

## Joint Biennial CNC-CIE, CIE-USNC & CORM Conference 2023 Conference Schedule (6-8 November 2023)

*Note: Times shown are Eastern Time (ET).*

### Monday, November 6<sup>th</sup>

<b>11:00 AM</b>	<b>Conference Start</b>
11:00 AM	Introduction, Jeff Hovis, President, CNC-CIE
11:05 AM	CIE Research Strategy, Jennifer Veitch, President, CIE
11:40 AM	short break
<b>11:50 AM</b>	<b>Optical Properties of Materials, Chair: Aaron Goldfain</b>
11:50 AM	Material Characterization of Phantom Standards Developed by the National Institute of Standards and Technology for Quantitative Optical Medical Imaging Application and Technology for Quantitative Optical Medical Imaging Applications, <i>Jeeseong Hwang, NIST</i>
12:10 PM	$\mu$ BRDF Measurement and Traceability Challenges, <i>Lou Gevaux, LNE-CNAM</i>
12:30 PM	Impact of a Finite Thickness Integrating Sphere Port on Diffuse Reflectance Measurements, <i>Luke Sandilands, NRC</i>
12:50 PM	UV-C Directional Reflectance Measurements of Common Materials, <i>Aaron Goldfain, NIST</i>
1:10 PM	break
<b>1:40 PM</b>	<b>UV Radiometry, Chair: Andrew Jackson</b>
1:40 PM	UV LED Measurements Using the IES-LM-92 Methods, <i>Jeff Hulett, Vektrex</i>
2:00 PM	Key Findings from Radiometric Testing of Upper-Room GUV Luminaires, <i>Jason Tuenge, PNNL</i>
2:20 PM	Field-Evaluations of Upper-Room and Whole-Room Germicidal Ultraviolet Installations, <i>Eduardo Rodriguez-Feo Bermudez, PNNL</i>
2:40 PM	short break
<b>2:50 PM</b>	<b>UV Radiometry (Cont.)</b>
2:50 PM	UVC and GUV Measurements in the UVSCF, <i>Jeanne Houston, NIST</i>
3:10 PM	Importance of UV Spectral Distribution in Solar Simulator Applications, <i>Andrew Brezinski, Sciencetech, Inc</i>
3:30 PM	The Need for Fluence-Rate Measurement Instruments, <i>David Sliney, Independent Consultant</i>
3:50 PM	break

## Monday, November 6<sup>th</sup>

(continued)

4:20 PM

### Current Research at NMIs I, Chair: Angela Gamouras

4:20 PM

A New Method for Measuring Splice Loss Uncertainty in Single Photon Detector Efficiency Measurements, *Sonia Buckley, NIST*

4:40 PM

Spectroradiometer Calibration with an UAV-Borne Light Source, *Liviu Ivanescu, NRC*

5:00 PM

Development of a New Reference Photometer, *Yuqin Zong, NIST*

5:20 PM

Infrared Radiometry for Space-Based Earth Outgoing Radiation Measurements, *Patrick McArdle, NIST*

5:40 PM

**End of Day**

## Tuesday, November 7<sup>th</sup>

11:00 AM

### Educational Session on Glare Metrics, Models and Standards,

**Moderator: Mark Jongewaard**

Speakers: Belal Abboushi and Naomi Miller (Pacific Northwest National Laboratory), Mehlika Inanici (University of Washington), and John Bullough (Mount Sinai Light and Health Research Center)

12:30 PM

break

1:00 PM

### Current Research at NMIs II, Chair: Heather Patrick

1:00 PM

Radiation Pressure to Facilitate Measurements of High Laser Powers, *Kyle Rogers, NIST*

1:20 PM

Quantum Cascade Lasers for Measurement Science, *Nelson Rowell, NRC*

1:40 PM

NRC Cryogenic Radiometer: Scale realization from the UV to NIR, *Ka-ming Liu, NRC*

2:00 PM

Laboratory and Field Calibration Methods for Solar-Induced Fluorescence Monitoring Systems, *Julia Marrs, NIST*

2:20 PM

break

2:50 PM

### Metrology of Indoor and Outdoor Lighting, Chair: Craig Bernecker

2:50 PM

A New Metric for Visibility of the Phantom Array Effect, *Jianchuan Tan, PNNL*

3:10 PM

Study of Non-Uniformity Corrections in Luminous Flux Measurements of Automotive Headlamps Using an Integrating Sphere Through Simulations, *Luis Prado Jr., Prado Lux*

3:30 PM

Development and Verification of a Low-Cost Handheld Spectroradiometer, *William Mills, Northern Illinois*

3:50 PM

Effect of Field of View and Cosine Correction on Spatial Efficiency for Indoor Lighting, *Parisa Mahmoudzadeh, Penn State*

4:10 PM

break

**Tuesday, November 7<sup>th</sup>**  
**(continued)**

- 4:40 PM** **Further Studies in Metrology of Indoor and Outdoor Lighting,**  
**Chair: Howard Eng**
- 4:40 PM Discomfort Glare for Pedestrians: Can Any Model Get Us in the Ballpark, *Belal Abboushi, PNNL*
- 5:00 PM Accuracy of the CIE Standard Observer and Other Spectral Luminous Efficiency Functions, *Wangyang Song, Penn State*
- 5:20 PM Improving the Mp Metric for Evaluation of Flicker, *Jiaye Li, NIST*
- 5:40 PM **End of Day**

**Wednesday, November 8<sup>th</sup>**

- 11:00 AM** **Invited talk on Cone Fundamental Photometry and Colorimetry,**  
**Lorne Whitehead, University of British Columbia**
- 11:30 AM short break
- 11:40 AM** **Human Vision, Chair: Jeff Hovis**
- 11:40 AM The Effect of Texture on Perceived Color Differences, *Zhenhua Luo, NC State*
- 12:00 PM The Influence of Background on the Visual Color Difference Evaluation of Multicolored Materials, *Jiaying Wu, NC State*
- 12:20 PM Visual Quality in Low-Light Environments: Effects of White, Amber and Red Lighting on Perception and Light Pollution Reduction, *Dorukalp Durmus, Penn State*
- 12:40 PM break
- 1:10 PM** **Human Vision (Cont.)**
- 1:10 PM Do Working Individuals with Color Vision Deficiencies Experience Challenges in the Digital Age?, *Sandra Mazur, Univ. Waterloo*
- 1:30 PM Color Vision Testing for the Railways, *Jeffery Hovis, Univ. Waterloo*
- 1:50 PM Gender Disparities in Spatial Cognition: The Influence of Stereopsis and Mental Rotation, *Sunder Bukya, Universities of Delhi, Hyderabad and Harvard*
- 2:10 PM A Core Lighting Curriculum for University Students and Independent Learners, *Kevin Houser, Oregon State*
- 2:30 PM break
- 3:00 PM **CIE Division reports**
- 4:15 PM **End of conference**