

OHCEAC CONFERENCE SCHEDULE 2024

“Advancement in CEA Automation and Crop Management”

July 17, 2024

All times are in Eastern US Time (ET)

Tuesday, July 16th Curl Viewpoint | 80 W Woodruff Ave, Columbus, OH 43210

5:00 -7:00 PM OHCEAC Welcome Reception at Curl Viewpoint
Sponsored by AdeptAg, Agrolux, Bauerle Precision, BFG Supply Co., Certhon,
RAYN Growing Systems and Sollum Technologies
Access Directions Provided in Separate Document

Wednesday, July 17th CEA Research Complex (CEARC) | 2515 Carmack Rd., Columbus, OH 43210

8:15 – 8:30 AM Welcome and Introductions
Dr. Chieri Kubota (OHCEAC Director, Ohio State University)

Keynote Presentations Session 1 | Moderator: Dr. Peter Ling (Ohio State University)

8:30 – 9:10 AM "Robotics for Agricultural Applications at the National Robotics Engineering Center at Carnegie Mellon University"
Dr. Dimitrios “Dimi” Apostolopoulos (Carnegie Mellon University)

9:10 – 9:15 AM Q&A

9:15 – 9:55 AM "Why Robots Are Not Yet Abundantly Used in Protected Cultivation"
Dr. Eldert J. van Henten (Wageningen University & Research, the Netherlands)

9:55 – 10:00 AM Q&A

10:00 – 10:15 AM Break

Keynote Presentations Session 2 | Moderator: Dr. James Altland (USDA-ARS)

10:15 – 10:55 AM “Can We Reach Autonomous Greenhouses in the Future?”
Dr. Silke Hemming (Wageningen University & Research, the Netherlands)

10:55 – 11:00 AM Q&A

11:00 – 11:40 AM "Keys to Successful Application of Horticultural Lighting"
Dr. Erik Runkle (Michigan State University)

11:40 – 12:10 PM Panel Discussion (All Keynote Speakers)

Lunch and Sponsor Presentations

12:10 – 12:45 PM Lunch

12:45 – 1:20 PM 5 Minute Sponsor Presentations



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Invited Research Presentation Session | Moderator: Dr. Chieri Kubota (Ohio State University)

- 1:20 – 1:40 PM "Novel Biostimulant Control of Lettuce Tipburn in Greenhouse Hydroponic Production"
Dr. Qingqu "William" Meng (University of Delaware)
- 1:40 – 2:00 PM "Nutrient Strategies to Increase Strawberry Daughter Plant Production in Controlled Environments"
Dr. Jennifer Boldt (USDA-ARS)
- 2:00 – 2:20 PM "Advanced Nutrient Management for Recirculating Hydroponics"
Dr. Ryan Dickson (University of Arkansas)
- 2:20 – 2:40 PM "Evaluating Winter Production of Six *Capsicum annuum* Cultivars Grown in the Greenhouse with Supplemental LED"
Dr. Craig Yendrek (Hawthorne Gardening Company)
- 2:40 – 2:55 PM Additional Q&A and Discussion
- 2:55 – 3:10 PM Break
- 3:10 – 3:30 PM "AI and Growing Plants: Limits, Threats and Opportunities in Real World Applications"
Dr. Jan Westra (Priva)
- 3:30 – 3:50 PM "AI-Enhanced Computer Vision for Crop Monitoring in Controlled Environment Agriculture"
Dr. Azlan Zahid (Texas A&M University)
- 3:50 – 4:10 PM "Development of a Data-driven Leaf Pruning Method Based on Weekly Light Integral below the Canopy"
Dr. Changhyeon Kim (Ohio State University)
- 4:10 – 4:30 PM "Utilizing Environmental DNA for the Detection and Identification of Common Greenhouse Pests Found on Tomato Plants"
Jonathan Lee-Rodriguez (Ohio State University)
- 4:30 – 4:45 PM Additional Q&A and Discussion
- 4:45 – 4:50 PM Conference Closing
Dr. Chieri Kubota (Ohio State University)
- 4:50 – 5:00 PM Tour Preparation (In-Person Participants)
- 5:00 – 6:00 PM CEARC Tour (In-Person Participants)

