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# LIGHTNEWS



*The Newsletter of  
Illuminating Engineering Society of  
North America  
B.C. Section 37  
Region 04, Northwest  
April 2004 – Spring Edition*



## *President's Comments*

by Darren Luce, LC  
IESNA BC Section President

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Be sure to visit the IES BC Section's home page at:  
[www.iesbc.org](http://www.iesbc.org)



**It's Spring time again in Vancouver, but it feels more like Summer. No more play-off's but more play time!**

Welcome to the Spring 2004 Edition of the IES BC Section's Newsletter!

The Lighting Industry has been very active over the last three months.

The IALD held their annual conference in Vancouver at the end of January.

Lightfair International 2004 was held in Las Vegas March 29th to April 2nd. Please see article in this issue.

I just returned from Light + Building held in Frankfurt April 18th to 22nd. The mammoth international trade fair and technology congress took place at the Messe Frankfurt complex in over 1 million sqft of space spread over 15 exhibition halls.

Altogether 1926 exhibitors from 53 countries showcased their products and technologies to 116,000 visitors including over 20,000 specifiers. IES BC section member companies BL Innovative Lighting and TIR Systems both exhibited at Light + Building.

As at Lightfair, LED technologies dominated the technical lighting category. The leading LED manufacturers are racing toward 1000 lumen packages with both Lumileds and Toyoda Gosei demonstrating such high flux devices. Luminaire manufacturers are starting to envision a Solid State Lighting future demonstrating an increasing number of products for both exterior and interior illumination incorporating both RGB and white LED sources.

Fibre Optics continues to be a large part of the technical lighting category as new sources increase the effectiveness and of this popular optical technology.

Automated controls were also of great interest in Europe where energy conservation is a huge market driver as the Euro zone becomes increasingly green.

The scale and success of the biannual Light + Building event forced me to ponder the question of making Lightfair a biannual event in North America alternating with Light + Building in Europe. It is no secret that some of the large industry players in North America are forcing this question to the surface.

After attending and exhibiting at both events within two weeks of each other I think the idea has merit. Lightfair would become a more international event that would better represent our industry with broader exhibitor and visitor involvement. The alternative years to Lightfair could feature a purely educational conference building on the successful Lighting Institute and Masters Courses held this year in conjunction

with Lightfair. IESNA must seriously look at this option to rejuvenate Lightfair and ensure its continued success.

Darren S. Luce, LC  
IESNA BC Section President

## Editorial

With construction industry in full upswing, everybody is getting busy.

After a quiet March, April has been indeed a crowded month for all the lighting practitioners in BC eager to upgrade their knowledge skills or to have a hands-on experience with new products. First, the week-long Lightfair in Vegas, then the LEED-BC seminar and the two back-to-back IES-BC seminars: Daylighting webcast and the Energy Efficient Architectural Lighting Seminar and Trade Show.

To relax you, in this Newsletter issue we will (only) present the awarded Lightfair products and bring you some (hot) news from the industry.

We hope to see all of you at the annual IID Awards Gala at the Crown Plaza Hotel. Have fun and enjoy your favorite Newsletter!

Cristian Suvagau, Editor

## Calendar of Events

Only three events left:

- |         |  |
|---------|--|
| May 14  | <i>IIDA + Vision Awards Gala Evening</i><br>Crow Plaza Hotel<br>6:30pm – 10:30pm               |
| May 27  | <i>Lightfair Review + Progress Report</i><br>Luncheon: 11:30am – 1:30pm, Arbutus Club          |
| June 13 | <i>Sunday Picnic at Stave Falls</i><br>All day event, Stave Falls Old Power Plant, Maple ridge |

## IIDA 2004

After judging at the BC Section and Pacific North West Region, following are the Awarded Projects:

### Gleneagles Community Centre, West Vancouver

Lighting Designers: Alan Bonisteel, Clarissa Raymundo, John Patkau, Patricia Patkau, and David Shone  
[Section Award](#),  
[PNW Region, Osram Energy and Environmental Design Award](#)

### T+T Supermarket, West Edmonton Mall

Lighting Designers: Ray Toh, Clarissa Raymundo, Paul Chiu, Cindy Lee and Paul Lam  
[Participation Award](#)

### Central City, Interior

Lighting Designers: Michael Graham, Bill Lam, Thom, Chris Doray and James Brown  
[Section Award](#)  
[PNW Region, Guth Award](#)  
[Advanced to IIDA International level](#)

### Central City, Exterior

Lighting Designers: Michael Graham, Bill Lam, Bing Thom, Chris Doray and James Brown  
[Section Award](#)  
[PNW Region Waterbury Award](#)

### Waterfront C + D Lobby

Lighting Designer: Tanya Lucente  
[Participation Award](#)

### The Carina Lobby

Lighting Designer: Tanya Lucente  
[Participation Award](#)

### The Carina Swimming Pool

Lighting Designer: Tanya Lucente  
[Participation Award](#)

### Electronic Arts, Vancouver

Lighting Designer: Margot Richards  
[Section Award](#), on to regional

### The Offices of MCMP Architects & MCM Interiors, Vancouver

Lighting Designer: Margot Richards  
[Section Award](#), on to regional

### Kiwanis Village Lodge, Nanaimo

Lighting Designer: Joseph M. Scott  
[Participation Award](#)

### Lynn Canyon Visitors Centre, North Vancouver

Lighting Designer: Joseph Scott and Douglas McMillan  
[Section Award](#), on to regional

### Dragon Bones Exhibit, Royal BC Museum, Victoria

Lighting Designer: Mark Dickson  
[Section Award](#)  
[PNW Region, Guth Award](#)

### Vacation House,

Lighting Designer: Shelley Penner and Robin McIntosh  
[Section Award](#), on to regional

## News Updates

### Surrey Central City wins architectural "Oscar" in France.

*Excerpted from The Province and Canadian Architect*



This year's IIDA entry of Surrey Central City complemented the list of awards the impressive building was nominated for.

On March 11, the prestigious *Marche Internationale des Professionnels de l'Immobilier* (MIPIIM) awarded in Cannes, France the Special Jury Prize to Bing Thom Architects for the Surrey Central City building over other 14 finalists.

The MIPIM Awards is considered the "Oscars" of the property industry. A total of 15 international projects in five project categories were nominated. These projects had to satisfy the following criteria: infrastructures and facilities access, site integration, originality of the concept, technical and architectural qualities and integration of services. Bing Thom Architects' Surrey Central City was nominated under the Best Business Centre Category alongside two Lord Norman Foster projects. This year the Jury honoured the Surrey Central City project with the most prestigious award: The Special Jury Prize. Bing Thom had envisioned the creation of a new city centre for the City of Surrey, Canada with a 1.7 million sq. ft mixed-use development that would integrate an existing regional shopping mall with a new major university (Simon Fraser University has recently announced that Surrey Central City will be home to its third campus in BC) and office development. "I am honoured that the Jury has recognized the architectural and urban planning complexities of the Surrey Central City project to grant it the Special Jury Prize at this year's MIPIM Awards," states Bing Thom, the Principal of Bing Thom Architects. "I always say that it takes a great client to make a great project, and Bing Thom Architects is proud to share this award with ICBC Properties Ltd. They had the courage and vision to believe that we would deliver a building of excellence." Bing Thom is a recent recipient of the Order of Canada, for his contribution to architecture, and more recently the Golden Jubilee Medal for his outstanding service to his country.

The building is easily accessible, right by the Surrey Central skytrain station, and you are invited to visit and admire it for yourself.



## Looking for Lighting Industry Talent?

**Mankajee (MK) SHRESTA**, PEng  
LIGHTING ENGINEER

10+ years of indoor and outdoor lighting design. Extensive international experience. Registered Professional Engineer in Ontario and BC.

Member of IESNA, CIE and Nepal Illumination Society

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## LightFair 2004

**LightFair 2004 New Product Winners Announced** (courtesy of Lighting.com)

With 222 new products this year, the New Product Showcase highlighted more products than ever before in LightFair history. Six "best of the best" awards were granted, and 25 products received "Best of Category" recognition. New categories to the showcase this year included LED lamps and Daylighting Integration products.

Without further ado, the winners are:

### Top Honors

The seven winners of six top awards this year are:

- **Best New Product of the Year**



**LINE** by [io Lighting](#) is an exterior LED-based linear luminaire for applications where "light pollution" and "light trespass" are an issue.

- **Design Excellence Award**

**Planterius Series** by [Zaneen Lighting](#) is a 120-volt line voltage system that can have up to 3,000 watts per run, with a maximum of 1,500 watts per circuit. It is free of voltage drops, as no transformers are required.

- **Judges' Citation Award**

[Mood Light Reflector](#) by Traxon USA is a modular, programmable, color-changing LED panel with a reflective surface. The panel can be operated via remote or DMX control. It was singled out for this honor for being decorative, functional and energy efficient.

- **Energy Award**



[Enlux LED Flood](#) by Enlux Lighting is an LED flood light that generates the equivalent light of

60-watt incandescent flood lights, while utilizing one-third of the power and offering a longer life.

- **Technical Innovation Award**

**FEBnet™** (Fluorescent Emergency Ballast Network) by [The Bodine Company](#) is an automated fluorescent emergency ballast network that automatically tests and monitors emergency lighting and records test results for review by AHJ.

- **Craig Roeder Award**



[Versa™ TILE](#) by Element Labs, Inc. is a glowing LED light tile

controlled by video signal that generates stunning visual effects when used in large arrays.

### Category Award Winners

- **Incandescent Lamps (4 entries)**

**Eurostar™ Refleko™ MR-11** by [USHIO America, Inc.](#) These lamps are well suited for enclosed or recessed fixtures. They are available in 20W and 35W in spot and flood beam spreads.

- **Fluorescent Lamps (10 entries)**

**SEAMLESSLINE** by Nippo Electric Co., Ltd. This is the only fluorescent lamp that lights from end to end and can light uniformly without dark zone in continuous rows.

- **HID Lamps (2 entries)**

The **GE CMH20 PAR30/820 Ceramic Metal Halide** by [GE](#)

- [Consumer & Industrial](#) This exclusive 20-watt PAR30 ceramic metal halide lamp provides 1200 lumens, 3000 K color and 10,000 hours of life.
- **Specialty Lamps (5 entries)**  
 RefleXaire by Illumination Management Solutions, Inc. (IMS) This LED aircraft reading light meets all FAA specifications for light output in both the general and commercial aviation markets, with only 3 watts of Luxeon LED.
  - **LED Lamps (15 entries)**  
[Enlux LED Flood](#) by Enlux Lighting This is an LED flood light that generates the equivalent light of 60-watt incandescent flood lights, while utilizing one-third of the power and offering a longer life.
  - **Recessed Downlights, Wallwashers and Accent Lights (24 entries)**  
 L-7000 Series Night Lights by [The Designers Edge](#) This is an in-wall LED dusk-to-dawn night light.
  - **Tracklighting, Low Voltage Cable and Rail Systems (10 entries)**  
 Planterius Series by [Zancen Lighting](#) This 120-volt line voltage system can have up to 3,000 watts per run, with a maximum of 1,500 watts per circuit. It is free of voltage drops, as no transformers are required.
  - **Troffers, Commercial Recessed and Surface Fixtures (10 entries)**  
[Destiny CV](#) by TTR Systems Ltd. It provides an even surface glow and paint-with-color function, offering a true asymmetric throw from a concealed linear source, correctly controlling the over-brightness at the mounting point, with a minimal setback distance of 6 inches.
  - **Suspended Indirect and Bi-directional Pendants (6 entries)**  
 Milan Series by [Manning Lighting](#) The robust product architecture and multiple design options elevate this fresh approach to lantern pendant design with performance downlight lamp packages.
  - **Decorative Sconces, Chandeliers, Ceiling, Table and Task Lamps (14 entries)**  
 Corall by [Smedmarks Inc.](#) The Corall is a decorative linear T5 fluorescent pendant luminaire.
  - **Site and Roadway Lighting (4 entries)**  
[GELcore LED Light Kit](#) from GELCore LED retrofit lighting system for outdoor illuminated street signs is designed to replace fluorescent system in OEM or end-user applications.
  - **Flood, Facade and Sport Lighting (15 entries)**  
 LINE by [io Lighting](#) An exterior LED based linear luminaire for applications where "light pollution" and "light trespass" are an issue.
  - **Landscape and Fountain Lighting (18 entries)**  
 Bridge by [FAD Lighting/Delta Light USA](#) A contemporary bollard collection that floats a glowing open square, which artfully redirects light downwards with consideration of Dark Sky concerns.
  - **Fiber Optic and Remote Source Lighting (3 entries)**  
 Adjustable Accent Light by [Fiberstars, Inc.](#) Patented non-imaging optics and proprietary fiber replaces eight 50-watt halogen lamps with no heat, UV or voltage at the fixtures.
  - **Theatrical and Entertainment Lighting (6 entries)**  
[VersaTMTILE](#) by Element Labs, Inc. A glowing LED light tile controlled by video signal that generates stunning visual effects when used in large arrays.
  - **Vandal Resistant and Industrial Specialty Lighting (3 entries)**  
 Ultimate Emergency Light by [SURE-LITES \(Subsidiary of Cooper Lighting\)](#) 20 standard features, widest temperature +122o F. to -31 oF. outdoor/wet/NEMA 4X UL rated, IP66, NSF, etc.
  - **Exit Signs and Emergency Lighting (3 entries)**  
 E-Plug by [K-Tronik](#) With proper placement, the E-Plug can enable safe mobility throughout the entire home during power interruptions. E-Plug utilizes the latest in LED lighting technology, providing an efficient portable light source.
  - **Controls (14 entries)**  
 DALI Star by [B+L Technologies](#) Fully digital addressable electronic isolation transformer for precise dimming control of 12V halogen lamps via DALI control system.
  - **Components (11 entries)**  
 Spectro Optical Systems™ (SOS) by [A.L.P Lighting Components Inc.](#) SOSTM linear prismatic reflector features carefully designed linear prisms that reduce glare, control brightness in high angles and improve contrast ratio.
  - **Research, Publications and Software (6 entries)**  
[GE ValueLight 2.6 Economic Software](#) by General Electric This is an updated software program that provides comprehensive economic analysis of multiple lighting systems to assist decision-making.
  - **Specialty Innovations (15 entries)**  
[Mood Light Reflector](#) by Traxon USA A modular, programmable, color-changing LED panel with a reflective surface. The panel can be operated via remote or DMX control.
  - **Ballasts and Transformers (10 entries)**  
 Odyssey™ Series LED Emergency and AC/Emergency Drivers by The Bodine Company Specialty drivers that allow LED fixtures to operate as code-compliant emergency lighting sources with 90-minute run times.
  - **Systems (3 entries)**  
 FEBnet™ (Fluorescent Emergency Ballast Network) by [The Bodine Company](#) Automated fluorescent emergency ballast network that automatically tests and monitors emergency lighting and records test results for review by AHJ.

▪ **Daylighting Integration Products (9 entries)**

Lumen Maintenance Photocell by [Lighting Control & Design](#) Intelligent photocell ideal for daylight harvesting with onboard digital display indicating foot-candles - part of a networked building-wide lighting control network.

▪ **Lamp Switches and Holders (3 entries)**

T2 Lamp Holder from 3E-USA This new UL-approved design holds the lamp better and provides a much larger contact area for the lamp to be energized.

For more information you can visit this years' New Products list at [www.lighting.com](http://www.lighting.com)

## 100 Years of Lighting



100 years ago, shortly after Thomas Edison invented the electric light bulb. A company known as the New York Gas Appliance Company was founded by Bernhard Blitzer. As electric lighting fixtures became more popular and widespread, the need for gas fixtures diminished and the company decided to change its name to Lightolier in 1918. 'Lightolier' is an amalgamation of the words 'light' and 'chandelier'. During the 1920's, Lightolier established itself as a leader in the design and manufacture of residential fixtures. Lightolier introduced the first commercial lighting fixtures in the 1930's and continued to grow and expand its role in the lighting industry. One of Lightolier's most prominent contributions to the industry was the invention of track lighting.

Lightolier came to Canada in 1965, through the acquisition of Modulite in Montreal, from Mr. Avrum Drazin. Since those early days in Canada,

Lightolier has prospered and now represents the broadest selection of indoor residential and commercial luminaries including: recessed, track, fluorescent, specification decorative and architectural lighting controls. Lightolier is now part of Canlyte, a division of Genlyte Thomas.

For the next 100 years.....There's more with Lightolier. (Courtesy of Canlyte)

## Light Flashes

### Study Finds That Personal Control of Lighting Boosts Satisfaction

*Adapted from Light Right Consortium and Zing Communications*



According to the California Energy Commission, automatic lighting controls typically generate 35-45 percent energy savings in commercial and institutional buildings. New intelligent lighting control solutions can increase energy savings by enabling facility operators to schedule dimming across select spaces or entire buildings. Significant additional energy savings, however, can result from allowing occupants to control their own light levels. And a new landmark research study conducted by the Light Right Consortium indicates that personal control of lighting not only saves energy, but can result in a significant improvement in occupant satisfaction and performance

The study was conducted as part of the consortium's overall goal of creating tools for analyzing the cost-effectiveness

of lighting designs that are both energy-efficient and of high quality. The consortium contracted with researchers at the Lighting Research Center and the National Research Council Canada (NRC) to set up an office environment with a typical open work plan in an experimental office building in Albany, New York. The researchers conducted experiments with six different lighting designs. Data was gathered about the performance and preferences of temporary office workers who were hired to work under one of the lighting configurations for a full day. Among the study findings:

- The most comfortable lighting designs were those that combined direct and indirect lighting with wallwashing - 81 to 85 % of participants found such combinations comfortable. Adding individual dimming controls to the overhead lights for a specific workstation increased the portion of workers who found the design comfortable to 91 %. Designs that provided only downlighting were rated as comfortable by just 69 to 71 % of the workers.
- Satisfaction with lighting spilled over into other areas. Workers who expressed more satisfaction with the lighting in their space rated the space as more attractive and indicated that they were happier, more comfortable, and more satisfied with their environment and their work.
- Giving workers the ability to control their own lighting increased their motivation to perform assigned tasks. The persistence and vigilance of office workers normally declines over the course of a workday. But workers who controlled their own lighting persisted longer on difficult tasks and were more accurate on tasks that required sustained attention.
- Workers showed a wide range of desktop light-level preferences

when they used dimming controls. On average, they chose lower levels than current practice requires, but the broad range of preferences suggests that if a lower ambient room illuminance were chosen as the norm, it would need to be supplemented with some means of providing higher levels of local light for workers who prefer a brighter environment.

The next step for the consortium is a field study, set to begin in 2004, that will explore longer-term effects and assess the impact of quality lighting across an entire organization. When the study has been completed, the consortium will see if it's possible to generalize the findings to typical offices and try to develop a software tool that will enable users to determine the impact a particular lighting design will have on an office environment and to calculate the potential economic benefits of that change.

The Light Right Consortium's mandate is to transform the lighting market by using research to investigate the link between lighting quality and the performance, satisfaction and productivity of workers. Market transformation goals include:

- 1) influencing customer decisions so that they are designing, purchasing and installing higher-quality and more energy-efficient technologies,
- 2) going beyond the technology issues to delve into the dynamic of customer and market behaviors, and
- 3) creating enduring market changes.

The Consortium, formed in 1998, is managed by the Pacific Northwest National Laboratory and operated by Battelle for the U.S. Department of Energy. Board members include the Alliance to Save Energy, the Illuminating Engineering Society of North America, the International Association of Lighting Designers, the International Facility Managers Association, Johnson Controls, the National Electrical

Manufacturers Association, the New York State Energy Research and Development Authority, Steelcase, the U.S. Department of Energy and the U.S. Environmental Protection Agency.

For more information, visit the Consortium at [www.lightright.org](http://www.lightright.org), or contact Carol Jones, Program Manager, Battelle, via e-mail at [carol.jones@pnl.gov](mailto:carol.jones@pnl.gov).

## Educational Program Update



**ED100 Introductory Lighting Course:** In this course, you will learn about the basic principles of lighting fundamentals.

We held two ED 100 Introductory Lighting Courses, one in February/March and a second one in April.

There were 25 students in the first course and 19 in the second class and. We are happy to announce that all passed.

*The next ED 100 will be held in the Fall, probably late October 2004.*

**ED150 Intermediate Lighting Course:** This course will increase your lighting expertise, promote personal growth and competence in lighting principles, enable you to network with industry experts.

The ED 150 Intermediate Lighting Course began in February with the second module on April 19th and the third module from the 31st of May to the 28th of June.

As each individual module is a section of it's own, a student can take any one at a time, even a year apart, but must complete all three to receive a certificate.

*The ED 150 intermediate lighting course – Session 1 is scheduled to start in February 2005. Location to be announced.*

Please stay tuned and check our web site at [www.iesbc.org](http://www.iesbc.org).

If you are interested to participate, please call **Owen Stevens** at 604-945-7131 or e-mail at [ostevens@litemor.com](mailto:ostevens@litemor.com)

## IES - BC Staff Box

The IES-BC Section's Board of directors for 2003-2004:

<i>President</i>	Darren Luce
<i>Vice President</i>	Cristian Suvagau
<i>Secretary</i>	Yvette Lauer
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## IESNA Mission

**The British Columbia Section is a part of the IESNA, a not-for-profit technical society, whose mission is to advance lighting knowledge and disseminate information for the improvement of the lighted environment to the benefit of society**