

# SPRING MEETING '22

HILTON WASHINGTON, D.C. CAPITOL HILL  
CAPITOL HILL - WASHINGTON, DC

## TUESDAY, APRIL 19

- 10am - 7pm**      **Registration & Information**
- 10:00 - Noon**    **Future Leaders Committee Meeting**
- 1 - 4pm**            **Manufacturing & Technology Committee Meeting**
- 4 - 5pm**            **Supplier Advisory Committee Meeting**
- 5:30 - 7pm**        **Welcome Reception — Atrium Foyer**  
Make new contacts and get reacquainted with industry friends while arranging dinner plans at popular nearby restaurants.

## WEDNESDAY, APRIL 20

- 7am - 2pm**            **Registration & Information**
- 7:30 - 8:15am**      **Breakfast & Opening Remarks**  
**Joe McClure, PPI President, McClure's Pickles.**
- 8:15 - 9am**            **A Decade of Applied Pickle Research at the University of Delaware**  
**Gordon C. Johnson, PhD, Extension Fruit and Vegetable Specialist, University of Delaware**  
Over the last decade, the University of Delaware has conducted applied research on pickles including plant nutrition, factors affecting quality, plant populations, disease management, variety trials, and yield optimization. Most recently, research has focused on yield stability in parthenocarpic pickling cucumbers.
- 9 - 9:30am**          **Irrigation & Water Management**  
**James Adkins, Associate Scientist, University of Delaware**  
Proper application rate, timing and uniformity of irrigation is critical to maximize yield in all crops. Irrigation management is exponentially more important with ground borne vegetable crops to reduce disease potential and improve cucumber quality. Ideal irrigation scheduling focusing on timing, rate, and application uniformity will be discussed in detail and the irrigation equipment limitations will be shared.
- 9:30 - 10am**        **FDA Sodium Reduction Guideline**  
**Martin Hahn, JD, PPI General Counsel, Hogan Lovells**  
Martin will update members on FDA's voluntary sodium reduction guidance and what it means for the pickled vegetable industry.

- 10 - 10:30am**      **Understanding and Managing Cucurbit Downy Mildew**  
**Jake Jones, PhD candidate, Extension Agent, Kent County, University of Delaware**  
Cucurbit downy mildew threatens pickling cucumber yields annually. Recent research on the pathogen's population biology can provide some insight into disease management. Findings will also be presented on fungicide efficacy and resistant varieties to manage the disease in the Mid-Atlantic.

- 10:30 - 11am**      **Integrated Approaches to Root Knot Nematode Management in Pickle Production**  
**Alyssa Koehler, Assistant Professor and Extension Specialist, Plant Pathology, University of Delaware**  
Root knot nematodes are microscopic roundworms that can cause significant yield loss. Infected cucumber plants are often stunted with substantial root galling that disrupts water absorption and nutrient uptake. Soil sampling to identify population levels and species distribution can inform cultural, chemical, and biological management decisions.

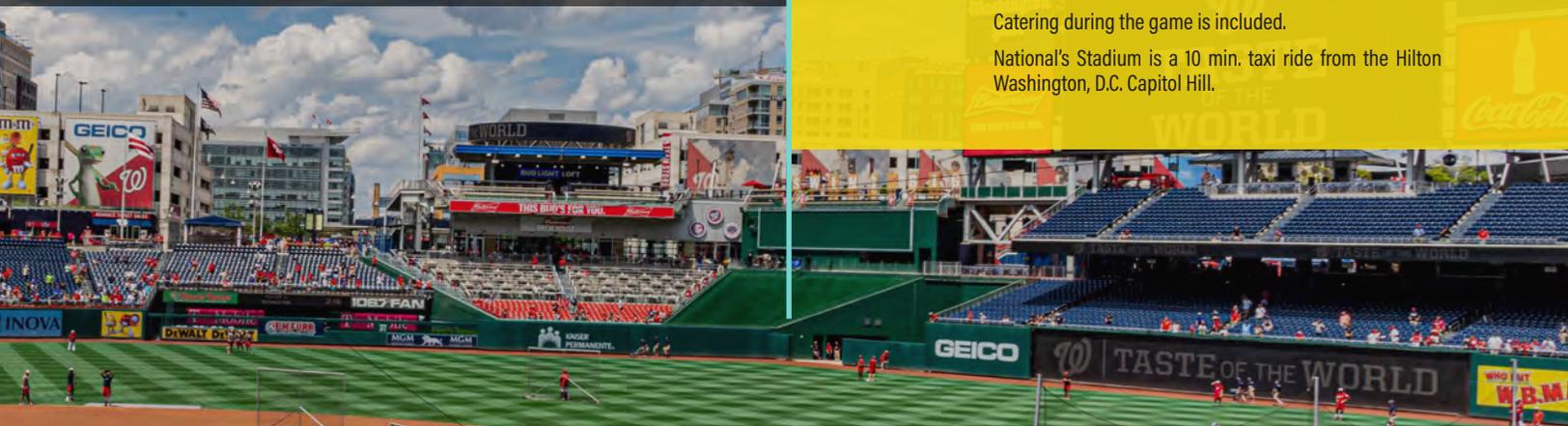
- 11 - 11:45am**      **Light Stable Natural Yellow - Disrupting the Norm (Patent pending!)**  
**E. Eric Engelman, PhD, Director of Colors Innovation & New Product/Process, Commercialization, Kalsec, Inc.**  
Nothing is as simple as black or white, but how about a natural yellow that is stable in light? Dr. Engelman will discuss the chemistry of natural pigments and how Kalsec has successfully overcome the historical challenges to replace synthetic yellow dyes in the pickling industry. He will review recent findings of enhanced stability utilizing combinations of natural pigments both in vitro and in sliced and whole pickles and peppers.

- Noon - 5pm**            **Free time to explore Washington, D.C.**

- 7:05 pm**  
Suites open at 6:05 pm
- MAJOR LEAGUE BASEBALL**  
**Arizona Diamondback vs. The Washington Nationals**  
National's Park

Enjoy the game from the comfort of climate-controlled Party suites - located along the 3rd base line with in- and out-door seating, offering fantastic views of the field. Catering during the game is included.

National's Stadium is a 10 min. taxi ride from the Hilton Washington, D.C. Capitol Hill.



# THE PPI SPRING MEETING '22 WILL PROVIDE IMPORTANT EDUCATIONAL INFORMATION AND UNMATCHED NETWORKING OPPORTUNITIES.

THURSDAY, APRIL 21

7:30am - Noon

**Registration & Information**

8 - 8:30am

**Continental Breakfast**

8:30 - 9am

**Legislative Update**

Hear a front row analysis of legislative issues of interest to the pickled vegetable industry, as well as a timely update on major Congressional actions.

9 - 9:30am

**Utilization of Spray Irrigation for Sauerkraut and Pickle Brine Wastewater**

Michael Maney, GLK Foods, Appleton, WI

Terry Viegut, GLK Foods, Appleton, WI

GLK Foods operates state-permitted lagoons and irrigation fields for the disposal of plant wastewater. The system offers a cost-effective and sustainable solution for wastewater with elevated chlorides and other components associated with fermentation. Mike will discuss operation layout, monitoring points and limits, and overall system operation.

9:30 - 10am

**Management of Effluents from Pickling Operations**

Ilenys M. Pérez-Díaz, PhD, USDA-ARS Food Science & Market Quality and Handling Research Unit

Ilenys will describe technologies tested to facilitate the management of wastewaters from pickling including pasteurization and alkalization, brine recycling, crossflow filtration and activated carbon bed. She will briefly describe other existing technologies to facilitate wastewater treatments such as reverse osmosis, distillation, electrodialysis and microbial desalination and discuss the potential solutions salt-loving-live organisms offer.

10 - 10:30am

**Agricultural and Temporal Factors Influence Bacterial Survival and Transfer to Cucumbers**

Kalmia (Kali) E. Kniel, Professor and Co-Director CEWER, Associate Chair, Department of Animal and Food Sciences, University of Delaware

Over a two-year field study, bacterial survival (E. coli and Salmonella) and transfer to crops was shown to be influenced by temporal and agricultural factors. These factors varied by year and included soil plots covered with or without plastic mulch, rainfall, and soil amendment utilization.

10:30 - 11am

**Sensors in Agriculture**

James Adkins, Associate Scientist, University of Delaware

Sensor technologies can improve management through more accurate and timely assessment of crop status, soil water status, and many other facets of crop production. Explosive advancements in technology and network connectivity have made the use of extensive and highly advanced sensor systems possible but determining which systems will result in a return on investment is difficult. This presentation will discuss which sensors are most appropriate for plant, soil, and water measurement, what works and doesn't, and the data associated data management challenges.

11 - 11:45am

**FSMA Implementation and FDA Inspection Experiences**

Fletcher Arritt, PhD, Mt. Olive Pickle Company

Brian Yaun, Investigator, U.S. Food and Drug Administration

Fletcher will lead this session designed to provide the latest information regarding compliance with FDA's Food Safety Modernization Act. Brian Yaun will share the administration's current approach to inspections. This is a great opportunity to get all your compliance questions answered!

11:45am

**Prize Drawing and Closing Comments**

11:55am

**Adjourn**

