

BCEA & IES

Advanced Lighting Seminar

Wednesday, October 7, 2015

Executive Suite Hotel & Conference Centre

Burnaby, BC

8:00 am - 4:30 pm

Topics

- Complying with ASHRAE/ IES Standard 90.1-2010 for lighting: 10 points to remember
- Advancements in lighting controls have changed how we Plan for and Wire them
- Making the best of conventional and LED technology in commercial and industrial applications
- Lighting beyond LEDs

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CREDITS FROM NCQLP**



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Price:

\$150 + GST

**BCEA & IES Members
receive 15% discount:**

\$127.50 + GST

Contact:

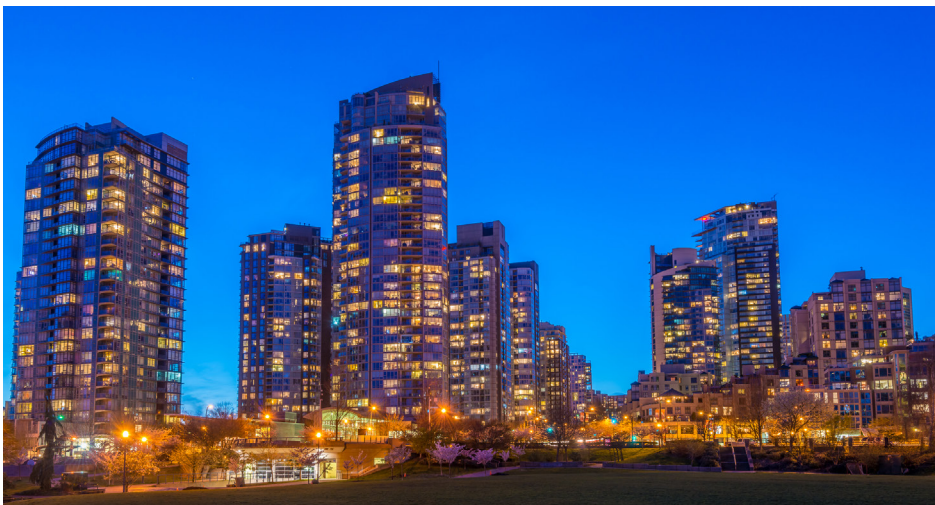
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British Columbia Electrical Association

*Building Community
through Education &
Advocacy*



Illuminating
ENGINEERING SOCIETY

BCEA & IES ADVANCED LIGHTING SEMINAR DETAILED INFORMATION

The Vancouver Section of the Illuminating Engineering Society in partnership with BC Electrical Association invites you to attend a full day Advanced Lighting Seminar.

SEMINAR ABSTRACTS AND SPEAKERS

Session 1: Complying with ASHRAE/ IES Standard 90.1-2010 for lighting: 10 points to remember

In December 2013 the British Columbia Building Code was updated with a new set of requirements for Part 3 buildings' energy performance directly based on the NECB 2011 and ASHRAE/ IES Standard 90.1-2010 documents. As a result, the energy performance of the lighting systems has increased significantly. However, while the general lighting design trends have adjusted well to the new standards, after almost 2 years of enforcement some particular requirements are still not effectively comprehended.

This presentation will reveal some important details of the lighting and electrical power requirements of ASHRAE/ IES Standard 90.1-2010 that lighting designers, electrical engineering consultants, green building consultants need to make sure of when complying with the current BC Building Code energy requirements.

Session 1 Speaker: Nikolay Smirnov, LC, P.Eng, M.Sc. is a Specialist Engineer with BC Hydro (BC, Canada) working in the Power Smart Engineering department since 2008. Nikolay's work history includes over 20 years of practicing in the fields of lighting engineering, energy management, lighting design and computer lighting modeling and visualization in Asia, Europe, and North America. He is a Professional Engineer registered in British Columbia and Lighting Certified (LC) by NCQLP.

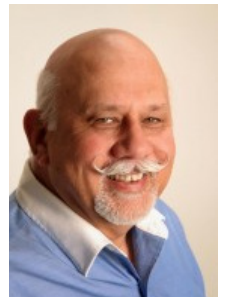


Nikolay is an active member of Illuminating Engineering Society (IES) serving on the IES Energy Management & Lighting Upgrade and Industrial Lighting Committees as well as on the local IES Vancouver Board of Managers. He regularly presents to the lighting community and building owners on the topics of energy efficiency in lighting design, integrated building design, building code energy requirements, utility incentive programs.

Session 2: Advancements in lighting controls have changed how we Plan for and Wire them.

Presentation will look at impact of wiring for lighting controls, no longer just power; you also have to be mindful of the network topology. Some best practices to select and plan for a successful installation, along with improvements in LED driver control technology.

Session 2 Speaker: Born and raised in British Columbia, **David Rawlings** has been an integral part of the dynamic lighting control industry for many years. Keen insight, a dedication to constant innovation as well as a fundamental understanding of leading edge technology have made David a key asset in many major lighting control projects. David holds the position of Manager of Controls group at CDm2 LIGHTWORKS. David was instrumental in developing the diurnal lighting system for the NICU ward in the new tower at Surrey Memorial Hospital. A family man, David is active in the community and has spent 27 years with the Canadian Armed Forces Communication Command Reserve.



Session 3: Making the best of conventional and LED technology in commercial and industrial applications

The variety of lighting related products has never been greater and consumers may find it difficult to choose the solution(s) that best suit their needs. To complicate matters, the same light source that works for one space, may not work for another.

'One-size' does not fit all, and this presentation will identify several traditional as well as LED sources that can be used in a variety of applications. Case studies will be presented to help illustrate this concept.

Session 3 Speakers: Brian Friedman, P.Eng., LC is a senior electrical engineer with BC Hydro's Power Smart Engineering department. He has provided electrical and lighting design services since graduating in 1979 from the department of Electrical Engineering at the University of Manitoba.



Brian became a member of the NCQLP (National Council on Qualifications for the Lighting Professionals) in 1999. After practicing as a consulting engineer for nearly 20 years, he then became a member of the electrical wholesaling and distribution industry, providing lighting design services as they related to sales. Brian joined Power Smart in 2009 and has been assisting the consulting and design communities in an effort to educate and update their knowledge of BC Hydro's incentive programs.

Casey Gaetz, LC, Associate, Senior Electrical Designer (Associate), brings over 40 years experience in the design of electrical systems for commercial, institutional, industrial and large retail projects. Casey's experience with both new building design and existing building retrofits provides an excellent background for optimizing electrical and lighting systems. He heads up our team for electrical energy retrofits as well as new and renovation projects.



Casey is also registered as a LC which is a designation for a certified lighting designer by NCQLP (National Council on Qualifications for the Lighting Professions) a requirement for doing lighting project with BC Hydro!

Session 4: Lighting beyond LEDs

Although LEDs are poised to irreversibly change the lighting industry is the convergence of these digital light sources with (digital) intelligent controls that will transform the world. The next few years will mark an exciting chapter in the convergence of disparate systems within commercial, municipal and industrial applications. Providing services in addition to the visual scope, network-powered LEDs can be added, moved, and changed like other plug-and-play network devices. Presentation will explore SSL's huge potential for changes not only for the lighting industry but for communications, financing and connectivity.

Session 4 Speakers: Dr. Cristian Suvagau, P.Eng., LC has been practicing and teaching architectural lighting design and energy efficiency in Europe and North America for over 25 years. A senior lighting and energy management engineer with BC Hydro, he focuses on lighting DSM programs and projects in British Columbia.

Cristian is a Professional Engineer, current President of the BC Chapter of the Illuminating Engineering Society of North America (IESNA) and member of the Canadian National Committee of the International Commission on Illumination (CNC/CIE). Cristian is a Lighting Certified (LC) professional and a Certified Energy Manager (CEM). He holds a Ph.D in lighting from the Technical University of Construction in Bucharest, Romania and participates actively on committees of the Canadian Standards Association (CSA), DOE Municipal SSL Consortium, Consortium for Energy Efficiency (CEE), Design Lighting Consortium (DLC) and many others to develop performance standards for LED and lighting products.



Dejan Lenasi, PEng.MSc.EE. is a specialist engineer Research & Development with Philips Lighting, NA. Dejan is Technical Expert with in depth understanding of existing and upcoming product safety and energy efficiency standards requirements. He was serving on national and international standards committees representing Canadian Standards Association, industry interests and advocating public wellbeing.

Dejan had a long experience in the industry making him among the foremost authority in LED lighting technology. For a past 20 years, Dejan has made significant contribution to product safety and understanding of safety principles. He was/is currently involved in several Technical Committees and Task Groups including CSA, UL, IEEE, IES, CANENA. Dejan is working closely with industry and government organizations including SCC, NRCAN, BC Safety Authority, International Association of Electrical Inspectors (IAEI) and numerous Hydro organizations (BC, ON, MA, NF).

