



MEETING NOTICE & INVITATION
Pacific Northwest Chapter • Society for Information Display

On-Chip Quantum Dots for Better Color Performance and Higher Efficiency

Juanita Kurtin

CTO and co-founder of Pacific Light Technologies

Wednesday, December 9th at 6:00 P.M.

PLANAR Systems (headquarters)
1195 NW Compton Dr.
Beaverton, OR 97006 (503) 748-1100

Abstract

The use of semiconductor quantum dots (QDs) in LEDs as downconverters has been a goal in both the lighting and display industries for the past several years, primarily because QDs present the opportunity to have high efficiency, highly tunable, narrow bandwidth emission, in both the green and red wavelength ranges. While other downconverters may offer one of these traits, simultaneously achieving this combination of capabilities can only be realized by QDs. Down-converters must generally be capable of being applied directly on the LED chip in order to allow for a cost-effective device architecture and optimal system-level integration. 2015 saw the introduction of remote QD solutions to the display market, however, the full promise of QDs has yet to be realized by these implementations. Pacific Light Technologies (PLT) has made great strides over the last year in the on-chip application of quantum dot materials. This talk will present recent progress for both lighting and display applications.

Speaker Biography



Juanita Kurtin is the CTO and co-founder of Pacific Light Technologies, a start-up company delivering quantum dots to the LED industry as a direct replacement for conventional phosphors. She has a background in the research of nanomaterials for various device applications, including transistors, solar cells, and light emitting diodes.

Prior to starting PLT, Dr. Kurtin was the VP of R&D at SpectraWatt, a solar cell manufacturing company, and also spent six years developing novel device architectures at Intel.

Dr. Kurtin obtained her BS degree in Chemistry from MIT and her PhD in Physical Chemistry from the UC Berkeley, studying with quantum dot pioneer Dr. Paul Alivisatos.

Seminar

The Seminar is free. Please join the speaker for a no-host dinner after the seminar. Directions to the restaurant will be provided at the seminar. Non-Members are welcome. RSVP to Gary Johnson at Gary.Johnson@tek.com or (503) 627-1985. Please indicate if you plan to participate in the dinner.

The Pacific Northwest Chapter of the Society for Information Display was established for the following purposes:

- To support the activities and purposes of SID.
- To encourage and contribute to the scientific and educational advancement in the field of information display and to promote its use.
- To provide forums for the exchange and dissemination of ideas and knowledge relating to the field of information display.

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