

## **EDITORIAL**

#### Welcome to the TRILUX Akademie

Lighting professionals in the UK can now benefit from the international success of the TRILUX Akademie. From September 2015, the new Akademie site in Chelmsford will offer training on the very latest topics in the light and lighting sector.

Providing knowledge, reducing complexity and establishing expertise is the aim of the TRILUX Akademie. The demands of bespoke lighting solutions are increasing continuously with the rapid advancement in LED technology, including optimisation for ever more diverse and specific applications, higher energy efficiency requirements, new regulations, as well as increased customisation.

Light has become intelligent, activating, relaxing or transformative, and the latest specialist knowledge is vital to optimise the possibilities created by new products and applications. With an up-to-date CPD seminar menu, practical seminars, webinars and theme days, we can support you in finding your way in the world of light, within this dynamic market.

Our training is aimed at architects and designers, electrical consultants and contractors and everyone concerned in a professional way with light, with the aim of simplifying your daily work. All those evaluating, operating, purchasing and using lighting systems in companies will benefit from our practical training programme. In addition, the TRILUX Akademie is the perfect forum for networking between specialists and colleagues.

Is there something missing from our existing programme that you would like to learn more about? Simply contact us – we'd be glad to expand our offering.

We look forward to seeing you!



Rebecca Ryan Head of Akademie TRILUX LIGHTING LTD UK



Richard Holt Managing Director TRILUX LIGHTING LTD UK





#### Theme days

How do you best gain an overview and detailed insights into a complex specialist theme? With the TRILUX theme days. These offer participants a complete view of a specific technical area on one day and communicate valuable, compact expertise.

During this day, experts offer intensive and perhaps controversial insights from various angles, and there's enough time after each expert lecture for discussions and the exchange of information. The mixed groups of participants from diverse professional backgrounds make the theme days the perfect platform for networking among colleagues – and for looking beyond your own horizon.



#### Seminars

Highly practical know-how direct from the experts – TRILUX Akademie seminars focus primarily on providing you with optimum specialist support for any challenge. Seminars are carried out by specialists with many years of professional experience, communicating their specialist knowledge in a comprehensible and practical way.

The exchange of information, discussions and interactivity are focused on achieving optimum learning and training effects. The small group sizes, usually 10 to 15 participants, ensure individual supervision and a good working atmosphere.





#### Webinars

Education and training conveniently from your home office or workplace: online seminars by TRILUX Akademie are not only highly convenient but also reduce effort in terms of travel, time and costs. Participants are trained in virtual seminar rooms on the latest light and lighting themes, in less than one hour.

To fully exploit the possibilities of this online format, events are carried out by technical specialists having supplementary training as certified e-trainers. An important methodological element of the webinars is interactivity, meaning that online participants also have the opportunity to ask specific questions about the topic.



### Lunchtime Seminars (CPD)

The latest lighting knowledge for your employees: we'd be glad to individually organise CPD seminars on-site at your company. These seminars are hosted by highly qualified technical experts trained for teaching. They usually take one hour, are free, and all participants are given a CPD certificate.



## **LUNCHTIME SEMINARS**

Date	Title	Location	Format	Page
on request	Human Centric Lighting in Practise	At your workplace	CPD	17
on request	LED to the Present	At your workplace	CPD	17
on request	LG7 update	At your workplace	CPD	18
on request	New Light, new code, new approach	At your workplace	CPD	18
on request	Enhanced capital Allowance explained	At your workplace	CPD	19
on request	ENEC+: Putting product data credibility first	At your workplace	CPD	19

### **OCTOBER 2015**

Date	Title	Location	Format	Presenter	Page
8th (Th)	How light effects our daily lives	•	Webinar	Daniel Stabenau	15
22nd (Th)	Lighting expertise simply explained: The 4 photometric principles	<b>.</b>	Webinar	Daniel Stabenau	14

## **NOVEMBER 2015**

Date	Title	Location	Format	Presenter	Page
4th (We)	The effect of light on people	Manchester	Seminar	Helen Loomes and Guest speaker from SLL	12
18-19th (We-Th)	Future of Smart Light	London (Lux Live)	Discussion	Dietmar Zembrot	6
18-19th (We-Th)	Form and function in harmony – Lighting the interior	London (Lux Live)	Seminar	Helen Loomes	6
18-19th (We-Th)	Lighting for Dementia	London (Lux Live)	Seminar	Daniel Stabenau	6

## **DECEMBER 2015**

Date	Title	Location	Format	Presenter	Page
3th (Th)	How light effects our daily lives	<b>©</b>	Webinar	Daniel Stabenau	15
7th (Mo)	Lighting expertise simply explained: The 4 photometric principles	<b>@</b>	Webinar	Daniel Stabenau	14

## **JANUARY 2016**

Date	Title	Location	Format	Presenter	Page
14th (Th)	Digitally dimming with DALI	Chelmsford	Seminar	Terry Cramer	10
21st (Th)	ENEC+: Reliability of LED luminaire data	<b>•</b>	Webinar	Jamie Yates	14
28th (Th)	Fundamentals of Indoor Lighting	Chelmsford	Seminar	Chris Skinner	9

## **FEBRUARY 2016**

Date	Title	Location	Format	Presenter	Page
4th (Th)	Lighting expertise simply explained: The 4 photometric principles	<b>.</b>	Webinar	Daniel Stabenau	14
11th (Th)	Light for life: Human Centric Lighting	London	Theme Day	Helen Loomes, Daniel Stabenau	7
18th (Th)	Planning of indoor lighting with DIALux 4 for starters	Chelmsford	Seminar	Andrew Christopher	8

## **MARCH 2016**

Date	Title	Location	Format	Presenter	Page
3rd (Th)	Quick calculations: The TRILUX efficiency calculator		Webinar	Jamie Yates	15
21st (Th)	Light management today – pioneering technology and simple implementation	Chelmsford	Seminar	Terry Cramer	11





On 18-19 November 2015 LuxLive will be returning to ExCeL and will be joined by two other great events – lightspace.london and Strategies in Light Europe – to create a must-attend show for anyone involved in specifying, manufacturing or designing lighting.

Target group	Lighting designers, electrical consultants, architects, contractors, construction authorities, facility managers and everyone interested in implementing lighting.
Contents	Dietmar Zembrot: • Future of Smart Light
	Helen Loomes: • Form and function in harmony – Lighting the interior
	Daniel Stabenau: • Lighting for Dementia
Dates/time	Wednesday, 18/11/2015 to Thursday, 19/11/2015
Location	London, Excel

Participation fee / additional benefits

free

### LIGHT FOR LIFE: HUMAN CENTRIC LIGHTING



The lighting needs of people continuously change throughout their lives. Whether in schools, offices, during shift work, when shopping, in hospitals or care homes – differing demands are made on lighting in accordance with the specific work or living situation. Light where the well-being of people is focused on is becoming increasingly important, and we show you as part of this theme day how dynamic and multifaceted Human Centric Lighting is, what has already been implemented, what is theoretically possible and where the trip is going in the future. Find out the most important background information and technical possibilities and gain a complete overview of the topic.

Targ	et	ar	out	)

Lighting designers, electrical consultants, architects, contractors, construction authorities, facility managers and everyone interested in implementing lighting matched to the needs of people.

#### Number of participants

Maximum of 80

#### **Contents**

What is Human Centric Lighting? Which non-visual effect does light have on people? Find this out and get further basic information in the introductory lecture by the TRILUX Akademie HCL expert:

#### Helen Loomes, Daniel Stabenau:

• The biological effect of light on people

Keynote guest speakers to present the latest insights into the effects of light on our lives. Please check the website for updates.

Q & A Session between the experts and participants will be a key aspect of this theme day.

Dates/time	9

Thursday, 11/02/2016

#### Location

London

Registrations at www.trilux-akademie.com









Booking number: TGDE0707 Participation fee / additional benefits:

free



# PLANNING OF INDOOR LIGHTING WITH DIALUX 4 FOR STARTERS



Target group	Lighting designers, electrical consultants, contractors and facility managers
Number of participants	Maximum of 15
Preconditions of the seminar	«Basics for planning indoor lighting» or comparable expertise
Learning aim	The seminar will teach you the essential basics of planning indoor lighting systems using DIALux planning software. Relevant planning stages will be carried out with the help of examples including the definition of planning projects, the identification and definition of required input parameters and the use of simplified planning possibilities and rapid result documentation.
Contents	DIN EN 12464-1 planning specifications     Lighting concepts     Luminaire selection according to project-specific demands     Positioning of luminaires via Dialux     Dimensioning luminaire luminous flux     Selection, types and number of lamps     Inputting planning parameters     Calculation of lighting system, calculation parameters     Control and analysis of planning results     → correcting input parameters     Documentation of results     Efficient work with DIALux
Dates/time	Thursday, 18/02/2016
Location	Chelmsford
Certificate	Participation certificate

Registrations and further locations/dates at www.trilux-akademie.com







Booking number: SEDE0102 Participation fee / additional benefits:

350,- £ plus VAT / includes catering and seminar documents



# FUNDAMENTALS OF INDOOR LIGHTING



Target group	Lighting designers, electrical consultants, architects, contractors, facility managers
Number of participants	Maximum of 15
Learning aim	The seminar will teach you fundamental knowledge about the application of natural and artificial lighting at places of work. You will gain sufficient knowledge about relevant occupational safety regulations and rules of technology to help you gain an extensive overview of the safety and health of employees with existing lighting situations. You will also be able to read and evaluate photometric lighting designs.
Contents	Basics of workplace illumination Legislative basics and technical rules Requirements of lighting Natural lighting (daylight) Criteria for the selection and evaluation of lamps and luminaires Measuring lighting Evaluation of existing lighting installations Evaluation of the results of lighting design Learning success control
Dates/time	Thursday, 28/01/2016
Location	Chelmsford
Certificate	Participation certificate

Registrations and further locations/dates at www.trilux-akademie.com









350,- £ plus VAT / includes catering and seminar documents



# DIGITALLY DIMMING WITH DALI





Target group	Design Engineers, lighting designers, trade, industry
Number of participants	Maximum of 15
Requirements	Basic knowledge with the planning and installation of luminaires
Learning aim	The seminar will teach you the meaning, performance capability and peripheral conditions of the DALI interface for professional light control. Practical exercises will give you basic knowledge about planning and commissioning DALI control units and DALI luminaires.
Contents	Definition of the interface Peripheral conditions for planning and commissioning Simple light controls with DALI and TouchDim Broadcast or individual addressing? What is DALI monitoring capable of? DALI as a bus, group control, scene control, light control, DALI systems DALI and building management: gateway integration Practical example of LiveLink – simple DALI application
Dates/time	Thursday, 14/01/2016
Location	Chelmsford
Certificate	Participation certificate

Registrations and further locations/dates at www.trilux-akademie.com







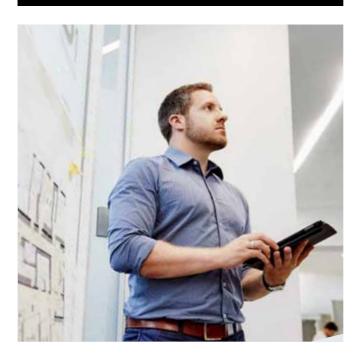


Booking number: SEDE0512 Participation fee / additional benefits:

350,- £ plus VAT / includes catering and seminar documents



# LIGHT MANAGEMENT TODAY – PIONEERING TECHNOLOGY AND SIMPLE IMPLEMENTATION



Target group	Designers, engineers and installers who plan and install modern light management systems.
Learning aim	In a mix of lecture and workshop you will gain fundamental knowledge about modern light management, and become familiar with the possibilities of practical planning and implementation of light management systems.
Contents	Why light management? Efficiency: energy saving with light management Comfort: Human Centric Lighting and control needs I undamental knowledge: Principles: daylight control, scenes and presence detection Sensor technology: which sensor for what purpose? What is DALI? Planning and implementation: light management in various applications Overview: current technologies and concepts Practical example: LiveLink – how light management becomes simple at last
Dates/time	Thursday, 21/03/2016
Location	Chelmsford
Certificate	Participation certificate
-	

Registrations and further locations/dates at www.trilux-akademie.com









Booking number: SEDE0522 Participation fee / additional benefits:

350,- £ plus VAT / includes catering and seminar documents



# THE EFFECT OF LIGHT ON PEOPLE



Target group	Lighting designers, electrical consultants, architects, contractors, construction authorities, facility managers and everyone interested in the biological effect of light on people.
Number of participants	Circa 30
Learning aim	The participants will acquire basic knowledge about the effects of light on people, their health, mood and performance. This seminar will inform you about which non-visual effects light has on us and our circadian rhythm, and how it influences our performance capability. You will find out how light functions as a synchroniser for our inner clock, why light has an activating effect and what contribution professional dynamic lighting can afford.
Contents	What the eye sees and the person perceives What is light? 24 hours: the human circadian rhythm Controlled by hormones: activity and relaxation The master clock: our inner clock The sun as an example: biologically effective light LG7: Featuring a preview of the update by Guest Speaker from the SLL
Dates/time	Wednesday, 04/11/2015, 5.30-7.30 pm
Location	Manchester
Certificate	Participation certificate

Registrations and further locations/dates at www.trilux-akademie.com









Booking number: SEDE0710 Participation fee / additional benefits:

100,- £ plus VAT / includes catering and seminar documents







#### Webinars

Education and training conveniently from your home or workplace: online seminars by the TRILUX Akademie are not only highly convenient but also reduce effort in terms of travel, time and costs. Participants are informed in virtual seminar rooms about the latest light and lighting themes in less than one hour.

To fully exploit the possibilities of this online format, events are carried out by technical specialists having supplementary training as certified e-trainers. An important methodological element of the webinars is interactivity, meaning that online participants also have the opportunity to ask specific questions about the topic.

Duration	approx. 1 hour
Location	The webinar is live at your own desk.
Technical preconditions	You need Internet access, telephone or VoIP (microphone and loudspeaker or headset).

# LIGHTING EXPERTISE SIMPLY EXPLAINED: THE 4 PHOTOMETRIC PRINCIPLES

Target group	Lighting beginners aiming to work with light professionally
Learning aim	The webinar will introduce you to the photometric principles: what is luminous flux, luminous intensity, illuminance and luminance? Experts will answer your individual questions.
Contents	The webinar communicates the four photometric principles of lighting in a simple and understandable way:  • Luminous flux • Luminous intensity • Illuminance • Luminance
Dates/time	Thursday, 22/10/15, 1.00 -2.00 pm Monday, 07/12/15, 1.00 -2.00 pm Thursday, 04/02/16, 1.00 -2.00 pm









**Booking number:** WEDE0517 Participation fee / additional benefits:

free



www.trilux-akademie.com/ WEDE0517



# **ENEC+: RELIABILITY OF LED LUMINAIRE DATA**









rarget group	operators of lighting systems
Learning aim	Light users are confronted with a wide diversity of performance promises for LED products – but how far can you trust these? This webinar will inform you about the content, practical relevance and user benefits of the new 'ENEC+' designation.
Contents	Basics of the performance standard for luminaires

• Requirements of LED luminaires

• Measurement values

• User benefits

• ENEC+ as a tender characteristic?

Dates/time Thursday, 21/01/16, 1.00 -2.00 pm Booking number: **WEDE0525** Participation fee / additional benefits:



www.trilux-akademie.com/ WEDE0525

Target group

# QUICK CALCULATIONS: THE TRILUX EFFICIENCY CALCULATOR

Target group	Electrical & energy consultants, energy representatives
Requirements	Fundamental experience in lighting design
Learning aim	You will get to know the possibilities and operation of the TRILUX online efficiency calculator for lighting and also become familiar with the presetting of relevant parameters.
Contents	What can the efficiency calculator do? Pre-settings and personalisation Configuring systems The influence of light management Calculation and evaluation Pay-back and total profit CO <sub>2</sub> evaluation Graphic display of results Report
Dates/time	Thursday, 03/03/16, 1.00 -2.00 pm









Booking number: WEDE0610 Participation fee / additional benefits:

free



www.trilux-akademie.com/ WEDE0610

# HOW LIGHT EFFECTS OUR DAILY LIVES

Target group	Lighting designers, electrical consultants, architects, contractors, construction authorities, facility managers and everyone interested in the biological effect of light on people.
Learning aim	Light functions as a synchroniser for our inner clock and light has an activating effect. This webinar will inform you about which non-visual effects light has on us and our circadian rhythm, and how it influences our performance capability.
Contents	<ul> <li>24 hours: the human circadian rhythm</li> <li>Controlled by hormones: activity and relaxation</li> <li>The master clock: our inner clock</li> <li>The sun as an example: biologically effective light</li> </ul>
Dates/time	Thursday, 08/10/15, 1.00 -2.00 pm Thursday, 03/12/15, 1.00 -2.00 pm









Booking number: WEDE709 Participation fee / additional benefits:

free







#### Lunchtime seminars (CPD)

Whilst all of our Akademie training can be logged as part of your Continuous Professional Development, our Lunchtime Seminars are specifically designed to meet that aim in the most convenient way possible for you.

We understand that your working day is already extremely full and so, as the name suggests, these seminars are held during your lunchbreak, taking no longer than an hour, with lunch provided by us. Our contact team will work with your company's CPD organisor to make the booking and delivery of a Lunchtime Seminar in your premises seamless.

These free seminars are hosted by highly qualified technical experts, trained for teaching. Following the seminar all participants will receive a copy of the presentation and a CPD certificate via email. Please note that some of our seminars are CIBSE accredited, please look for the CIBSE logo in this program, whilst others require self-certification.



# HUMAN CENTRIC LIGHTING IN PRACTISE



If we feel strengthened by the morning sun or relax when walking in the evening sun, this is not just imagined and is not accidental either, because sunlight changes its colour composition during the course of the day to control many biological processes in the human body. For example, the blue light component in the morning is especially high to provide an activating effect that promotes concentration. In the evening on the other hand, the blue component in sunlight lessens while red increases – the melatonin level and fatigue increase. Because people mostly spend their time in closed rooms though, these important impulses influencing the biological rhythm are often lost. Intelligent, biologically effective lighting solutions offer an alternative.

Target group	Design Engineers, Electrical Consultants, Lighting Designers, Contractors, Architects & Facility Managers
Contents	<ul> <li>Focussing on human biological response to lighting.</li> <li>Recapping the biology of light and its effect on our circadian rhythms, human well-being and health.</li> <li>Case studies on lighting in education projects.</li> <li>Looking at research to improve the environment for elderly people &amp; dementia wards.</li> </ul>
Duration	approx. 1 hour
Certificate	Participation certificate









No open registration.

## LED TO THE PRESENT

Seminar participants will receive an all-round overview of the technological features and requirements of LED in general lighting. Our expert will inform you about the technical status, the uses and applications as well as the future prospects of this technology.

Target group	Design Engineers, Electrical Consultants, Lighting Designers, Contractors, Architects & Facility Managers
Contents	LED market and current development Forces driving LED forward, Standards     Technical Basics LED design, Electrical properties, Light colour/binning, Optical Systems and usage, LED Drivers, Thermal Management, Summary: 9 criteria for LED
Duration	approx. 1 hour
Certificate	Participation certificate









No open registration.

The Society of Light & Lighting's Lighting Guide 7 gives advice on the design and operation of office lighting schemes and installations for all users of office buildings and associated areas. In this seminar our expert takes you through the key elements of the guide and highlights the recent updates which were published in latter part of 2015.

Target group	Design Engineers, Electrical Consultants, Lighting Designers, Contractors, Architects & Facility Managers
Contents	<ul> <li>An overview of the updates to the SLL's updated LG7, Design Guide for Office Lighting</li> <li>Detailed look at the fundamental aspects of LG7 design process</li> <li>Working with different spaces including those speculative spaces for unknown users</li> <li>Energy saving and LMS</li> <li>Project examples</li> </ul>
Duration	approx. 1 hour
Certificate	Participation certificate









No open registration. CPD Available from January 2016

# NEW LIGHT, NEW CODE, NEW APPROACH



The world of Lighting is growing ever more complex, thanks in no small part to the arrival of LED technology. In this seminar our expert filters through the latest information and delivers it to you in a digestible form. This seminar focuses in particular on current planning standards as set out in EN 12464, the European code for the lighting of workplaces.

Target group	Design Engineers, Electrical Consultants, Lighting Designers, Contractors, Architects & Facility Managers
Contents	<ul> <li>An introduction to the European code for the lighting of workplaces</li> <li>Uniformity v Background</li> <li>Developing a scheme around a task or activity</li> <li>Cylindrical illumination and modelling</li> <li>Energy Savings</li> <li>Project examples</li> </ul>
Duration	approx. 1 hour
Certificate	Participation certificate









No open registration.

# ENHANCED CAPITAL ALLOWANCE EXPLAINED



The government's Enhanced Capital Allowance Scheme encourages businesses to invest in specific energy-saving technology, by allowing you to offset equipment costs against taxable profits, providing a strong incentive to invest in energy-saving equipment, including LED lighting.

With the aid of case studies, our presenter will talk through the key points to consider when applying for the scheme and help you to overcome some of the barriers.

Target group	Design Engineers, Electrical Consultants, Lighting Designers, Contractors, Architects & Facility Managers
Contents	The benefits and new requirements of the scheme The additional benefits of using energy efficient schemes  How to overcome some of the barriers that prevent uptake of the ECA An industrial case study that successfully claimed the allowance  An office lighting case study currently updating to LED which will meet the new requirements
Duration	approx. 1 hour
Certificate	Participation certificate









No open registration.



# ENEC+: PUTTING PRODUCT DATA CREDIBILITY FIRST

With the ENEC, Europe gained a uniform label for electrotechnical products regarding electrical, thermal and mechanical safety. The new ENEC+ label now certifies the credibility of product data, particularly with LED luminaires, by a neutral inspection authority. In the seminar our experts give an overview of the following:

Target group	Design Engineers, Electrical Consultants, Lighting Designers, Contractors, Architects & Facility Managers
Contents	<ul> <li>Basics of the performance standard for luminaires</li> <li>Requirements of LED luminaires</li> <li>Measurement values</li> <li>User benefits</li> <li>ENEC+ as a tender characteristic?</li> </ul>
Duration	approx. 1 hour
Certificate	Participation certificate

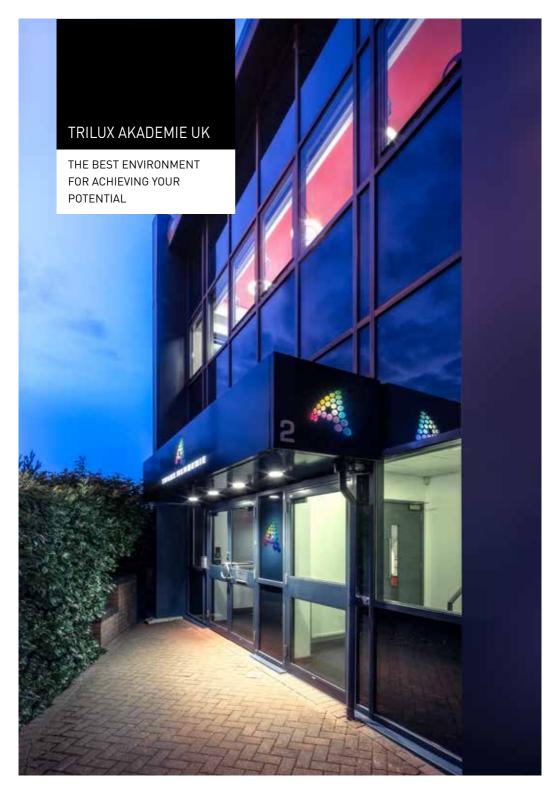








No open registration.

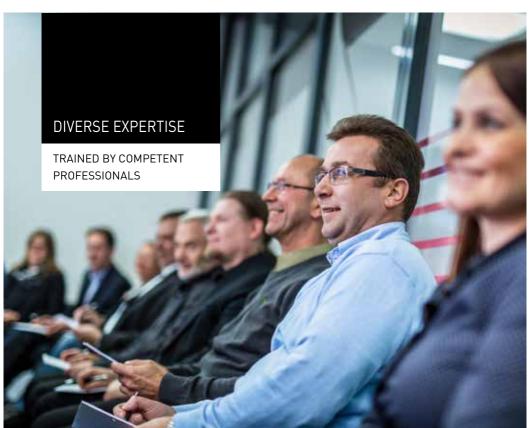




# Fresh ideas need room – and the better the room is designed the easier it is to think and learn

The TRILUX Akademie is equipped according to the very latest standards, also at the Chelmsford site, and bright and friendly lighting in each room shows how ideal light helps towards a highly pleasant atmosphere for learning. The right surroundings are waiting for you for every topic: display areas, training and meeting rooms and work areas for practical experiences.

















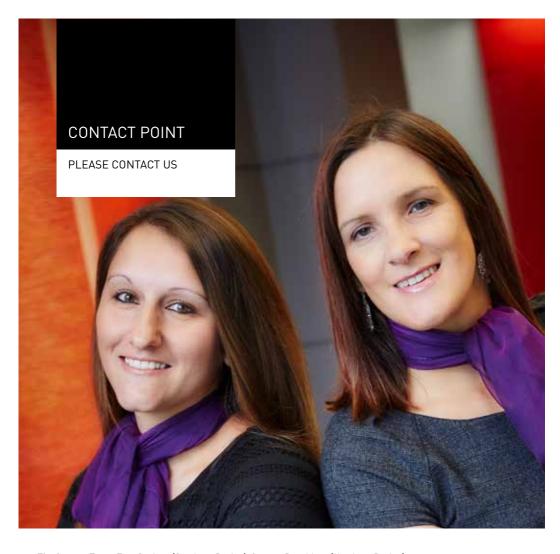
Our presenters: Jamie Yates MSLL



Helen Loomes MSLL



**Andrew Christopher** 



The Contact Team: Tara Sapiano (Southern Region), Gemma Donaldson (Northern Region)

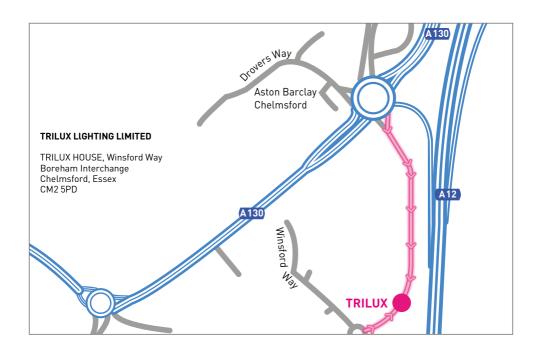
The contact team are here to help you with your registration queries and booking CPDs.

If you have a question around the TRILUX Akademie programme, please contact the team for advice.

### TRILUX LIGHTING LIMITED

TRILUX HOUSE, Winsford Way Boreham Interchange Chelmsford, Essex CM2 5PD Tel +44 12 45 46 34 63 Fax +44 12 45 46 26 46 akademie@trilux.co.uk

www.trilux.co.uk



www.trilux-akademie.com 15/58-Acad-GB 093 993