News Release



May 10, 2016

Ashland presents the cultural dimension of personal care at the New York Society of Cosmetic Chemists Suppliers' Day

Bridgewater, NJ - The inclination of consumers in emerging markets to invest in new products and formats is driving change in the personal care industry. Ashland (NYSE: ASH) is conducting primary research in these markets to predict the types of ingredients and formulations likely to be in demand in the years ahead.

At the New York Society of Cosmetic Chemists Suppliers' Day exhibition, Edison, New Jersey, preliminary results from Ashland pinpoints what consumers require from modern hair care and styling formulas in countries such as Brazil, South Korea, and Indonesia.

"Surveying consumers in Asia and Latin America, it is increasingly clear that the tendency toward specific hair care practices, and preferences toward actives of local origin, and next-generation ingredients, serve as essential areas of consideration in new product formulations," said Linda Foltis, vice president care specialties research and development, Ashland. "Our global technical and marketing teams now have a range of qualitative and empirical data that help Ashland tap into consumer thinking and ingredient preferences in particular markets."

One of the biggest challenges in emerging markets is in the area of delivery. Without an efficient delivery system to deposit natural oils, proteins, amino acids, anti-dandruff and other popular ingredients onto hair strands, the benefits of these ingredients can be limited.

"Bioavailability and actives delivery is a core scientific competency within Ashland," Foltis said. "At the Suppliers' Day Education Session held on May 9th, Joseph Dallal, senior manager hair care technical sales, Ashland, explained how shampoo and conditioning formulas can be designed to deliver ingredients with greater effectiveness and efficiency than formulas without delivery systems."

David Streuli, principal scientist, Ashland, also presented the fundamentals of aerosol technology development, a traditional delivery system for hair styling and finishing sprays in Japan, Europe, and North America.

Global laboratory network of cultural innovation

At Booth 301, Ashland invites attendees to discover how personal care ingredients, incorporated into prototype formulations, are adopted or designed for consumers in a particular geographic area, culture, or market. Technical and market experts can explain how the Ashland global laboratory network provides support for regional market needs in the areas of ingredients, formulations, market claims substantiation and clinical or consumer science studies. These data sets become a part of the Ashland global network and can be leveraged for use in other regions.

One example is Polyelectrolyte Complex Three (PEC3), a highly functional polyelectrolyte complex that delivers the benefits of styling and conditioning on hair. PEC3 is a patent-pending offering based on guar hydroxypropyltrimonium chloride and acrylates copolymer.

"Polyelectrolyte Complex or PEC technology has allowed us to solve challenging consumer benefits, notably in the areas of hair repair and durable heat activated smoothing," said Allwyn Colaco, senior team leader, Ashland. "The aggregate structure formed provides a synergy that is expressed in a system that conditions while styling, without compromising on either attribute."

The benefits of PEC3 include smooth comb-through, natural hold, humidity resistance, improved manageability, and shine. Moreover, PEC3 is heat activated with styling tools to produce a strong wash-resistant film that provides additional benefits of smoothing, anti-frizz, and shine.

At in-cosmetics 2016 in Paris, Ashland won the Bronze Innovation Zone Functional Ingredient Award for Polyelectrolyte Complex Three.

Sustainability in Zeta Fraction™ technology

Ashland also invites attendees to discuss Zeta Fraction™ technology, a proprietary platform to capture the biologically active complexes of live plants on a sustainable basis. This novel technology separates intracellular bioactives into various "fractions" while protecting the integrity of molecular architecture that exists in these cells. Ask how Zeta Fraction technology utilizes sustainable processes (in cultivation, production, and return of plant byproducts to the soil) and can add value throughout the supply chain.

Solutions Destination

Most recently, Ashland introduced Solutions Destination, a science-based platform that consumer product companies may access to acquire novel solutions and to carry them to market to enhance consumers' lives. Through Solutions Destination, Ashland offers the consumer product industries core scientific competency in the areas of bioavailability, texture/rheology and multi-functionality.

For more information about new products, initiatives and the global laboratory network of Ashland, visit the company at the New York SCC Suppliers' Day, today and tomorrow, or on the web at Ashland.com/personalcare.

About Ashland

Ashland Inc. (NYSE: ASH) is a global leader in providing specialty chemical solutions to customers in a wide range of consumer and industrial markets, including adhesives, architectural coatings, automotive, construction, energy, food and beverage, personal care and pharmaceutical. Through our three business units – Ashland Specialty Ingredients, Ashland Performance Materials and Valvoline – we use good chemistry to make great things happen for customers in more than 100 countries. Visit <u>ashland.com</u> to learn more.

-0-

FOR FURTHER INFORMATION:

Andrea Falciani +1 (302) 594-5237 AMFalciani@ashland.com