COLLABORATION WITH IOWA STATE UNIVERSITY

Through our Global Innovation Network (GIN), we are a member of the Center for Bioplastics and Biocomposites (CB²), which is a collaboration of companies and universities that pursues research to establish new processes and products, and push boundaries of renewable resources. Siegwerk has been a member of CB² since its creation in 2014 as an Industry/University Cooperation Research Center. Members are comprised of companies from the Industrial Advisory Board (IAB), in which GIN participates, to direct proposed research projects at Iowa State University and Washington State University. Each year, various proposals are submitted and voted upon to see what project will receive a funding grant, which is provided by the National Science Foundation and IAB members.

This year, GIN coordinated with the Flexible Packaging Business Unit, located in Des Moines, IA, to submit an idea for a project to develop a transparent UV barrier coating that could be printed on flexible packaging. Shan Jiang, an Assistant Professor at Iowa State University (ISU), saw an opportunity with this idea where his research lab could develop such a product. He reached out to Siegwerk for guidance on his proposal submission for a new biobased UV absorbing coating. His proposal would use organic and/or inorganic nanoparticles with a biobased binder resin to selectively block UV rays that are degradative to foodstuffs. These nanoparticles would absorb UV energy and release it as heat. Furthermore, careful control of nanoparticle size would allow the coating to print transparently.

We are excited to announce that Professor Jiang’s research proposal was selected for the CB² 2018 funding to develop the new UV barrier coating. The GIN team will be mentoring Professor Jiang and his team throughout the year to apply his new ideas in coating applications. We anticipate with this research that it will allow Siegwerk to offer a coating for more efficient and durable transparent UV resistance for packaging to improve shelf life of UV sensitive materials.

Troubleshooting Guide at Your Fingertips

The Siegwerk Troubleshooting Guide is now an App!

The Siegwerk Troubleshooting Guide app makes getting answers to common problems even easier. It will help identify issues and remedy problems on the go. You can find the new app by searching for “Siegwerk TSG” or click on the appropriate device operating system.
INNOVATION AWARDS PRESENTED

The Sigewerk Innovation Awards is a competition that recognizes “Siegwerkers” (Siegwerk employees) who bring new ideas to life in the packaging business. Whether that idea is big or small, these ideas could drive technical Flexible Packaging business to future successes.

Over a dozen unique entries were submitted from across the United States and Canada (CUSA). Each entry was presented to the selection committee, where it was rated on various factors including originality, overall potential, and presentation of the concept. The winners not only received a monetary prize, but are also given the opportunity to either directly manage and work on the suggested innovation, or manage the project indirectly, while receiving assistance from various CUSA Development, Applications, and GIN personnel.

We look forward in seeing the end result of these projects.

Ashley Corkin, Chemist II, suggested a project to incorporate a testing mechanism into the label of alcoholic beverages to ensure they have not been contaminated with gamma hydroxybutyric acid (GHB) or ketamine, both chemicals are known “date rape” drugs. The project focuses on a varnish, ink, or overprint that contains a testing solution that can be printed directly on the beverage label. This would greatly increase the availability of a testing protocol to consumers.

Steve Brokman, Lab Manager, presented a project entitled, “Incorporation of Soluble Dye Chromophores in Ink Binder Resins.” This project focuses on the grafting or chemical bonding of soluble dye chromophores into common ink resins used to mill pigments or make finished inks. The end result is to achieve coloration from the resins themselves. One can imagine replacing pigments in finished inks or enhancing their coloristic properties.

See us at
Booth #219
May 6 - 9, 2018
Indiana Convention Center
Indianapolis, IN