

Packaging Solutions Are Neatly Packaged at IFT16

The work of the Food Packaging Division will be showcased at IFT16: Symposia, poster and e-poster sessions, a presentation of the Riester-Davis-Brody Award, and packaging innovations on the expo floor promise to make IFT16 full of packaging guidance.

Symposia with Packaging Themes

The Food Packaging Division's Distinguished Lecturer, Shyam Sablani, will speak during session 026, "Advances, Challenges, and Opportunities in Nonthermal and Other Novel Food Processing Technologies: Engineering and Packaging Aspects," on Sunday, July 17, from 2 p.m. to 3:30 p.m. Sablani will discuss the design and development of

packaging that is compatible with microwave-assisted thermal sterilization and high pressure processing.

During session 042, "Packaging Innovations for Processed Meat, Poultry, and Seafood," on Monday, July 18, from 10:30 a.m. to noon, speakers Hossein Daryaei, Alexandra M. Oliveira, and Baris Ates will discuss the packaging innovations needed to meet new food processing technologies. Notably, Ates will focus on innovation in reducing packaging stress during forced convection processes.

From 12:30 p.m. to 2 p.m. on Monday, July 18, session 053, "Maximizing Freshness and Reducing Waste of Packed Food Using Shelf Life Simulations: Basic

Principles and Case Studies," will feature presentations by Eva Almenar, Michelle Richardson, and Evan Ziolkowski. Almenar and Ziolkowski will discuss shelf life modeling techniques and their role in package selection. Richardson will explore high barrier packaging needed for NASA's mission to Mars.

From 2:15 p.m. to 3:45 p.m. on Monday, July 18, session 065, "Intelligent Packaging to Inhibit Food Fraud, Reduce Food Waste, and Market Food," will include presentations by John Spink, Douglas C. Moyer, Abdenour Abbas, and Jim Sinisgalli. Spink and Moyer will talk about reducing food fraud. Abbas and Sinisgalli will speak about tools that enable consumers to manage consumption and reduce food waste.

Exhibitor Information

What follows are brief descriptions of some of the products and services available from packaging-related companies that will be exhibiting at IFT's food expo.

Caliber and Intrepid intermediate bulk containers (IBCs) will be in the spotlight at the Buckhorn booth. The company offers a large assortment of bulk boxes, handheld containers, pallets, and specialty boxes in addition to its IBCs. *Buckhorn, buckhorninc.com, Booth 4552*

Aseptic tanks suitable for sanitary storage, fermentation, and transferring applications are available for rental from CCR Containers. In addition to portable aseptic tanks, the company's product assortment includes stainless steel intermediate bulk containers and pressure containers. *CCR Containers USA, ccrcontainers.com, Booth 3942*

Fully outsourced container rental solutions from CHEP are approved for liquid and dry

food contact applications. A broad assortment of container options includes liners, accessories, tracking, cleaning, and repair. Collapsible, stackable containers mean lower storage and transportation costs. *CHEP Palletecon Solutions, chep.com, Booth 4656*

Plastic bags for bulk food handling that are detectable by metal and x-ray inspection systems reduce the risk of product contamination



resulting from bits of packaging getting into the manufacturing process flow. Detectamet bags are available in nine colors and a wide choice of micron gauges. These bags

work well with another new product, metal detectable paper, which can be printed on all standard designs of multicolor printing machines to yield labels, instructions, and record sheets for use in food product applications. In the past year, Detectamet has added more than 20 new detectable tools and materials to its product assortment. The list of new offerings includes a lidded box-tray designed to handle semifinished products. All Detectamet plastics are safe for contact with food. *Detectamet, detectamet.com, Booth 4727*

Sorbent technology from Multisorb can help reduce preservative use, retain freshness, and increase product shelf life. By slowing oxidation, Multisorb's oxygen absorbers and packaging solutions can extend shelf life and support the use of natural oils in foods while reducing the possibility of rancidity or reliance on synthetic antioxidants. Solutions are available for baked goods, fresh and processed meats, nuts, prepared foods, snacks, MREs,

Session 098, “Designing Biomaterials for Sustainable Food and Health: Assembling Proteins and Carbohydrates to Construct Sensors and Carriers of Active Compounds,” on Tuesday, July 19, from 10:30 a.m. to noon, will be a fascinating symposium on bio-derived polymers. Yuan Yao will discuss dendrimer-like biopolymers that enhance the active ingredients in foods and the creation of Pickering emulsions, non-emulsion dispersions, and nanoparticles to protect, enhance, or enable bioactive ingredients for food applications. Jozef L. Kokini will talk about the potential of a zein-based gold-coated nanophotonic platform combined with surface-enhanced Raman spectroscopy. And Peng Zhou will discuss dairy protein-based biomaterials for food and health.

During session 103, “Quenching the

Marketplace Thirst for Innovative Packaging,” on Tuesday, July 19, from 10:30 a.m. to 11:30 a.m., Jeff Hilton and Andy Dratt will discuss how packaging manufacturers are designing creative packaging for beverages to capture the attention of consumers, which translates into product sales.

Packaging Exhibits

On the expo floor, ingredient packaging by global suppliers Aran Packaging, Greenville, S.C. (aran.co.il), will be on display at booth 446, and bag-in-box innovations by International Paper, Indianapolis, Ind. (internationalpaper.com), will be on display in booth 3112. PakSense, Boise, Idaho (paksense.com), at booth 4522 will showcase temperature monitoring that complies with the Food Safety Modernization Act.



Brian Wagner,
recipient of
2016
Riester-
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Award

2016 Riester-Davis-Brody Award

The 2016 recipient of the Riester-Davis-Brody Award is Brian Wagner, vice president of consulting services for HAVI Global Solutions. “With Aaron Brody’s name added this year, the award is humbling beyond belief,” Wagner says. He credits his success to being “fulfilled by putting the needs of others—consumers, customers, colleagues, employers, employees, friends, family, strangers—first.” Brian advises new graduates to “constantly seek to learn and find something that makes you relevant.”

tortillas, and pastas. Multisorb’s oxygen absorbers are manufactured in the United States in a cGMP compliant facility certified to GFSI FSSC 22000. *Multisorb Technologies, multisorb.com, Booth 405*

Permeation/barrier testing devices from Labthink International

are designed to measure gas (O₂, CO₂, and N₂) and vapor permeability through barrier materials with wide range and precision temperature and humidity control. In addition to barrier packaging materials, these devices may be

used for containers and blister pack permeability tests. Developed to meet ISO/ASTM international standards, the devices are equipped with an embedded computer control system. Labthink permeation devices may be used with the company’s advanced online data management system for packaging testing. *Labthink International, labthinkinternational.com, Booth 2375*

SpaceKraft disposable IBCs with Aseptic

Bottom Fill (ABF) technology provide processors of aseptic packaged goods with a cost-effective one-way shipping alternative to stainless bulk containers. *SpaceKraft IBCs* with ABF technology allow products to be filled and dispensed aseptically using steam sterilization; this approach can extend unrefrigerated shelf life up to six

months. With a capacity from 220 gal to 330 gal, *SpaceKraft IBCs* with ABF technology include a form-fit ethyl vinyl alcohol copolymer high-barrier irradiated liner with a two-inch steam sterilizable valve designed with DIN11851 (DN50) dairy thread capable of withstanding up to 145°C, making it a good fit for aseptically processed fruit applications. *International Paper, spacekraft.com, Booth 3112*



Packaging Solutions Are Neatly Packaged at IFT16 continued...

Poster Sessions Showcase Active and Intelligent Packaging

Packaging Sensors

- Development of a Spoilage Sensor to Detect Microbial Metabolic Products in Seafood Packaging on Sunday, July 17, from 3 p.m. to 5 p.m.
- Preparation of a Freshness Indicator for Quality of Nuts in Smart Packaging in on Sunday, July 17, from 3 p.m. to 5 p.m.

Antioxidant Packaging

- Improving Stability of Lycopene in Oil-in-Water Emulsions with Polyphenol-Coated Active Packaging Materials on Monday, July 18, from 11 a.m. to 1 p.m.
- Effect of Polymer Chemical Structure on Efficient Loading and Release of Naturally Occurring Compounds and Their Application in Antioxidant Food Packaging on Tuesday, July 19, from 10 a.m. to noon

Antimicrobial Packaging

- Development of UV-Activated TiO₂ Nanocomposite Food Packaging Film for Antimicrobial Application on Sunday, July 17, from noon to 2 p.m.
- Hydroxypropyl- β -Cyclodextrins and Plasticizers Modulate the Load Capability of Monoterpene Alcohols in Hydrophilic Polymers: Application to the Design of Active Food Packaging on Monday, July 18, from 2:30 p.m. to 4:30 p.m.
- Allyl Isothiocyanate (AITC) by Triacetyl β -Cyclodextrin (TACD) and Its Potential Application in a Polymer Extrusion Process for Food Packaging on Monday, July 18, from 2:30 p.m. to 4:30 p.m.
- Development of Antimicrobial Food Packaging by Incorporated Antimicrobial Molecule-Nanoparticles System in Bio-Based Polymers on Tuesday, July 19, from 10 a.m. to noon

Making Connections

Food Packaging Division members Ziyneet Boz, a doctoral student at the University of Florida, and Maxine Roman, senior scientist at Kraft Heinz, have developed social platforms and a committee structure for division members to connect more readily before, during, and after IFT16. Recent news on hot topics, research, and workshops are announced through IFT Connect, on LinkedIn, and on the division Twitter account, @IFTFPD, and a fun Twitter takeover session during IFT16 will increase engagement with others. **FT**



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