



## Packaging Opportunities Are Nicely Bundled at IFT17

Exhibits, symposia, and technical sessions provide ample opportunity to connect, build new ties, and learn. IFT17 delivers a tidy package for packaging professionals.

### Packaging Sessions

During session 007, “Nano-Enabled Packaging to Increase Food Safety and Decrease Food Waste,” on Monday, June 26, from 10:30 a.m. to

noon, speakers Hongda Chen, Tony Jin, and Umut Yucel will discuss recent innovations in packaging technology to reduce microbes in foods and decrease food waste. The

## Exhibitor Information

Descriptions of some of the packaging-related exhibitors at the IFT17 food expo follow.

**A gusseted plastic liner** for bag-in-box applications, the *Z-Tainer* comes in sizes ranging from 1.5 L – 20 L with a variety of taps available. Bag-in-box liners ensure that air ingress (and oxidation) is minimal because



they shrink as product is dispensed, thus keeping the product fresh. The cubic shape of the *Z-Tainer* helps ensure that liquid does not get trapped in nooks and crannies of the bag as it is emptied, reducing waste. The shape is also advantageous during the production process; because the handle is on top and the liner matches up with the shape of the box, it can be easily and quickly set into a box after filling. Applications include oils, wine, flavors,

and fragrances. *Zacros America*, [zacrosamerica.com](http://zacrosamerica.com), Booth 5018

**A collapsible intermediate bulk container**, the *Pallecon 315* is a simple and cost-effective option for shipping and storing liquids. It features an interlocking design that allows containers to stack easily whether full or empty. Smooth walls and a lowered sump bottom discharge feature improve hygiene and ensure low residual product when liquid is decanted. CHEP *Pallecon* provides food and beverage container rental programs, including tracking and management services, for reusable dry and liquid containers. *CHEP Pallecon Solutions*, [cheppallecon.com](http://cheppallecon.com), Booth 4935

**A supplier of fiber-based corrugated packaging**, International Paper offers *SpaceKraft* and *ReadyFill* intermediate bulk containers (IBCs). *SpaceKraft* IBCs are available in a variety of shapes and in a range of capacities up to 330 gallons. These containers are strong, recyclable, and sustainable and offer advantages over drums, returnable totes, and bottle-in-cage systems for set up, storage, dispensing, and disposal. Suitable for high-volume food processors, *ReadyFill* IBCs are compatible with automated filling equipment that is often used with standard drums and totes. *ReadyFill* arrives prebanded and secured to a heat-treated wooden pallet.

*International Paper*, [internationalpaper.com](http://internationalpaper.com), Booth 4140

**A new bag and box combination** available from Arena Products will be on display at the food expo. New versions of the *Air-Evac Blowfish* liner and *Arena 330* shipper can be filled by aseptic fillers that require steaming the connecting valve and can be used to replace rigid metal tanks, saving users space, time, and money. It fills and discharges through the same valve, which is located at either the bottom center or bottom corner of the shipper; a base side hookup is available for either option. The company bills the *Arena 330* shipper as the only all plastic, collapsible, reusable, stackable, bag-in-box for bulk liquid shipping; it is suitable for discharging thick or viscous bulk materials. *Arena Products*, [arenaproducts.com](http://arenaproducts.com), Booth 4636



speakers offer a blend of research and implementation to spark ideas.

During session 029, "Technological Advancements in Food Processing and Packaging to Improve Sustainability in the Food Industry," on Monday, June 26, from 3:30 p.m. to 5 p.m., the 2017 recipient of the Riester-Davis-Brody Award will discuss sustainable packaging solutions for the food industry, including new research assessing the efficacy of bio-based and biodegradable packaging materials and the benefits of active and intelligent packaging.

In session 071, "Active Packaging to Enable Clean Labeling," on Wednesday, June 28, from 8:30 a.m. to 10 a.m., Kay Cooksey will provide an update on how antimicrobial packaging increases the safety of clean label foods. Julie Goddard will discuss the influence of ligand chemistry on performance in complex matrices, synthetic routes to scalability, and the efficacy of these technologies in reducing food spoilage. John Solomon will speak about simple improvements in active packaging that will extend the shelf life of foods. And Walker Stockley will address how modified atmospheres inside packages influence shelf life.

On Monday, June 26, from 3:30 p.m. to 5 p.m., an ePoster session will feature a presentation on nanocomposite packaging films based on chitosan. Another ePoster session on Wednesday, June 28, from 1:30 p.m. to 3:30 p.m. will feature presentations on a novel antimicrobial pouch for blueberries, active packaging films containing bacteriophages, and modified atmosphere packaging using permeable gas components.

#### Packaging Exhibits

Among this year's Food Expo exhibitors are Dixie Canner (Booth 1675), which will feature miniature processing equipment, aseptic canning, and vacuum packaging equipment; International Paper (Booth 4140), which will showcase *SpaceKraft* and *ReadyFill* bulk fill containers; WePackItAll

## Printed Poster Sessions on Food Packaging

### Nanotechnology

- Antibacterial Properties of Carvacrol and Cinnamaldehyde Released From a Solution of Blow Spun Fish Skin Gelatin Nanofibers, Monday, June 26, from noon to 2 p.m.
- Antimicrobial Activity of an Olive Flounder Bone Gelatin Film Containing Zinc Oxide Nanoparticles, Monday, June 26, from noon to 2 p.m.
- Development of Polylactic Acid-Based Nanocomposite Films Reinforced With Cellulose Nanocrystals From Coffee Silverskin Through an Extrusion Process, Monday, June 26, from noon to 2 p.m.
- Antibacterial Cellulose Nanocrystal Film Incorporated With Essential Oil-Loaded  $\beta$ -Chitosan Beads: Preparation and Characterization, Monday, June 26, from 3 p.m. to 5 p.m.
- Effect of Nanocomposite Packaging on Postharvest Senescence and Proteome Changes of Golden Needle (*Flammulina Velutipes*) Mushrooms During Cold Storage, Monday, June 26, from 3 p.m. to 5 p.m.
- Effects of Edible Hydroxypropyl Methylcellulose Film Incorporated With Carvacrol and Nano-Encapsulated Carvacrol on the Shelf Life of the Table Grape, Tuesday, June 27, from 11 a.m. to 1 p.m.
- Development of Antimicrobial Biofilms Based on Hydroxypropyl Methylcellulose and Oregano Essential Oil Nano-Emulsions, Tuesday, June 27, from 11 a.m. to 1 p.m.
- Optimization of pH-Responsive Nanoparticles Based on Poly-D,

- L-Lactide-co-Glycolide, Chitosan, and Trans-Cinnamaldehyde for Antimicrobial Delivery Applications, Tuesday, June 27, from 3 p.m. to 5 p.m.
- Biodegradable Zein-Laponite Nanocomposite Films Have Improved Mechanical, Water-Vapor-Permeability, and Surface Properties, Tuesday, June 27, from 3 p.m. to 5 p.m.
- Effect of Cellulose Nanofibers on Active Functions of Polysaccharide-Based Edible Films, Wednesday, June 28, from 1:30 p.m. to 3:30 p.m.
- Preparation of Nano-Bilayer Films Composed of Polyvinyl Alcohol, Chitosan, and Alginate, Wednesday, June 28, from 1:30 p.m. to 3:30 p.m.

### Antimicrobial Packaging

- Edible Films Formulated With a Mixture of Biopolymers for the Preservation of Minimally Processed Tropical Fruits. Monday, June 26, from 3 p.m. to 5 p.m.
- Antibacterial and Preservative Effects of Gelatin Film Incorporated With Thyme Essential Oil and Modified Atmosphere Packaging on Sailfish Fillet, Tuesday, June 27, from 3 p.m. to 5 p.m.
- Effects of Nisin and High-Pressure Processing at Low Temperature on the Survival of *Listeria* on Cold-Smoked Sockeye Salmon During Cold Storage, Tuesday, June 27, from 3 p.m. to 5 p.m.

### Intelligent Packaging

- Using pH-Responsive Polymer Nano-Brushes and Metallic Nanoparticles Platforms, Monday, June 26, from noon to 2 p.m.
- Fabrication of Optical Thermal

## Packaging Opportunities Are Nicely Bundled at IFT17 continued...

History Indicator for Perishable Foods Using Alginate/Gelatin Composite and Gold Nanoparticles, Monday June 26, from noon to 2 p.m.

- Modeling of TTI Smart Labels Response for Monitoring Histamine Formation in Fish, Monday, June 26, from 3 p.m. to 5 p.m.

- Focusing Bacterial Quorum Sensing Signaling by Nano-Magnetic Assembly, Monday, June 26, from 3 p.m. to 5 p.m.

- Aptamer-Based Biosensor for Real-Time Detection of *Listeria Monocytogenes* in Food Products Gelatin/Reduced Graphene Oxide/Gold Nanoparticles Nanocomposite: A Novel Design for the Fabrication of High-Sensitivity Enzymatic Glucose Biosensors for Food Industry, Wednesday, June 28, from 10 a.m. to noon.

- TTI Smart Labels for Monitoring Shelf-Life of Ready-to-Eat, Chilled Smoked Fish Products, Wednesday, June 28, from 1:30 p.m. to 3:30 p.m.

### Active Packaging

- Effects of Modified Atmosphere Packaging on Surface Color of Dark-Cutting Beef, Tuesday, June 27, from 11 a.m. to 1 p.m.

- Characterization of PLA- /PHB- Based Active Packaging Film and Its Application on Oysters. Tuesday, June 27, from 3 p.m. to 5 p.m.

- Solution-Free Preparation of Metal Chelating Active Packaging Material and the Resulting Antioxidant Efficacy, Tuesday, June 27, from 3 p.m. to 5 p.m.

- Designing of Equilibrium Humidity Packaging of Three Banana Cultivars, Considering the Effect of Temperature, Relative Humidity, and Storage Time, Wednesday, June 28, from 10 a.m. to noon.

- Development of PLA-/PHB-Based Biodegradable Active Packaging and Its Application on Salmon, Wednesday, June 28, from 10 a.m. to noon.

(Booth v426), which will highlight its co-packaging services; and CHEP Pallean Solutions (Booth 4935), which will highlight its services for reusable dry and liquid containers.

### Making Connections and Food Packaging Division News

An awards presentation and networking social for the Food Packaging Division will take place on Monday, June 26, from 6 p.m. to 8 p.m., and the division will have a table at the IFT Division Networking reception on Tuesday, June 27, from 4:45 p.m. to 6:15 p.m. Join food packaging professionals as they welcome new executive committee members Maritza Ramirez and Reza Tahergorabi at these events. **FT**



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