

# SSL Postings

U.S. DEPARTMENT OF ENERGY

April 20, 2016

## If You're Going to LIGHTFAIR....

If you're heading to LIGHTFAIR<sup>®</sup> International next week, be sure to put **booth #2010** on your agenda. That's where DOE's vendor-neutral team will be leading a full menu of cutting-edge discussion forums about solid-state lighting —ranging from today's challenges to tomorrow's applications. These won't be the usual "we talk, you listen" affairs, but rather will be dynamic, open-ended discussions about some of SSL's hottest issues. We've expanded our format this year in order to get your input on solid-state lighting's most challenging topics.



The schedule for these discussions is posted on the [DOE website](#). On Tuesday morning, Jeff McCullough, Tracy Beeson, and Naomi Miller — all of Pacific Northwest National Laboratory — will review the current "state-of-the-shelf" for TLEDs, including lessons learned from DOE studies, and take a hands-on look under the hood at the wiring and physical attributes of the various TLED types. This will be followed by a discussion featuring representatives from utilities, specifiers, manufacturers, and UL.

In the afternoon, PNNL's Ruth Taylor and D&R International's Marci Sanders will go over the latest improvements to the [LED Lighting Facts](#)<sup>®</sup> database, including tools for specifiers to improve usability and help them sort through and evaluate product information. You'll also hear from specifiers how to utilize that database to synthesize and assess valuable information on TM-30, lumen maintenance, controls, optics, and more.

The highlight on Tuesday will be the announcement of the 2016 [Next Generation Luminaires](#)<sup>™</sup> winners (more on that next week). Those products represent the best of the best, and the NGL judges' stamp of approval offers another valuable tool for specifiers.

On Wednesday morning, PNNL's Michael Poplawski and Ruth Taylor will offer an introduction to connected lighting for those who are new to the topic. You'll learn how connected lighting differs from traditional lighting control, what the implications are for energy consumption, how test beds can make a difference, and what's needed to accelerate the development of connected lighting technology.

Wednesday afternoon, PNNL's Naomi Miller will lead a discussion between specifiers, test labs, and manufacturers on specifying, controlling, and testing color-tunable LED lighting products. She'll be joined by Jeff Davis of Intertek and Ann Schiffers of USAI Lighting to cover how such products are being used; what information is needed in order for them to be specified, installed, and used properly; and what test labs are learning about them. That session will be followed by one in which PNNL's Michael Royer and Andrea Wilkerson focus on the interpretation of TM-30 measures for evaluating color rendering, with additional emphasis on demonstrating, in a hands-on manner, how preferred color-rendering attributes change with the context.

Thursday morning, Naomi Miller and Leslie North of Aurora Lighting Design will present an overview of OLED product capabilities, challenges, and potential and review the results from DOE's first [GATEWAY](#) study of an OLED office-lighting design. Then Andrea Wilkerson and her PNNL colleague Bob Davis will review the top takeaways from a survey of nurses about patient room lighting in hospitals, along with the results from a GATEWAY/Sacramento Municipal Utility District demonstration of LED lighting in two patient rooms at a senior care facility. Following that discussion, Andrea will present the latest findings from DOE's long-term monitoring of outdoor LED luminaires installed along the U.S.–Mexico border near Yuma, AZ — including the unexpected changes in measured illuminance over the first 7,000 hours of operation.

In addition, DOE SSL team members will take part in a number of sessions on the LIGHTFAIR conference agenda. Michael Poplawski will co-present the one-day course "Connected Lighting Systems — The Present and the Promise," which will help participants understand the evolving capabilities of outdoor connected lighting systems and create specifications targeted at specific needs. He'll also take part in the panel discussions "A Revolution in Lighting Control Systems: from the Past to Present & Future," which will describe the barriers that have prevented large-scale adoption and what's needed to overcome them, and "Introduction to ANSI C137, Standards for Lighting Systems," which will introduce attendees to the initial projects of ANSI C137, whose emphasis is to shift focus from components to lighting systems in order to maximize energy savings. Naomi Miller will take part in the panel discussion "Nighttime Lighting Blues: Juggling Needs of People & Critters," which will address the growing problem of sky glow, focusing on evaluating the spectrum, luminaire distribution, and light levels for responsible night lighting. Bob Davis will give the seminar "Research to Application: Lighting for Healthcare," which will summarize the principles of high-quality healthcare lighting reported in recent research, and will co-present the seminar "Senior Care Lighting — An Iterative Pilot Study," which will present results from an LED installation in a senior care facility. Michael Royer will give the seminar "Spectral Tuning: Introducing IES TM-30," which will demonstrate a spectrally tunable source covering a broad range of color-rendition characteristics and use the TM-30-15 calculation tool to examine how the method captures the changing performance. And Jack Curran of LED Transformations will give a workshop and a power lunch, both entitled "LED 101 and a Lot More," which

will review the basic concepts of LED lighting technology and their implications for specifiers, contractors, and end users.

So if you're heading to LIGHTFAIR, check the [schedule](#) posted on the DOE SSL website, and be sure to stop by booth #2010. I promise it'll be a sales-pitch-free zone. Our only wares will be unvarnished facts, and we'll be giving those away at no charge. So bring your questions, because we've got answers — and a mission to educate people about solid-state lighting so that it can continue to develop and fulfill its energy-saving potential.

Best regards,  
Jim Brodrick

As always, if you have questions or comments, you can reach us at [postings@akoyaonline.com](mailto:postings@akoyaonline.com).