

## ISCST 2016 Symposium Abstract

### Measurement of UV LED Curing Processes: Practice and Standards

Jim Raymont, EIT Instrument Markets

Measuring UV curing processes involving conventional mercury (electrode and microwave) light sources is well understood. However, the emergence of UV LEDs as an alternative light source has caused confusion among suppliers and end-users alike. Inherent differences between mercury lamps and LEDs sources require different instruments, procedures and standards in order to obtain accurate and reliable measurements.

As UV LEDs become more commonplace, there is an even greater emphasis on how UV LEDs should be measured, how instruments should be calibrated and how measurements should be reported. This paper session will provide an update on the important topic of measurement of UV LED sources including:

- Differences between measurements of traditional mercury sources and UV LEDs
- Proper characterization and reporting of UV LED output
- Development of an spectral response band to properly measure the range of commercially available UV LED sources
- Work with National Institute of Standards and Technology (NIST) to verify readings on a traceable radiometer used to calibrate customer units
- Development of a transfer process and LED source that enable calibration of radiometer units.

For questions about this paper, please contact:

Paul Mills  
[pmillsoh@aol.com](mailto:pmillsoh@aol.com)  
(440) 570-5228