Seshadri Ramkumar

Professor

Environmental

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Learn more about Integrated Scholar Seshadri Ramkumar in this question-and-answer session.

What are your research objectives and interests?

Research in our laboratory follows a mission-linked applied approach into both basic and applied aspects. With the help of students, we carry out basic understanding on the process and characteristics of materials such as cotton that has a wide range of applications to enhance human health and protect the environment. We apply basic knowledge gained to develop products that can be commercialized. In other words, we are interested in translational research!

How do you feel your research impacts the globe? We work on research projects that focus on societal benefits, with emphasis on improvements in human health, sustaining and protecting the environment.

What types of service projects have you been involved with?

I strongly believe in lifelong learning and continuous professional development. So far for a few years now I actively participate in the LSRAE Lifelong Learning Institute activities, wherever I can contribute. A unique service aspect of my professional life at Texas Tech is the distribution of "Tex Snips," Textile News Snippets, columns that get distributed via e-mail to about 1,500 people around the world. Texas Snips columns feature the latest research items not only from the teaching laboratory but also from many entities around the world. We create these columns to feature the latest research items not only from the teaching laboratory but also from many entities around the world. We create these e-columns as a service to students, researchers and interested people in the field of fiber science, cotton and materials science.

What are you currently working on?

My research projects revolve around environmentally friendly materials such as cotton, which is an important commodity in High Plains of Texas. Our effort predominately is on enhancing the basic knowledge on cotton and finding new applications for cotton and other natural products such as wool, ramie and sisal. A major goal of ours is to take cotton into the next realm of research and industrial application.

Where do you find your inspiration?

My inspiration to research comes from looking around me, day-to-day life and aiming to utilize my knowledge in finding solutions to societal problems, e.g., our recent work on finding a low-cost solution for toxic oil spills. A major source of inspiration comes from interacting with stakeholders such as fellow researchers, commodity groups, industry and more importantly students.

What advice do you have for new faculty members about balancing the components of Integrated Scholarship—teaching, research, and service—in their careers?

Teaching, research and service are intertwined with each other and it is beneficial for faculty to grasp this idea early in their careers. We are blessed being in academe in the United States where the contribution of these three elements of academia is clearly spelled out. Giving a service component to the university, professional society and society-at-large helps us to know research problems that are important, which helps us to build research careers. Integrating latest research information in the course curriculum enhances the value of course delivery to faculty and also engages students in the class by dealing with topical aspects of the course. So in my humble opinion, teaching, research and service are valuable aspects of a professor's life. Particularly for young faculty, having an integrated approach will help to progress quickly in academia and realize their full potential.

What are you currently working on?

I am fortunate to be a part of academia in three different countries including India, the United Kingdom and the United States. My background is in textile materials and technology, having gained the basic degree form India. My Ph.D. was from the University of Leeds, England. For the past 16 years, I am honored to be a part of Texas Tech University, where I focus my efforts towards teaching and research on advancing materials for improving human health and environment. I am fortunate to receive the Honorary Fellowship from the world's largest professional society for textile professionals, The Textile Association in India which has about 22,000 individual members.