Postings: from the desk of Jim Brodrick

The year 2011 promises to be an eventful one for solid-state lighting. Just around the corner is DOE's eighth annual SSL R&D Workshop, which takes place Feb. 1-3 in San Diego. More than just a great forum for networking, it's a way to stay informed about the latest solid-state lighting R&D advances, strategies, and ideas – not to mention a chance to participate in an event that informs the research agendas in government, academia, and industry. It's not too late to register, and I hope to see many of you there. The R&D workshop will be followed later in the year by two others sponsored by DOE: the third annual SSL Manufacturing Workshop in April – which focuses on improving LED and OLED manufacturing processes, equipment, and costs – and the fifth annual SSL Market Introduction Workshop in July, focused on strategies for speeding SSL market adoption.

I've mentioned before that, as solid-state lighting continues its rapid development, one of DOE's functions is to help provide some "guardrails" along the route. One of the ways we do that is with the CALiPER program, which tests a wide range of commercially available LED lighting products and publishes the results online. CALiPER reports for each succeeding testing round provide an ongoing series of "snapshots" that not only show areas and products that excel, but also those needing improvement. But the program publishes other reports as well. Two that are coming out this year will be especially valuable resources to the industry, because they focus on key issues in solid-state lighting that call for closer looks.

One of those reports is the third in a series on long-term performance of SSL products, and covers the relative light output, color shift, and absolute photometric performance of two dozen LED luminaires and replacement lamps that were operated and monitored for 6,000 hours. The other report will provide updated analysis from new testing with LED T8 and T12 linear replacement lamps, which comprise a significant commercial market, and will focus on the most current products available.

Another DOE report coming out very soon will look at particular applications where SSL is already competitive with traditional lighting sources, and will estimate the current and projected energy savings from those SSL products. An update of a similar report from 2008, it will include new applications as well as revised energy-saving figures, to reflect the progress SSL has made over the past two years.

One of those applications attracting considerable interest from cities nationwide is street lighting. That's why DOE launched the Municipal Solid-State Street Lighting Consortium last year, as a new forum to share information and experiences on this hot topic. With the Consortium now in full swing and the LED street lighting market moving at warp speed, DOE has planned a series of eight regional workshops for 2011, all strategically located within an easy drive from members. The first two workshops are set for Feb. 17-18 in Tampa and March 8-9 in Kansas City, with details to come on meetings for the Northeast Region (sometime in April in Philadelphia), Southwest Extended (May), North Central (June), Northwest (July in Seattle), Southwest (August in San Jose), and South Central (September).

Along similar lines, a series of regional workshops on SSL for lighting designers will be hosted by the International Association of Lighting Designers (IALD), as part of a joint education initiative between IALD and DOE. The goal will be to not only help designers educate their clients about aspects of solid-state lighting, but also to

provide those designers with the tools and background to accurately assess the growing number of LED products coming onto the market.

Keep your eye on the L Prize competition in 2011. The next few months will be busy ones as long-term testing wraps up on the current L Prize 60W replacement lamp entry. The Technical Review Committee will be hard at work reviewing all the documentation and data, including field assessment reports. But the L Prize isn't only about 60-Watt replacement lamps; it's about replacing the most widely used and inefficient light bulbs, and that also includes PAR 38s. In order to make the L Prize competition even more effective in helping consumers save energy, DOE has temporarily put the PAR 38 replacement category on hold so that the criteria can be modified to incorporate lessons learned from the 60-Watt competition (although the legislated technical requirements will remain unchanged). The modified criteria will be announced in May at LIGHTFAIR International, when the PAR 38 category is reopened.

These are just a few highlights of what DOE has planned for 2011. Stay tuned to these *Postings* to learn more as our plans unfold.

As always, if you have questions or comments, you can reach me at postings@lightingfacts.com.