

CU PACKAGING NEWS

The virtual reality Issue

THE SONOCO INSTITUTE OF PACKAGING DESIGN & GRAPHICS at CLEMSON UNIVERSITY

2018 FTA Forum

This year the Flexographic Technical Association's (FTA) forum, "Bringing It All Together," took place in Indianapolis, IN. Clemson University, including staff from the Sonoco Institute with faculty and students from both Graphic Communications (GC) and Packaging Science, pulled out all of the stops, by participating in the conference and trade show in big ways.

On day one, Sunday May 6, attendees heard from Bobby Congdon (Sonoco Institute) and Jeff Schuetz (Sonoco Products Company) on the Sonoco FRESH Initiative. Nona Woolbright, GC Professor, also participated in a panel discussion on the Phoenix Challenge which Clemson students competed in this year.

Later that evening, GC student Katherine Treadaway was awarded the FFTA Rossini North America Flexographic Research Scholarship for an excellent flexo research proposal. A total of \$13,000 was awarded to her and the department to

assist with her undergraduate research. GC student and 2017 Rossini Scholarship winner, Tom Koester, also presented his flexo research findings earlier that day on variable repeats.

Besides leading sessions and participating in the Awards Banquet, the Clemson team also manned a large booth at InfoFlex, the accompanying trade show next door to the conference. The star of the booth was the virtual reality (VR) setup which showcased the Institute's consumer behavior shop, or CUshop™. Many attendees stopped by to experience a virtual version of CUshop, which is a physical eye tracking lab at the Sonoco Institute. The Institute is currently expanding its virtual capabilities with the help of new full-time staff member, Nate Newsome, by partnering with companies to provide training opportunities for large-scale printing and packaging equipment.

Overall, Forum 2018 was a great opportunity to learn, network, see old friends and gain new connections. The Sonoco Institute was honored to be invited to participate in so many ways.

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By joining our Corporate Membership Program, you allow us to:

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- Ensure top-quality seminars and workshops for your employees' continuing education
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NEW MEMBER SPOTLIGHT:

DIGIMARC | 

The Sonoco Institute welcomes Digimarc to the ranks of its corporate membership program!

Digimarc is the inventor of the Digimarc Discover® software and Digimarc Barcode for the automatic identification of virtually any object. Digimarc's patented Intuitive Computing Platform provides a comprehensive set of technology for reliably and efficiently identifying, discovering and interacting with digitally-enhanced media and objects.

"Digimarc is proud to be a member of the Sonoco Institute," said Scott Wilcox, Vice President of Client Services, Digimarc Corporation. "We believe Digimarc Barcode will soon become an integral part of how consumer product packaging is conceived and designed, and we're excited to be involved with a university where packaging innovation is the core focus."



Katherine Treadaway, left, accepts award at the FTA Forum with Mr. & Mrs. Rossini.

Clemson Student Awarded Rossini Scholarship

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The Sonoco Institute is proud to congratulate Clemson Graphic Communications student, Katherine Treadaway, for accepting the Rossini Scholarship at this year's Flexographic Technical Association (FTA) Forum. This is the fifth consecutive year that a Clemson student has been awarded the scholarship, which grants funds to both the student and the associated institute for a winning flexographic research proposal.

In order to be considered for the FFTA Rossini North America Flexographic Research Scholarship, students must propose a project which addresses a problem in the flexographic industry, identify a project faculty advisor, and provide a copy of their transcript(s) and three letters of recommendation.

Treadaway's proposal was based on the idea that with recent developments in press technology, the plate relief standard of 18-22 mils can be reduced to allow for greater minimum dot stability without printing the floor of the plate.

"I believe that the thicker plate floor will improve highlight dot performance and achieve higher resolutions with both conventional and hybrid screening across multiple substrates," said Treadaway. "My main goal is to utilize technology that is commonplace in the industry so the findings can be easily implemented. If successful, printers will be able to print smaller minimum dots without printing the floor of the plate from increased impression in addition to smoother fade-to-zeros. These cleaner fades will increase the quality of their products by being able to print smoother linear gradients, radial gradients and high-quality images that utilize a lot of highlight dots."

"After graduation, I first hope to continue my research through the Graphic Communications Graduate Program at Clemson University," Treadaway continued. "After earning my master's degree, I would like to enter the flexographic industry, ideally in the area of package printing. In the meantime, I want to make the most of my college experience and continue to learn as much as I can to better prepare myself for what the future might hold."

Treadaway was announced as the winner at the FTA Forum Awards Banquet on May 6, 2018 in Indianapolis, IN. Sonoco Institute staff, along with a large group of Clemson faculty and students, attended the conference this year to network, gain valuable insights and represent the University at the InfoFlex trade show.

"I am delighted and honored to be the 2018 recipient of the Rossini Scholarship," commented Treadaway. "I'd like to thank the Sonoco Institute for working with me on this research project and helping me to achieve my goals!"

Mark your calendars!

UPCOMING EVENTS at the SONOCO INSTITUTE

- Digital Plates & Screening for Flexo: May 30-31
 - Corrugated Packaging: June 6-7
 - Intro to Prepress Workshop: June 26-28
 - Orientation to the Flexo Workflow: August 13-16
- Learn more at sonocoinstitute.com/events

Digital Plates & Screening for Flexo Seminar

The Sonoco Institute has revamped a popular industry seminar for May 30-31, 2018. The Digital Plates and Screening for Flexo seminar will give attendees a behind-the-scenes look at optimizing all variables in the plate selection process.

Round top or flat top? Hard or soft durometer? Which of three dozen screening options should you choose? How do you determine your minimum dot?

During this one-and-a-half-day seminar, attendees will conduct several print trials touching on all of the variables aforementioned, on multiple substrates, with both UV and water-based inks. Working with industry experts, attendees will learn how each variable interacts to affect print outcomes, and develop an understanding of how to achieve optimum and repeatable results on every plate, every press run.

“With the constant advancements in screening, imaging and plate technologies, it is important to understand the best options for your unique needs,” said Brad Gasque, Technical Service Consultant for DuPont Advanced Printing. “This seminar will be great to learn about these newest

advancements as well as how to optimize and keep plate making in control.”

Hands on sessions will include: Plate, Stickyback and Screening Variables on Various Substrates; Plate Imaging, Evaluation and Process Control; Establishing Optimal Screening and Calibration Curves; Plate Exposing, Processing, Measurement and Process Control.

Presentation topics will include: The Digital Workflow; Imaging, Exposing and Processing Options; Plate Optimization and Calibration; Screening Options; Process Control throughout the Digital Plate Workflow.

Esko, a longtime partner of the Sonoco Institute, recently donated a new piece of equipment to be utilized publicly for the first time at the Digital Plates seminar. The Esko XPS Crystal uses UV LEDs to produce highly consistent digital flexo plates. They don't need warm-up time and always emit consistent radiation.

Industry registrants can receive a one-hundred dollar discount per person when registering three or more people. Contact Bobby Congdon for details or register online at SonocoInstitute.com/Events.



Brad Gasque, DuPont, teaches about platemaking at the Sonoco Institute.

HOW DOES AR &
VR FIT INTO THE
DESIGN
WORKFLOW?

FIND OUT AT THE
PROOFING &
VISUALIZATION
SEMINAR THIS
FALL!

TECH CORNER

Check out what's new at the Sonoco Institute!

The HTC Vive Pro



Recently the Sonoco Institute purchased a new virtual reality headset to assist with the expansion of its VR program. Nate Newsome, Research Associate in Virtual Reality for the Sonoco Institute, reviews its capabilities:

"It's a nice upgrade from the headset we had. Honestly, it makes our platform much easier to demo with it. The ergonomics are better because it's easier to put on, and having the headphones built-in is nice to have people immersed a little bit more. The best upgrade besides that - the screen is really good. It allows you to read text better, which is really great for some of the package designs that we have built into our platform. Overall, it's a slight upgrade to what we had, but it definitely makes life easier!"

More info on the [HTC Vive Pro](#).

STAY CONNECTED
We're always working on something new!



Newsome with his wife, Alex, and daughter, Penelope.

Staff Spotlight: Nate Newsome

Nate Newsome has a unique educational background consisting of art and computer science, which has led to a passion for creating interactive technologies. He graduated from Clemson with a BFA in Visual Arts and an MS in Computer Science where he focused on a human-centered approach to developing interactive technologies. As a graduate student, he developed virtual reality systems for Clemson's Virtual Environments Group, the Mixed Reality Lab at USC's Institute for Creative Technologies, and the Sonoco Institute. As the Institute's Research Associate in Virtual Reality, he is creating innovative VR solutions for the printing and packaging industry.

"We see a lot of potential with VR training opportunities in the printing and packaging industry," said Newsome. "I'm really looking forward to jumping into some of the bigger projects now that I'm full-time with the Institute,

especially bringing presses into VR and using it as more of a teaching tool," he continued.

Newsome believes this will be a great tool for industry partners, and is also looking forward to sharing the platform with students to have them learn more about certain presses they don't have access to on campus.

"Bringing it to trade shows is a lot of fun, because although some people have tried VR it's usually not good VR, since it's still fairly new," said Newsome. "Like putting your phone in a headset, it doesn't allow people to walk around and interact in a much larger space like this does. We get a lot of fun reactions and people are sort of mind blown," he commented.

A fun fact about Newsome is that he used to be a Backcountry Guide in northern Minnesota and Canada. In his free time, Newsome enjoys hiking, camping and woodworking, but most of all, he enjoys spending time with his wife, Alex, and daughter, Penelope.

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