

LUMINOUS SPEC

WINTER 2015

“...there’s nothing more powerful in **establishing mood and atmosphere** than light.”



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FEATURED PROFILE

Galina Zbrizher

An Atmospheric Strategist at Heart

When Galina Zbrizher of Total Lighting Solutions in Vancouver, Canada started working in the lighting industry about 30 years ago, lighting design and technologies were still in the early stages of development. She participated in shaping the industry by serving on the Board of Directors of the International Association of Lighting Designers (IALD), serving as President of the Illuminating Engineering Society (IES) – Toronto Section, a Chair of the IES Hospitality Facilities Committee and active contributor to the IES Design Guide for Hotel Lighting DG-25, by serving seven years on the LIGHTFAIR® International Conference Advisory Committee, and finally as a judge for several lighting design competitions and contributing author for lighting design publications. Between extra curriculum activities and a busy work schedule with projects across the application spectrum, Galina took some time to let us get to know her a bit better.

How did you end up in lighting design and with your own company?

By accident! (laughs) I didn't intend for lighting design to be my profession. I studied in the former Soviet Union in a university specializing in construction of municipal buildings, and graduated with a major in economics for construction. It's an engineering degree, and comprised of the general knowledge of all building systems including architecture and all types of engineering with the emphasis on project management and finance. When I moved to Toronto, I didn't speak a word of English, and was lucky to get hired as a draftsman by a consulting engineering firm. As my English improved, I progressed from drafting to electrical design that included design of lighting which I was drawn to. To learn more, I took IES100, IES150 (now known as the Fundamentals of Lighting series and Advanced IESNA lighting courses). I faithfully attended courses at LIGHTFAIR every year, learning from the most talented and accomplished lighting professionals, I read about lighting, I looked at lighting wherever I was and

learned from mistakes and successes on my projects. Because our industry and our profession are so young, it feels like I kind of grew up with it. It's mind-boggling to think that when I began to design lighting, CFL, halogen and ceramic metal halide technologies were considered cutting-edge. By the time I moved to Vancouver in 1995, lighting design became 100% of my occupation. In 2001 when the multi-disciplinary firm I worked for as a principal of lighting design group was purchased by a bigger multi-disciplinary firm with no interest in developing lighting design practice, I had to make a decision whether I would continue working for someone else. By happenstance, next day after I learned of my job becoming obsolete, I was asked to design lighting for the Whistler Conference Centre, a significant sized project, and at the time it seemed that the decision was kind of made for me. And that is how my firm, Total Lighting Solutions came about. To learn how to run a business I went to business school while designing TLS' first project, and with other projects coming along shortly, I never looked back.

With numerous awards and extensive lighting design industry involvement, your passion is evident. What motivates you to operate at this high level?

My mother. Or, at least I hold her largely responsible. (laughs) I grew up being told practically daily, "You have to live up to your potential!" And according to my mother, there was no limit to my potential. Living up to your potential pretty much translated into studying and working super hard. I believe that after many years of "practice" under my Mom's directive, wanting to do the best that I can and putting all my energy into what I'm doing became part of my personality. I don't know of any other profession where people are as passionate about their work as lighting designers are; we are incredibly lucky to do what we love and be paid for doing what we love doing. I feel the same way, lighting design is my work, hobby and passion, and it's no wonder that I give it as much time as I do. That and the deadlines! (laughs) The drawback is that I think I became a workaholic, and would not call my life balanced.



Top left: Photo of Galina Zbrizher

Top right: Wyndham Hotel, Phoenix, AZ – Photo by Jeff Zaruba

Bottom: Hyatt Regency, Vancouver, BC, Canada – Photo by Ed White



VanDusen Botanical Garden Visitors Center
Vancouver, BC, Canada

Photo Credit: Nic Lehoux

A client of yours in Vancouver refers to you as an “atmospheric strategist”. What does that mean to you?

First of all, I seriously considered putting that as a title on my business card (laughs); I think it’s a fantastic description! What it means to me is that there’s nothing more powerful in establishing mood and atmosphere than light. Mood of any space, in my opinion, is created by quality of light and its composition. Any space can be made to feel the way that the client intended it to feel when light treatment is applied purposely to evoke a specific emotion. But no matter what the space is, if the emotional response was accidental to design process or if the client’s intent for the space was misunderstood, or if selection and placement of light was wrong, the space will feel wrong.

How has the insurgence of LED influenced your lighting designs compared to other technologies such as incandescent or fluorescent?

Like everything, there are plusses and minuses to LED. On the plus side, working with miniature-sized LEDs is great in that it allows better concealment and integration with architecture; allowing spaces to be lit with smaller, less obvious luminaires. Precise optical control allows us more control in achieving design intent using considerably less energy, especially in exterior designs. Dimming control and ability to integrate smart technologies inherent to LED allows present time response, integration with any computer-based environments, and more flexibility in exterior space design than HID and fluorescent systems. “Smart” controls, long life, miniature size and ability to save energy, are benefits that I consider top in LEDs. On the other hand, I find that more attention is needed when designing with LED because oftentimes they’re less predictable in creating lighting effect than other sources. Intensity, diffusion and color variances are difficult to predict

“ LEDs are an incredible resource in today’s toolbox that allow us to achieve amazing things that were just not possible previously. ”

from information provided by specifications, and integration is difficult, especially with LEDs from different lighting manufacturers on the same project. Even though LEDs may have very similar specifications in terms of wattage, color temperature, CRI (color rendering index) and R value, they are often very different in intensity, color and color rendition. The other element of LED that I find frustrating is controls compatibility. With one control system and luminaires from different manufacturers, you can bet your bottom dollar that luminaires will all react differently. So in terms of how LED has impacted our design process, it definitely takes more time to design a system with LED. However, LEDs are an incredible resource in today’s toolbox that allow us to achieve amazing things that were just not possible previously. I think we’re all still on a learning curve.

If you could design anything, anywhere and with no constraints, where and what would it be? In other words, what’s your dream project?

My dream project would be to work with Santiago Calatrava on any project, anywhere and anytime because I find his designs truly inspiring. It doesn’t really matter what kind of project, whether it’s a bridge, or tower, or museum or a winery; every single

one of them in my opinion is a gorgeous example of the confluence of art, architecture and structural engineering where form and function are one and the same.

When designing any space, what is the biggest consideration, and do you weave a signature style or element into the design?

I don’t know that there’s a biggest consideration; I think there are a number of considerations that have the same weight and same importance. And sometimes consideration that appears to be less important turns out to be significant because of its impact on something else on the project. With that said, functionality is the primary goal, because if the project does not function successfully, the project is not successful. In the broad sense, integration with architecture and all other building systems and every person’s effort to lessen environmental impact, including impact of light and lighting, are at the top of my list.

PROJECT SPOTLIGHT

AWARD-WINNING LIGHTING DESIGN ATTRACTS ATTENTION AMONGST A BUSTLING URBAN BACKDROP



SandRidge Commons is the sleek, modern headquarters of oil and gas exploration company, SandRidge Energy, Inc., in Oklahoma City, Oklahoma. Together with Renfro Design Group, Inc., and Rogers Partners, SandRidge used Philips Color Kinetics systems as part of an overall outdoor lighting scheme to enrich the main building's Belluschi-designed Brutalist architecture and enhance community engagement by day and night.

White light (4000K) evenly projects up the 393', 30-story building façade using eW Reach Powercore LED floodlights; and 8°, 13° and 23° beam angles deftly highlight the distinct and deeply-recessed window shapes in the building's upper, middle and lower floors. The ensuing dramatic contrast between luminance and shadow is emulated in the towering 34' plaza canopy. During daylight hours, the canopy provides much-needed shade, while at night, hidden eW Graze Powercore linear LED lighting fixtures set at 10° and 30° beam angles brighten the canopy's underside with an inviting 3000K light.

The simple, yet strong lighting design is energy-efficient, and also recognized by Architectural Lighting magazine for an "Outstanding Achievement" 2014 AL Design Award.



PRODUCT NEWS



Flat
Cone

Meet specifications without compromising your budget for urban projects

Philips Lumec **TownGuide LED Post-Top Luminaires** offer a wide range of designs and unbeatable value, making this product ideal for any urban project.

TownGuide is available in three modern shapes: Flat Cone, Classic Cone and Classic T. Each offers configuration options including clear or frosted bowls, and a range of lumen packages (from 3,100 to 9,800 lumens), so it's easy to select the right solution to suit new lighting applications or seamlessly blend into existing areas. In addition to style options, TownGuide helps to minimize wasted light and energy, and also maximizes total cost of ownership, to reduce overall costs while complying with applicable lighting requirements.

Visit www.philips.com/townguide to learn more.



Confident roadway solutions to help enhance liveability in your city or town

With the new Philips Lumec **RoadFocus LED Cobra Head Luminaires**, you can now reliably upgrade to LED roadway lighting; saving energy, maintenance and operating costs, and contributing to environmental stewardship. At the same

time, you'll benefit from performance surpassing that of high intensity discharge (HID) luminaires while retaining the familiar cobra head design. RoadFocus is designed to replace 70–400W HID luminaires, and provides uniform, high performance LED illumination. In addition to enhanced light output with excellent uniformity, RoadFocus LED Luminaires can help to drive cost and workflow efficiencies. Our luminaires are favorably priced, and also easily retrofit into existing infrastructures so you only purchase what you need, when you need it. With three sizes, a sleek, low-profile design, and many options, RoadFocus extends the same uniform aesthetic throughout all of your roadway applications. RoadFocus LED Luminaires are the only roadway lighting solution you will need.

Visit www.philips.com/roadfocus to learn more.



Defining LED commercial downlights

Philips Lightolier defines the commercial LED downlighting product category with **LyteProfile LED Downlight**. The LyteProfile blends visual comfort and performance at a cost that fits many commercial

budgets. It utilizes a robust Frame-in-Kit + Light Engine + Reflector that is perfect for a wide variety of installation conditions and is easy to upgrade. LyteProfile delivers up to 90 lm/W at the emitted luminaire level at an aperture size of 6, and has a maximum plenum depth of only 4.5". Advanced thermal technology reduces size and physical material in the luminaire.

Visit www.philips.com/leddownlights to learn more.



Visually transform architecture to captivate your audience

The Philips Gardco **ClearScape LED Luminaires** feature an architecturally stylish design that will complement your application's visual landscape. Available in two sizes (small

and medium), ClearScape offers outstanding photometric performance and significant savings over 70–400W HID with equivalent performance, in addition to featuring the latest in energy saving control options. Precision optics, shields, color filters, and field tunable white options allow you to customize your lighting solution and paint with light. Whether accentuating fine details, highlighting a monument or boldly drawing attention to an architectural facade, ClearScape is the right solution to bring definition to a space.

Visit www.philips.com/clearscape to learn more.



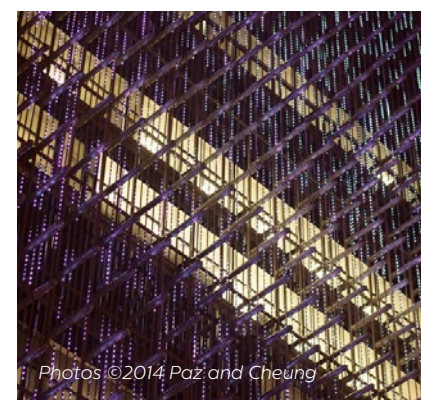
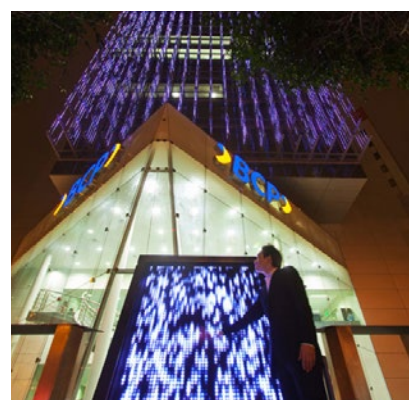
AROUND THE WORLD

Give people a new way of seeing, feeling, and experiencing their perception of self and the freedom to explore new sensations

The headquarters of Banco del Crédito de Peru (BCP), the country's largest and oldest bank, is a prominent structure in the Lima skyline and can be seen from almost anywhere in the city. Lighting designers Claudia Paz and Nicholas Cheung recently used Philips Color Kinetics lighting solutions to update the building's exterior façade with a large interactive public art installation. This new canvas forges a unique connection between the bank and community by engaging city dwellers and creating a space for social participation for people of all ages.

In 2014, BCP wanted to update the look of their headquarters to celebrate a modern and progressive Peruvian society and to symbolize their new brand identity of openness and transparency. BCP commissioned designers Paz and Cheung to translate these themes into a lighting design that would complement the glass wall that architect Felipe Ferrer designed for the building's exterior. The result of the collaboration was BCP Affinity – a three dimensional façade – that consists of an LED canvas, an interactive LED outdoor podium with multi-touch sensors, and an interactive lighting control system.

The three-dimensional façade consists of six layers. The outermost layer features Philips Color Kinetics ArchiPoint iColor Powercore, daylight-visible, exterior-rated LED points of light. Each fixture (532 in total) is secured to the end of a perpendicular pole in a 62' x 92' (19 m x 28 m) grid. Philips Color Kinetics iColor Flex MX gen2, flexible strands of high-intensity and full-color LED nodes compose



Photos: ©2014 Paz and Cheung

the remaining five layers. The result is two distinct grids—one bright, bold, and sparse for dramatic moments, and the other concentrated and subtle for nuanced sculptural effects. In total there are 26,182 individually addressable nodes.

To enable interactivity with the façade, Paz and Cheung created a podium of LED panels that mimics the façade on a smaller scale. Passersby choose from eight interactive shows that use both light and sound. Multi-touch sensors detect when the screen is touched triggering a network of interactive servers that remotely process the live input data. The content, which includes such effects as constellations, fireworks, and rain, then simultaneously appears on both the façade and the LED podium.

"Each show intuitively steers people to express themselves," says Paz. "Seeing this conversation between a person and light, in my mind, is magical!"

See more at www.colorkinetics.com/showcase/installs/BCP-Affinity

EDUCATION

Lighting Application Center



Whether you're new to the industry, or want to learn additional skills, the Philips Lighting Application Center offers a variety of courses in the United States and Canada, for all levels.

Please visit www.philips.com/LightingApplicationCenter for the complete 2015 schedule and to find additional information about the Lighting Applications Center programs or please write to us at lightingapplicationcenter@philips.com to arrange a customized visit.

SPECIFIER SEMINAR SERIES: Lighting Trends & Technology Update

SYNOPSIS: The 2015 quarterly events have expanded to include an optional day in NYC to learn about lighting design with offerings from Philips Color Kinetics plus earn 1.0 AIA credit for attending a presentation on Intelligent LED Lighting Systems and Controls. To end the day in a true New York fashion, participants are treated to a special viewing of the Times Square Ball where Philips Lighting has been a corporate sponsor for over 16 years.

The remainder of the 2-day seminar will be held at the Philips Lighting Application Center in Somerset, NJ and focuses on lighting trends, as well as the latest technologies for both outdoor and indoor applications. With a variety of topics presented over the two days, attendees are able to earn additional 5.5 hours of Continuing Educational Units (CEU) and AIA Learning Units.

Please note that these are special offerings and are not listed on the Lighting Application Center website.

LOCATION: Somerset, NJ

DATES: March 10–12, 2015
June 9–11, 2015
September 15–17, 2015
December 1–3, 2015

REGISTER: Please contact your local Philips Sales Rep to register for the seminar.

LED WORKSHOP

SYNOPSIS: The 1-day LED Workshop is designed to give participants all the tools to make an intelligent decision in choosing the correct LED for the respective application. While there is much talk about LEDs, there is a lack of knowledge with regards to this ever popular light source. We will explore the history of the LED, physical characteristics of a light emitting diode, attributes that will limit an LED's effectiveness, LEDs in comparison to other available sources, as well as a look into the future of lighting.

LOCATION: Toronto, ON, Canada

DATES: February 25, 2015

REGISTER: Visit www.philips.com/LightingApplicationCenter

LIGHTING SPECIALIST WORKSHOP

SYNOPSIS: This 2-day Workshop builds on a basic understanding of lighting to address the critical issues in the experience, measurement and assessment of lighting and lighting systems. This workshop is aimed at the needs of those with two to five years of lighting experience and the desire to augment their lighting knowledge and know-how.

LOCATION: Toronto, ON, Canada

DATES: February 26–27, 2015

REGISTER: Visit www.philips.com/LightingApplicationCenter

OUTDOOR APPLICATION WORKSHOP

SYNOPSIS: This workshop will detail outdoor applications requirements with respect to the latest recommendations from IES. Attendees will explore the latest in outdoor lighting technologies including outdoor commercial, municipal and roadway lighting, as well as control, and look into IES' Lighting Handbook Tenth Edition and recommended practices: RP-33-14 "Lighting for Exterior Environments", RP-20-14 "Lighting for Parking Facilities" and RP-8-14 "Roadway Lighting", and RP-22-05 "Tunnel Lighting". IES technical manuals TM-15-11 "Luminaire Classification System for Outdoor Luminaires", TM-10-00 "Addressing Obtrusive Light "Urban Skyglow and Light Trespass" will also be included, as well as Scotopic/Photopic Ratios, what they are, how they can be used and how NOT to use them. If you work with outdoor lighting in any way, this course is a must.

LOCATION: Toronto, ON, Canada

DATES: March 9–10, 2015

REGISTER: Visit www.philips.com/LightingApplicationCenter

RETAIL & HOSPITALITY WORKSHOP

SYNOPSIS: This 2-day workshop addresses the principles and practicalities of integrated lighting solutions for retail and hospitality settings. Participants will observe lighting in action, measure and evaluate lighting alternatives, and practice applying the content. Lighting systems as an integrated solution, including sources, luminaires, and controls will be discussed.

LOCATION: Toronto, ON, Canada

DATES: March 23–24, 2015

REGISTER: Visit www.philips.com/LightingApplicationCenter

INTRODUCTION TO LIGHTING CONTROLS WORKSHOP

SYNOPSIS: The 3-day workshop introduces the basics of dimming and remote switching, presence and daylight detection, controls protocols and strategies. For each of the control types, attendees will learn what it does, where it is used, how it is connected and how to specify and order. Other topics include principles of lighting control, dimming light sources, motion and daylight sensors, control signals (wired and wireless), control panels and networks, reading control schematics, and more!

LOCATION: Somerset, NJ

DATES: March 24–26, 2015

REGISTER: Visit www.philips.com/LightingApplicationCenter

EDUCATION

Webinars

THE FUTURE OF OLED LIGHTING WEBINAR

SYNOPSIS: This webinar will look at the current state of OLED lighting and explain in which direction this technology is going to grow. New features will be added and costs to manufacture are improving. Additionally, OLED light is becoming more and more affordable and thus commercially viable for many more applications. You will get an in-depth and inside look into OLED lighting and whether to include it in your lighting strategy.

HOSTED BY: Dietmar Thomas

DATES: February 26, 2015 (10am EST)

REGISTER: Visit www.philips.com/LightingWebinars



THE INTERNET OF LIGHT: SEMANTIC LIGHT WEBINAR

SYNOPSIS: During this webinar, Zary Segall will show how next to an internet of things there is also an internet of light. In his research he shows clever ways light can interact and become part of its surroundings and users.

HOSTED BY: Zary Segall

DATES: March 26, 2015 (10am EST)

REGISTER: Visit www.philips.com/LightingWebinars



ADAPTIVE LIGHTING FOR INDOOR APPLICATIONS WEBINAR

SYNOPSIS: This webinar is focused on adaptive lighting for indoor applications – light sources that can adjust their light output based on environmental conditions. It will include an introduction on lighting controls, followed by key strategies and technologies for adaptive lighting, aiming at improved visual comfort, well-being and energy efficiency. The lighting controls include management of candle-power and spectral-power distributions in response to occupancy and daylight availability. Benefits, challenges and issues are presented through case studies of technology demonstrations in residential and commercial applications.

HOSTED BY: Konstantinos Papamichael

DATES: April 29, 2015 (10am EST)

REGISTER: Visit www.philips.com/LightingWebinars



Lighting Academy for you



Lighting Academy offers a comprehensive range of educational resources for people who want to expand their lighting knowledge. With a rich history in lighting, Philips is uniquely qualified to bridge the gap between the cutting edge in lighting innovation and the real-world solutions required by professionals.

The Academy partners with world-leading experts to provide you with up-to-date information and valuable inspiration. You will be sure to find something on this website that will enlighten you.

Visit www.philips.com/lightingacademy to see what training options are available.

CONFERENCE & EVENT NEWS

LIGHTFAIR® International (LFI)

DATE: May 3–7, 2015

LOCATION: Jacob K. Javits Convention Center, New York, NY

BOOTH: #1207 on level three of the show floor; Showcasing the latest technologies and advancements in lighting.

SYNOPSIS: LIGHTFAIR® International is considered to be the world's largest annual lighting trade show/conference for lighting, design and technology innovation. Bringing together the top industry professionals from around the world, LIGHTFAIR® International is THE industry event to attend.

WEBSITE: www.lightfair.com

HIGHLIGHTS OF THE 2015 SHOW:

- LFI 2015 will include the new category expansions of alternative energy, solar power, software, exterior and roadway, digital signage, healthcare and hospitality.
- Augmenting the trade show experience is the LFI 2015 Conference, which will feature over 140 speakers, the new LFI Controls & Connectivity Forum and the inauguration of shorter, 30- and 60-minute course options to complement its seminars, workshops, Forum and Lunch & Learn sessions. There are 78 course offerings in 2015, all connected to the central theme of integrated design. The focus areas/tracks are inspiration, applications research, technology & tools and methodology.



- The Pre-Conference LIGHTFAIR Institute® and LIGHTFAIR Conference program includes 11 Institute courses, 15 Institute workshops, 29 seminars, two Conference workshops, five Forum seminars, twelve 60-minute sessions, two 30-minute Power Lunches and two Lunch & Learn seminars – totaling more than 210 hours with accreditation.
- LFI Innovation Awards® presentation takes place on May 5 beginning at 8:30 a.m., highlighting the industry's most innovative products and designs introduced during the last 12 months.

INDUSTRY NEWS

Philips Sponsors LightSavers Smart StreetLight Controls Workshop



On December 2, 2014, Philips was on hand to share their expertise and showcase their latest outdoor controls at the Smart StreetLight Controls Workshop in Toronto, Ontario. The Workshop, geared toward Lighting Managers, Engineers, and Planners to help them better understand the benefits of adaptive controls, highlighted intelligent controls and how they help to reduce energy consumption and provide useful data on lighting performance. Philips demonstrated their new technology including the Philips CityTouch Lighting Management Solution which gives users the power to make light in a city dynamic, intelligent and flexible. Philips also showed their StarSense Telemangement System which can be used for monitoring, controlling, metering and diagnosing outdoor lighting.

About LightSavers: LightSavers Canada is a national market consortium that aims to step up the adoption of LED lighting and smart adaptive controls in certain general illumination applications. LightSavers Canada will assist municipal and provincial governments, public institutions, and private companies that own or manage lighting assets to learn from each other about LED and smart control performance, procurement and financing.

Visit www.lightsavers.ca to learn more.

2015 Architectural SSL Product Innovation Awards are Announced



The publishers of Architectural SSL magazine announced the winners of their fourth annual Architectural SSL Product Innovation Awards. The awards determine and honor the most innovative LED and solid-state luminaires and fixtures on the market, while also recognizing the players behind the components that make up these light sources.

Three of the awards went to Philips Lightolier SlimSurface LED Downlight, Philips Lumec Metroscape/Urbanscape LED Pendant, and Philips Ledalite VersaForm LED Recessed Luminaire.

Visit www.architecturalssl.com/pia to learn more about these products and the other winners.



CLUE International Lighting Design Competition



The CLUE (Community Lighting for the Urban Environment) competition closed its registrations on 1/31/2015. CLUE has been holding this international design competition and awarding cash prizes every year since 2004 – aiming for excellence by encouraging conscious integration of the aesthetic quality of the products, technical advancements in lighting and environmental thoughtfulness. But most of all, the competition encourages the development of global solutions that link humans to their environment, through the innovative use of light.

The competition is open to students (university and college) and emerging professionals with less than five years in the profession. Prizes range from \$1,000 to \$5,000. The CLUE competition "INTERFACE" was launched in May and sponsored by Philips Lighting. The CLUE jury meeting will be held in February in Montreal to acknowledge the new winners.

The jury is composed of high-caliber design professionals who will judge this year's design proposals:

- **François Roupinian** / Principal & Design Director [Lightemotion]
- **Fred Oberkircher** / Independent Higher Education Professional / FIESNA, Educational IALD, IDA, LC [Texas Christian University]
- **Louis-Xavier Gagnon** / Co-Artistic Director / Designer [Atomic 3]
- **Martin Houle** / Director and Founder [Kollectif]
- **Nathanael Meyer** / Creative Director [gsmprjct*]
- **Randy Burkett** / President and Design Principal [Randy Burkett Lighting Design, Inc]
- **Tom Russello** / Senior Director, R&D Director, Indoor/Outdoor Lighting North America [Philips]

Visit the CLUE website www.cluecompetition.com to learn more about this important group and to see the latest developments from this competition.

NOTEWORTHY

William Hanley, IES Executive Vice President, Retires after 26 Years



The retirement of William (Bill) Hanley, IES Executive Vice President, became effective December 31, 2014. Mr. Hanley served as chief of staff starting in 1988 and is the longest serving head-of-staff since the founding of the IES in 1906. He is known for many outstanding achievements including guiding the IES through unprecedented growth, and presiding over the launch of LIGHTFAIR International, IES's management of the Street and Area Lighting Conference, and the publication of the latest three editions of the IES Lighting Handbook.

To learn more about Mr. Hanley's notable accomplishments, please visit: www.ies.org/about/whanley.cfm.