



Brown to Receive Olney Medal

Philip J. Brown is the 2023 recipient of the **AATCC Olney Medal**. Brown, Swetenburg Professor in the Department of Materials Science and Engineering at Clemson University, is being recognized for his prolific work with fiber materials, including spinning and the production of deep groove capillary surface channeled fibers; fabrication of polymeric photonic crystal fibers; the production and properties of hollow fiber membranes, including examination of phase inversion conditions; the dry jet wet and wet spinning of fibers; and electrospinning of fibers and nanofibers. Basically, Brown's research has developed fibers that illuminate, transport, bind, hold, and heal.

The results of Brown's research projects are found in peer reviewed publications, monographs, and books, as well as presentations and patents. He has received several Clemson

University Board of Trustees Awards for Excellence for research collaborations. He also received the AATCC J.W. Weaver Paper of the Year Award in 2008.

Philosophies

Brown continually envisions fiber's many uses. He created a research philosophy involving the development of multicomponent melt and wet spinning techniques that become "viable vehicles to produce functional/smart, active, or adaptive fibers." He would also like to delve further into polymer and nanoparticle synthesis. He sees this research as multi-disciplinary and collaborative, involving textiles, engineering, design, and marketing—a well-rounded process from creation to final product.

Besides Brown's research philosophy, he also has a teaching philosophy and methodology. Early in his teaching career, he earned a Postgraduate Certificate in Learning and Teaching in Higher Education from the University of Leeds. He values what he learned about different teaching styles and their effectiveness. He uses self-assessment, student assessment, faculty input, and teaching texts to improve his ways of teaching. He developed an anatomy of a lecture, from the introduction of the class through to the structure and flexibility of his lectures, including how to keep students awake (literally) and engaged. Brown's self-assessment of teaching is "to find ways to initiate student learning," believing that a student who is an independent learner will develop "general learning skills that are transferable to other courses, and later on to their chosen careers."

In addition to working with Clemson University's Research Experience for Undergraduates (REU) and Research Experiences for Teachers (RET) programs, Brown also teaches science as part of the Emerging Scholars Program at Clemson, a program that provides students from poor, rural areas with limited educational opportunities, a chance to gain a better education and learn what it takes to succeed in college. The program involves teachers, students, parents, and the community to help students find a university where they will succeed. He believes it is very important to inspire young people to become interested and excited about science and engineering.

Brown is a humble visionary, who, whether focusing on fiber or students, takes the time to ponder the possibilities and picture the potential.

For information about the Olney Award, and a list of past Olney Medal recipients, visit www.aatcc.org/olney.