SBI database. She also serves as a senior representative on the Tompkins Textile Student Council and has served as a mentor for incoming freshmen in the program. She regularly volunteers during annual College of Textiles Open House and Alumni Tailgate events.

www.aatcc.org/students/awards/outstanding.htm

Charles H. Stone Scholarship

The AATCC Foundation Charles H. Stone Scholarship provides scholarships to junior and seniors majoring in polymer or textile chemistry fields at North Carolina State University (NCSU) or Clemson University. Four US$6,000 Charles H. Stone Scholarships are awarded each year.

Christopher Dunn
Dunn majored in materials science and engineering with a focus on polymers and a minor in chemistry at Clemson University. He says that in the future, he "would like to experiment with the capabilities of high energy lasers as well as radiation detectors" and testing doped optical fiber. Dunn says that the Stone scholarship "has given me the opportunity to succeed and complete my undergraduate career with no debts."

Brittany Wilson
Wilson is double-majoring in Polymer Color Chemistry and Chemical Engineering at NCSU. She plans to pursue a master's degree in polymer chemistry with research emphasis in polymer use in the medical industry, and then a career using polymers in new and innovative ways in the medical field. "Ever since I volunteered with the American Red Cross (going on eight years), I have had a desire to help improve the quality of a person's life through health and now [through] chemistry," says Wilson. She is grateful for the Stone Scholarship because "in a struggling economy, it is very difficult for my parents to fund education, so [the scholarship allows her] to graduate debt-free. This scholarship is providing me the opportunity to pursue my goals in the fields of study of polymers and chemistry, while easing my parent's financial burden."

Beau Horner and **Justin Murphy**, both of Clemson University, were also Stone Scholarship winners.

www.aatcc.org/foundation/grants/stone.htm

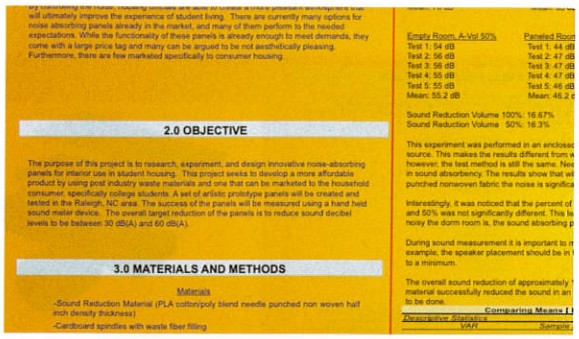
Piedmont Section Scholarships

The AATCC Piedmont Section currently awards five US$3,000 Piedmont Section Scholarships per year. Students must reside in N.C., S.C., Va., or W.V. and attend Clemson University, North Carolina State University, Radford University, or Virginia Tech to apply.

Julisha Joyner
Joyner recently graduated with a degree in polymer & color chemistry, as well as textile engineering from NCSU. "With this scholarship, I was able to experience more in a semester than I could even dream about," says Joyner. "I was able to visit new places, win awards, and finally graduate!" She says that her experiences last year helped her achieve a dream she has had "since freshman year"—to work with the NCSU Textile Protection and Comfort Center. "In the future, I hope to obtain my masters in textile engineering and hopefully my PhD."

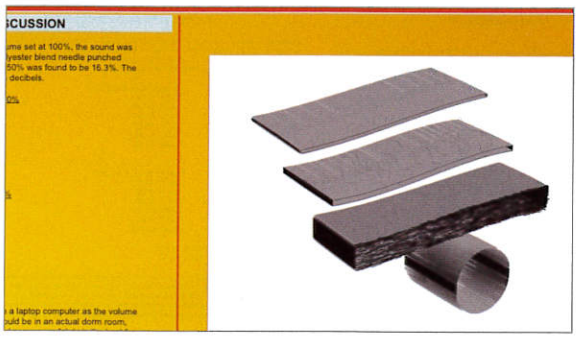
Lindsey Kern
Kern graduated in May 2012 with a degree in Polymer and Color Chemistry from NCSU. "This scholarship helped me to be able to graduate debt free and gain a lot of experience in the textile industry. I feel prepared to take the next step."

Second place: *Water Stable Plant Protein Film from Camelina for Tissue* Engineering by Yi Zhao and Qiuran Jiang of the University of Nebraska-Lincoln.

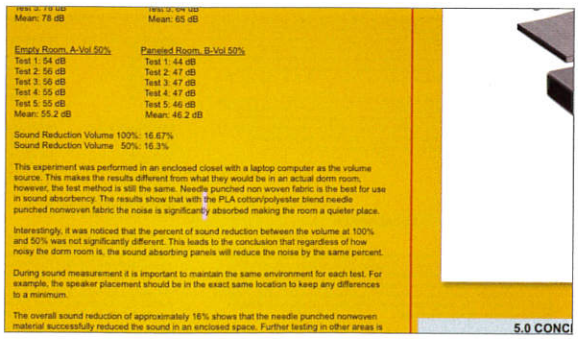


Functional/Smart/Nano Materials winners

First place: *Nanowire-Structured Based Hybrid Cell for Harvesting Solar and Mechanical Energies* by Chen Xu of the Georgia Institute of Technology



Second place: *Effects of Long-term Chemical Treatment on the Electrical Resistance of Poly(3,4-ethylenedioxythiophene) on Textiles* by Christopher DiFranco and Jinlin Cai of the University of Massachusetts-Dartmouth



All of the entries were excellent and the judges had a difficult task determining the winners. The judging was administered by Radhakrishnaiah Parachuru of the Georgia Institute of Technology, Robina Hogan of the United Soybean Board/Hogan Consulting, Kanti Jasani of Performance & Technical Textile Consulting, and Seshadri Ramkumar of Texas Tech University.

Research Support Grant Report

Mark Chan, Cornell University, delivered a project report for the 2011-2012 AATCC Research Support Grant he received for his masters thesis project, the *Surface Modification of Microporous Polypropylene Membrane by UV-Initiated Grafting with Poly(ethylene glycol) diacrylate.* "In this study, poly(ethylene glycol) diacrylate (PEGDA) was surface grafted, through UV-initiated grafting, onto a microporous polypropylene (PP) membrane to develop and control a moisture-sensitive porous structure," says Chan. He says that this surface modification was shown to improve hydrophilicity of the hydrophobic polypropylene membrane. The grafted PEGDA was shown to respond to moisture, decreasing pore size in response to changes in relative humidity. "This moisture-responsive property can enhance protection of the membrane when exposed to possible liquid-borne pathogens," says Chan. "This will allow for a functional membrane that limits the transport of liquid-borne pathogens while providing transport of moisture vapor away from the body."