

Materials McElvain Seminar



Department of Chemistry
UNIVERSITY OF WISCONSIN-MADISON

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Founder and CEO of UbiQD, Inc.



*“Beyond Displays – How
Quantum Dots Will Help Power
and Feed Future Cities”*

In recent years, quantum dots (QDs) have gained interest as narrowband emitters for displays, but have traditionally suffered from reliability issues, high manufacturing cost, and toxicity concerns, which prevent them from being incorporated into products beyond displays. UbiQD, Inc. is a spinoff company from Los Alamos National Laboratory that envisions making QDs ubiquitous across many industries with a new kind of QD that is intrinsically more stable, lower-cost, and avoids toxic compounds. The company is currently focusing on bringing to market QD-tinted luminescent solar concentrators (LSCs) that enable electricity-generating windows and optimize greenhouse agriculture. UbiQD's first product, called UbiGro, will be highlighted in the talk. UbiGro is a QD-enabled greenhouse film that red-shifts the sun's spectrum for improved crop yield and quality. It has been shown effective for multiple crops in various climates, and is installed in numerous commercial greenhouses.

**Thursday, March 7, 2019
12:15 pm in room 3215**