



Unique Lighting Applications for Plants and Animals

April 10, 2012 - Syracuse, NY

2:00 - 5:00 pm

Syracuse Center of Excellence

727 E. Washington Street

Syracuse, NY 13244-0001

Recent research in agricultural production reveals that spectrum, intensity and distribution affect successful growth of plants indoors, such as in greenhouse, aeroponic, and hydroponic environments. Also, with over 1400 Public Health Service-approved animal laboratories in the U.S., lab animals are increasingly being used to advance knowledge in many areas of research. For example, there is evidence that lighting affects milk production in cows.

How do we provide the right light for these plants and animals? This seminar will highlight opportunities for manufacturers to address these applications.

Announcing Our Panel:

Melissa Brechner, Ph.D. - Director, CEA Center for Hydroponic Technology Transfer, Cornell University

Melissa is the director of the Cornell Center of Excellence for Controlled Environment Agriculture (CEA) Technology Transfer, Education, and Applicable Research sponsored by NYSERDA. CEA is an advanced and intensive form of hydroponically-based agriculture, where plants are grown within a controlled environment so that horticultural practices can be optimized.

She has a bachelor's in bioresource engineering and another in horticultural engineering, both from Rutgers University, and a master's and a doctorate in specialty systems engineering from Cornell University. Melissa lives in Ithaca with her husband and two young sons.

Mariana Figueiro, Ph.D. – Light and Health Program Director and Associate Professor, Lighting Research Center, Rensselaer Polytechnic Institute

Mariana is LRC Light and Health Program director and associate professor at Rensselaer Polytechnic Institute. She is the recipient of the 2007 NYSTAR James D. Watson Award, the 2008 Office of Naval Research Young

Investigator Award, and the 2010 Rensselaer Polytechnic Institute James M. Tien '66 Early Career Award for Faculty. She is former chair and current member of the IESNA Light & Human Health Committee.

Mariana holds a bachelor's in architectural engineering from the Federal University of Minas Gerais, Brazil, and a master's in lighting and a doctorate in multidisciplinary science from Rensselaer. Her master's and Ph.D. dissertation research focused on the area of human circadian response to light.

Sandi Meier, Ph.D. – Senior Project Manager, NYSERDA

Sandra is senior project manager in the Environmental R&D group with the New York State Energy Research and Development Authority (NYSERDA). Her portfolio includes policy analysis and research in the areas of climate change, biomass, controlled environment and urban/rural agriculture, and air quality. Prior to joining NYSERDA in 2008, she was director of the Environmental Energy Alliance of New York managing regulatory and research initiatives for electric generating and transmission/distribution companies operating in New York state.

Sandra has a master's and doctorate in forest pathology from North Carolina State University and a bachelor's in forest biology from SUNY College of Environmental Science and Forestry.

Kim Peiler – Application Engineering Manager, OSRAM Opto Semiconductors, Inc

Kim is application engineering manager at OSRAM Opto Semiconductors, and she is responsible for solid-state lighting application engineering in North America. Her broad application engineering experience includes street and area, retail, residential, commercial, horticulture, and specialty lighting. Additional experience outside SSL includes mobile communications backlighting and camera flash, industrial and consumer white goods, and automotive interior illumination. Prior to joining OSRAM in 2005, Kim performed automotive research in development of advanced illumination and display technologies as well as application of optical data communications networks. She has been working in various capacities in the field of optoelectronics since 1999.

Kim holds a degree in electrical engineering from General Motors Institute (Kettering University) in Flint, Michigan. She has been also active with the IESNA.

Capturing the Lighting Edge is supported through funding by NYSERDA.

For more information, visit

<http://www.lrc.rpi.edu/education/outreachEducation/CapturingtheLightingEdge.asp>

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