kudos involved, each finalist receives free SLL membership for one year, a cash prize, a certificate and a free lighting publication.

‘Winning Young Lighter of the Year was fantastic,’ said last year’s winner Christopher Knowlton, who also won the ILP’s prize for the best-written paper. ‘The whole process of the competition is a great way to engage with the lighting community, meeting peers and established practitioners alike.

‘Since winning, I’ve come to realise just how widely recognised the competition is. It’s a great platform from which to meet new people and gain professional recognition.’

Entrants must have been under 30 on 9 November 2011 and their submissions must be prepared specially for the competition or meet its specific requirements. They can be based on previously prepared work such as theses, but should be self-contained and capable of being presented in 15 minutes. The starting point is a 300-word synopsis which must be submitted by 20 January.

For more details and an application form, go to www.sll.org.uk/yloty
Research lacks vision

Whatever happened to visual performance? is the title of this year’s Trotter Paterson lecture on 31 January. It will be delivered by Dr Mark Rea, director of the Lighting Research Center at Rensselaer Polytechnic Institute and a professor in Architecture and Cognitive Sciences. Rea will argue that the topic of visual performance, central to much of the history of lighting research in the 20th century, has become out of date and largely forgotten, but that its importance must not be overlooked.

‘Human factors research today has moved on to more fashionable topics associated with solid state lighting, like colour rendering, brightness appearance and biological rhythms,’ says Rea. ‘Despite these trends, visual performance remains a cornerstone in all lighting applications; it is, and always will be, important to see well.’

Awards in control

Lighting designers and architects, as well as luminaire, ballast and control equipment manufacturers, are invited to enter the biennial Dali Awards. The awards recognise new and innovative lighting applications in which Dali components are used for ‘enhanced lighting quality and convenience’. Judges will be looking for energy efficiency, convenience of operation and lighting design. Schemes can be private, industrial, commercial or public sector, and must have been completed between 1 January 2010 and 31 December 2011. The closing date for entries is 31 January. Winners will receive their awards at Light and Building in Frankfurt this April. Further details are available at www.dali-ag.org, where applicants can also register for the award.

Guildhall scheme wins student exterior lighting award

Bartlett student and SLL member Rachael Nicholls won this year’s Electrical Safety Council/Lightmonger’s Award for the best exterior lighting design project on the MSc Light and Lighting course. Her scheme was for the facade of the Guildhall headquarters of the City of London Corporation (pictured right). The award was presented by Eddie Taylor, Master of the Worshipful Company of Lightmongers, at the recent Lighting Education Trust Lecture at UCL, Educating Future Lighting Designers (see P5).

‘I am delighted to have won, especially for a project that I enjoyed working on so much,’ said Nicholls. ‘If only real projects were so simple, with a silent client and no budget.’ See P10 for an opinion piece by Rachael Nicholls on the student’s view of lighting education.

On the lighter side...

The one big lighting mystery of 2011 that remains unresolved was whether a fundamental law of physics had indeed been broken and that something really could travel faster than the speed of light. The latest update was in November when Cern scientists again confirmed that a beam of subatomic particles had appeared to outstrip light speed. Researchers tweaked the experiment – sending neutrino particles 450 miles through the ground from Cern in Geneva to the Gran Sasso laboratory in Italy – to rule out a possible timing error. In the new test they used shorter pulses, around three nanoseconds instead of 10 microseconds long, so they could time the arrival of the neutrinos with greater accuracy. However, the neutrons still arrived at the Italian site some 60 billionths of a second faster than if they had been travelling at the speed of light. ‘I am not yet ready to get out my knife and fork,’ said Professor Jim Al-Khalili, a University of Surrey physicist, who has promised to eat his boxer shorts on live TV should the findings be proved correct.

Sheffield hosts research workshop

Sheffield University will be hosting another Lumenet workshop event in 2012 for PhD students currently working in lighting and related subjects, including visual perception, environmental psychology, daylighting, colour and vision.

Sponsored by the SLL, Zumtobel, Thorn and Velux, Lumenet 2012 is aimed at individuals in the first or second year of their research programme. Students will be invited to present their research to gain critical feedback from an invited panel of leading researchers which this year includes Peter Boyce, Jens Christoffersen, John Mardelejvic, Mike Pointer and Jennifer Veitch.

Lumenet 2012 takes place on 19-21 June at the Arts Tower, School of Architecture, University of Sheffield. More details from Dr Steve Fotios on +44 (0)114 222 0371 or at lumenet2012@sheffield.ac.uk
Degrees of separation

Are lighting professionals still a class apart? Two of the speakers at the recent LET lecture outline their views on what needs to be done next to improve lighting education and professional status

Jeff Shaw: Spreading the word

When we’re at a party my wife is asked what she does for a living. She says that she is a doctor. People react in a number of ways (usually they start asking for medical advice), but all she needs is a single word – doctor. When they ask what I do, it’s usually more complicated:

‘I’m a lighting designer; most often I work with architects on buildings on the permanent lighting installation and on the daylighting.’

‘No, not in theatre…’

‘No, I don’t design light fittings…’

Even then, I think the person who asked often moves on with only a partial picture of what I do for a living. I think this lack of knowledge of what we do – or even that we do it – is the root of the problem with education in our industry.

Everyone finds their way into lighting by accident. Arup’s lighting team includes people with backgrounds in architecture, product design, interior design, electrical engineering and fine art, among others. As an employer, when recruiting, we have recourse to very few places if we want someone who actually already knows something about lighting – the graduates of the UCL Light and Lighting MSc being pretty much the only port-of-call. There is an argument that these diverse backgrounds add to the richness of experience in our industry. This is true, but I don’t believe it’s sustainable long-term to rely only on ‘accidental lighters’ to populate our industry.

‘An undergraduate degree in architectural lighting would go some way to helping to achieve this recognition. But much more is needed, and we need to start at the grass roots’

Dominic Meyrick, lighting principal-partner at Hoare Lea Lighting, carried out an interesting exercise for a recent column in Lighting magazine. He studied the number of architects, landscape designers, interior designers and other related professions compared to the number of university undergraduate degrees in these topics. In summary, we both feel that there is a gap in the market for at least one BSc or BA in architectural lighting in the UK (and preferably one of each, given that the nature of lighting is that it’s both an art and a science).

Other anecdotal evidence supports this conclusion. For example, in 2009 the LET carried out a small informal survey of students graduating in product design at London South Bank University. We found that a majority would have seriously considered a degree in lighting design had it been an option (again, not only had it not been, but they had no idea that it ever might be). Since then, LET has been working closely with industry partners and a number of universities to get an undergraduate degree off the ground, and is making good progress.

This is perhaps the chicken – we also need an egg (or is it vice versa?). It may not be a case of ‘build it and they will come’ – the average 16-18-year-old choosing a career path needs to know that lighting is an option. If the public don’t know that lighting design exists, then the children don’t know that it’s an option and their parents don’t know it’s a legitimate profession into which to encourage their offspring.

We need to change this. Lighting needs to be
considered to be what it is—a profession, and the industry needs to unite to achieve this goal. The existence of an undergraduate degree in architectural lighting would go some way to helping to achieve this recognition. But much more is needed, and we need to start at the grass roots.

For one thing, we need role models for children. Kevin McCloud, of Grand Designs fame, started professional life as a lighting designer—yes, it is not a pity that the public is not aware of this? And if there are not sufficient high-profile people to act as role models, then our projects can surely speak for us. In late July 2012, night-time images of London’s Olympic Park will be broadcast across the world—what are we doing to make sure that the world asks who is responsible for lighting these scenes?

And we need to be going into schools, using avenues such as Stemnet (Science, Technology, Engineering and Mathematics Network), and enthusing kids about lighting from an early age, showing them what we do and how we do it, and what an effect on shaping the world around us we have. We need mentors to guide and lead the future lighting designers into the industry. Any volunteers?

Stuart Bulmer: Courses of action

Having been a part of the lighting profession for more years than I would wish to remember, I have long been of the opinion that our educational standards, while seen as good within the lighting world, have not carried the same weight outside our profession. Speaking as a lighting engineer, my career has generally involved answering to a manager from the civil engineering discipline, or indeed at one time, the head of a waste disposal department.

I feel, however, that we are now at a watershed when it comes to educating our future lighting designers/engineers, or as I prefer to group them, lighting professionals.

What are the new lighting professionals looking for? I would suggest that they want courses that are relevant and up to date, and that have a level of academic accreditation standing alongside those of the civil, electrical and mechanical engineers.

First we need to look at what is currently available. I can only speak with authority on education provided by the Institution of Lighting Professionals where we have a range of options, both residential and one-day courses.

The Exterior Lighting Diploma is the flagship course of the ILP and consists of four separate modules, three of which are one-week residential where students are taught the basic principles of light production through to the design of lighting for various highway situations, as well as lighting of structures. Each module contains a team design project presented at the end of the week. The fourth module is work based and requires the students to submit a series of designs that they have undertaken.

The educational programme also includes a series of Fundamentals courses aimed at those who don’t have full contact with the profession but some managerial involvement, as well as new entrants to the profession and manufacturers who only see the element of lighting related to their products. Many of these short courses are set up at the instigation of institution members.

So what is the problem with improving our image through qualifications? First, we have a plethora of lighting bodies all vying to train students with a consequent overlap in material. It is a fact that many of these bodies rely to varying degrees on the income generated by training.

The initial solution is surely for the disparate groups to meet together and determine a plan for the way forward. It may be that each group would carry on using its own courses but the difference would be greater coordination and less overlap.

Each of the courses would require some level of accreditation, and there may be a way in which these credits could accumulate to produce a degree in, say, lighting technology and application. It will mean working together and forgetting the pettinesses of the past but I’m confident there is the will within the profession to make this a reality.

Educating Future Lighting Designers was organised by the Lighting Education Trust and held on 2 November at UCL.

Stuart Bulmer is the ex-education services manager for the ILP

Jeff Shaw is associate director of Arup Lighting
Bright futures

Ready Steady Light marks its first decade with an event to inspire a more youthful audience

To celebrate the 10th anniversary of Ready Steady Light on 20 March, a special junior version will be held the day before, together with seminars and workshops exploring the medium of light. Also held at Rose Bruford College in Sidcup, Kent, Junior RSL will follow the same format as the main event and is open to anyone aged 16 and over, especially young people studying science, maths, art and design.

Anyone aged under 16 can also come along to JRSL to watch but must be accompanied by a parent or guardian. Registration for the full day is just £10 per entrant. Teams will be put together on the day for the competition. The winning team will have a place in RSL the following day.

Event founders Mark Ayers and Martin Lupton will be returning as guest judges for the main event. ‘It’s great that the event has gone from strength to strength year on year,’ said Lupton. ‘The addition of the junior version is a great opportunity to raise awareness of the profession of lighting design with the next generation of potential designers.’

As usual up to 15 teams will compete to design an exterior lighting scheme in just 180 minutes given a range of equipment. Continuing the tradition of recent years, the allocated area has to be lit in its natural state without the use of props borrowed from around the site.

There are likely to be more applications for teams than can be accommodated so entries are being restricted to one team per organisation. ‘We would also like to encourage team organisers to include first-timers to the event in their teams,’ said SLL secretary Liz Peck.

Each team must also be led by an SLL member, and judging will be in three categories:

- Most Creative Effect based on the natural features of the site and the theme. Judged by an expert panel.
- Best Technical Solution, taking into account energy use, light pollution, and health and safety. Judged by an expert panel.
- Peer Prize. Judged by other contestants.

Fill in the form below for both events or download from the SLL website. Post or email to Julie Kane, RSL, SLL, 222 Balham High Road, London SW12 9BS. E: jkane@cibse.org

REGISTRATION FORM

Name of SLL member:

Other members of team (max 5):

Address:

Daytime tel:

Email:

PAYMENT

Team entry: £150 inc VAT

Please make cheques payable to ‘CIBSE’ or by credit card below.

* Payment attached/please debit my:

- [ ] MasterCard
- [ ] Visa
- [ ] Visa Delta
- [ ] Switch
- [ ] Maestro

Cardholder’s name

Card number

Card expiry date / Card start date

Security code / Issue No (if applicable)

Cardholder’s signature

Cardholder’s address including full postal code

(if different from that already given)

* Delete where appropriate
Designing for energy reduction

Helen Loomes begins a series based on the One Building a Minute Masterclass programme, by looking at new technology in old stock

In the past six months LED products have easily reached 60lm/W and many are now up to 90lm/W. This means they are now a very effective option when it comes to retrofitting old installations. However, the design of the lighting scheme isn’t just about chasing energy numbers. All the old rules still apply and it is crucial to use the right product to produce the necessary colour rendering, colour temperature and a visually acceptable scheme.

But when superannuated building stock with outdated technology is being updated it is clearly a good opportunity to create a better lit environment that is also energy efficient. And this isn’t just about LEDs, but also electronic control gear and effective light guidance systems to give better LORs.

Cylindrical illuminance is an approach we will all have to get used to, and for a good reason. Well-lit faces aid communication and the installation of wallwashers or directional spotlights will add variety and interest on the walls, and highlight architectural features and artwork. The newest types of luminaire are available in LED versions, and while not as efficient as larger LED luminaires, they are still preferable to tungsten halogen and will definitely earn their keep with the difference they can make in energy consumption.

But lighting controls make the biggest difference in this respect. Daylight linking and presence detection ensure we are not using energy unnecessarily, but again give us another benefit, allowing much more flexibility of light levels, space differentiation and mood changing. An average boardroom is a good case in point in that it will be used for many different tasks: a casual meeting, a formal presentation (probably with AV), overspill work or the office party. All of these will benefit from different levels of general light with varying points of accent light for interest, all of which can be programmed for specific scenes.

An advantage when refurbishing old buildings is that much of today’s technology can also be installed relatively easily – wireless control systems, for instance. EnOcean technology doesn’t involve rewiring down the walls and a wall-mounted control switch can even be stuck on glass panels.

Obviously the existing system has to be evaluated first, as sustainability has to involve reuse where possible. An easy way to determine whether electronic control gear is installed, for instance, lies in everybody’s hands. Any mobile phone with a camera can detect the difference between electromagnetic or ECG by the flickering the camera picks up.

Upgrading our existing building stock is vital and capital cost shouldn’t be a block to this type of investment. Finance is available to cover the cost of new installations that save enough energy to be repay capital costs through the expected saved expenditure on fuel. The Carbon Trust also has many schemes in place to aid this type of financial arrangement.

Calculation of the saved expenditure is relatively simple (a calculation tool can be downloaded free from www.trilux.com). Payback times will depend on the type of installation and frequency of use. Typically office installations will be written off over five years, but with much longer lamp life this might need rethinking. What makes really interesting reading is the ‘profit of ownership’ numbers this tool provides for a new scheme over the long term. In retail the calculation is not so advantageous because the dynamic nature of fashion and shop design, will dictate a refit before it is really needed.

Many parameters will affect the decision to replace old lighting, but in a large number of cases there is no doubt that the change can be cost-effective right now.

Helen Loomes is marketing manager of Trilux Lighting
Taken to task

Iain Carlile focuses on the human factor and finds blue sky thinking

The latest issue of Lighting Research and Technology starts on a positive note with an optimistic opinion piece by Jennifer Veitch on the present and future state of lighting design and research. ‘This is a good time for lighting, with the exciting advances in lighting technologies and in scientific knowledge about light and lighting,’ says Veitch. ‘These new developments and emerging leaders add to the ample reasons for optimism about lighting’s bright future.’

Where the papers are concerned, a number are predominantly concerned with human factors, especially lighting for tasks, and daylight.

Logadóttir et al investigate the use of an illuminance task that allows users to set their preferred illuminance in a workplace environment. The preferred level chosen by a user tended to lie roughly in the middle of the range of available illuminances presented. The anchor illuminance (the illuminance experienced before the adjustment is carried out) also had a significant effect on the outcome. These results should be of interest to all lighting professionals and should be considered when referring to the results from studies on preferred illuminances using the adjustment method.

O’Donnell et al’s paper considers the chromatic contrast of a task and how this may effect visual performance (the speed and accuracy of processing visual information). The study found that chromatic information is crucial to visual performance when achromatic information is weak (or missing). The results will be helpful to anyone investigating how colour can be used to improve visual performance.

Kretschmer et al have been looking at lighting spaces for night-shift workers over the age of 50. Their study examined the effects of exposure to bright light at night on the attentiveness of people in this age group. Their findings show that exposure to bright light reduced error rates for certain task types while other tasks remained unaffected.

EM Jaén et al assess the flicker effects of lamps on visual performance by comparing the results of different tasks. The outcomes suggest that a visual search task may be useful in identifying subjects who are more sensitive to flicker.

On to daylight, and the paper by Košir et al that investigates the relationship between horizontal and vertical daylight illuminance in interior spaces. They found the ratio between the two to be relatively constant even under variable external sky conditions. This could be of interest to designers using automatic controls to adjust solar shading and the daylight linking of artificial lighting.

M Kocifaj and B Kránicz’s paper on modelling clear sky colours presents a theoretical formula to allow a rapid numerical modelling of clear sky colours under various aerosol loadings. Although it is generally accepted that sky colours may change with differing meteorological conditions, the study’s results show that the colours of daylight may become unstable even under cloudless conditions.

A method of finding frequency distributions of CIE general skies from sky illuminance or irradiance is presented by K Alshaibani. This could be particularly useful in geographical locations where there is insufficient accurately recorded data.

SLL members can access LR&T online via the SLL website (www.sll.org.uk/resources/lighting-research-and-technology and follow the links).
Very few industries are as multifaceted as lighting. Designers come from countless backgrounds – architecture, fine art, theatre lighting, even chemistry, to name but a few. The current education debate seems to centre on how to move from people ‘falling into’ lighting to a situation where an undergraduate course in lighting is available, and students are able to get into lighting at a younger age.

While this would in some ways be beneficial to the industry, we should not lose sight of our existing strengths. The varied backgrounds of designers is in many ways a great thing, and we should perhaps ensure that students interested in related subjects are made more aware of the opportunities in lighting. While there is an argument for consistency in education, these varied skills can only be a strength.

Perhaps less discussed is how existing courses can be improved. Lighting practitioners have frequently observed when they are recruiting that, whatever the quality of the course, it does not necessarily equip graduates for the realities of commercial lighting design.

I’m currently studying for my MSc Light and Lighting at the Bartlett School of Graduate Studies, UCL. The course has become widely recognised as a benchmark for designers, and the skills and qualities of the graduates are well known among lighting professionals in the UK. It attracts students from all over the world, from a variety of backgrounds, who often feed into the UK lighting industry when they get jobs here after graduating.

I have found that the course has taught me skills and given me knowledge that I wouldn’t necessarily have learnt in practice. It has also made me a better designer in ways that I did not expect. The staff are second to none. Knowledgeable and endlessly supportive, the tutors, together with the continuing success of the graduates, are what gives the course its outstanding reputation.

Unfortunately it is graduates that the course produces, not designers. While the graduates of course have a strong technical knowledge of light, they are not equipped with the skills required to go out and work in the industry as designers. To be fair, the course documentation makes it clear that the course is an academic study of light, but while actually studying the course the students are often referred to as future lighting designers, and that’s what most of us are. While some students will go back to architecture, product design, electrical engineering or whatever discipline they originally hailed from, the majority of the graduates do go on to become, or continue to work as, lighting designers. The blurring of the status of graduates can lead to students expecting to emerge as designers, and to experience frustration when this isn’t the case.

The course content is also mixed. In one module, for instance, students are encouraged to explore the research that has led to the way in which we specify lighting, but in another, students are examined in their use of traditional techniques of analysing daylight, skills that are unlikely to be used in modern daylight design.

For one thing, a stronger link between the course and the wider industry would undoubtedly inform the students’ expectations for the next stage of their career. While industry events that offer valuable networking opportunities are posted up on the course intranet, in-house events such as guest lectures would build up a relationship between students on the course and designers in the industry.

Secondly, this would benefit the coursework which in some ways does not seem to evolve with current technology. Where existing lighting education is concerned, developing course content and a stronger link between courses and the industry are just a couple of steps that can be taken quite easily to improve the education of lighting designers. They just might make all the difference.
Sky’s the limit

Sky Gallery and Sky Backstage by DALD which picked up both architectural lighting practice of the year and project of the year at the first Lux Awards

The three-storey Sky Gallery in The O2 main entrance gives the company’s customers an exclusive route into the arena on event days and showcases Sky’s 3D programming. Key to the brief both here and backstage was to have a low carbon footprint. Only budget prevented an all-LED solution.

RGB LED strips, each individually addressable by DMX, are stepped behind the floating wall panels that house the TVs. The continuous flowing sequence that reflects Sky’s corporate colours made the effect more costly in money and power terms – the total lighting load is 20W/sq m – than a sequence of single colours. One of the smaller halo walls, on the right hand side of the ground floor, alone needed 56 LED strips with 168 DMX channels. ‘It probably wouldn’t have been anything remotely like that if we hadn’t had to achieve this lighting effect around the walls,’ says David Akinson.

Customised suspended 600mm-square cubes at varying heights, reduce the effect of the higher ceiling void of the first floor. RGB LEDs are set behind opalescent polycarbonate to create a soft diffused glow from the bottom of some cubes. RGB LED strip integrated into the central column links in with the overall lighting sequence.

Sky customers move from the top of the Gallery along a link corridor – with a wall backlit along its length by Chroma-Q Color Force 48 colour-change fittings – to the exclusive Sky Backstage directly behind the arena stage. A series of spaces – the Welcome Zone, Interactive Zone, Dressing Room – feature a range of effects from automated RGB LED fittings through to custom-designed miniature white LEDs replicating photographic flashes. These lead to the bar area, originally a vast black space which Atkinson skilfully counters with lighting and suspended Barrisol elements. RZB’s Stadion RGB T8 oval-shaped pendants act as colour-block foils to the pastels on the Barrisol.

A series of corrugated polycarbonate panels form a centrally suspended feature over the bar itself. Both this and the Barrisol elements are lit from above by GLP moving-head, RGB LED fixtures, specified not for animation but for their ease of remote positioning and focusing. They are slightly modified with a diffusing effect to soften and spread the light over the Barrisol panels.

‘The most sophisticated use of colour in lighting, extraordinary attention to detail and the seamless integration of light and architecture’
– Lux Awards judges

Lighting design: David Atkinson Lighting Design
Branding design: RPM
Key suppliers: AC Special Projects, Chroma-Q, Flos, Forma Lighting, GLP, James Thomas, Osram, Reggiani, Robe, Traxon

Photography: Rachel Coates, SkyB
2012

19 January
Lighting Basics 3: Interior lighting applications
Mid Career College
Trainer: Dr Robert Bean
Venue: Avonmouth House
London SE1 6NX
www.cibsetraining.co.uk/mcc

25 January
Lighting Masterclass
One Building a Minute
Speakers: Brian Charman, Iain Macrae, Peter Le Manquais, Stewart Langdown, Helen Loomes
Plus IALD guest speaker
Time: 10am-4.30pm
Location: The Watershed, Bristol
www.sll.org.uk

31 January
Trotter Paterson lecture
Whatever happened to visual performance?
Speaker: Dr Mark Rea
Venue: Institute of Education, University of London, Bedford Way, London WC1
www.sll.org.uk

22 February
Lighting Masterclass
One Building a Minute
(see 25 January)
Location: York Racecourse
www.sll.org.uk

29 February-1 March
The Arc Show
Venue: Business Design Centre,
Islington, London N1
www.thearcshow.com

20 March
Ready Steady Light
Location: Rose Bruford College
Sidcup, Kent
www.sll.org.uk

21 March
Lighting Design Awards
Venue: London Hilton, Park Lane
www.lightingawards.com

29 March
Lighting Masterclass
One Building a Minute
(see 25 January)
Location: St James Park, Newcastle
www.sll.org.uk

15-20 April
Light and Building
Venue: Messe Frankfurt
www.light-building.messefrankfurt.com

26 April
Lighting Masterclass
One Building a Minute
(see 25 January)
Location: Space Centre, Leicester
www.sll.org.uk

24 May
Lighting Masterclass
One Building a Minute
(see 25 January)
Location: City Hall, London
www.sll.org.uk

9–12 June
Guangzhou International Lighting Exhibition 2012
Venue: China Import and Export Fair Complex, Guangzhou, China
www.light.messefrankfurt.com.cn

19-21 June
Lumenet 2012
Workshop for PhD students
Location: Arts Tower, School of Architecture, University of Sheffield
E: lumenet2012@sheffield.ac.uk

Lighting Masterclasses:
Masterclasses are kindly sponsored by Holophane, Philips, Thorn, Trilux, Tridonic and Wila. 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