

2015 Oliver Max Gardner Award Recipient
Dr. Behnam Pourdeyhimi
NC State University

Dr. Behnam Pourdeyhimi, founding director of the Nonwovens Institute at North Carolina State University, serves as associate dean for industry research and extension in the College of Textiles. Dr. Pourdeyhimi, the Klopman Distinguished Professor of Textile Materials, has made scientific and technical breakthroughs responsible for improvements in water purification and air filtration, drug delivery systems, agricultural production, and protective materials for military and civilian security. These innovations include high-strength nonwovens, sensors for blood-borne pathogens and textile-based energy sources.

As the executive director of the Nonwovens Institute, Pourdeyhimi leads a cooperative research institute dedicated to creating next-generation nonwoven applications through global partnerships among industry, government and academe. He is dedicated to moving research forward and improving the market for nonwovens. His expertise is sought after by industry and scientific organizations around the world. Dr. Pourdeyhimi acts as a consultant to more than 30 research groups and corporations.

His research encompasses image and structural analysis of nonwoven fibrous webs, bioengineering and materials, instrumentation and test method development, next-generation fiber structures, and nonwoven product development. His publications include several books and monographs and more than 200 refereed journal articles. He holds more than 80 U.S. and international patents. Dr. Pourdeyhimi's contributions to fiber and textile science, engineering and technology have earned international awards. A past president of the Fiber Society, he won the organization's Young Distinguished Achievement Award in 1994, the same year he received the Fellowship of the Textile Institute. In addition, he was honored with the TAPPI Technical Achievement and Hollingsworth Award, and INDA's Lifetime Technical Award.

Known for taking a genuine interest in the success of his students, Dr. Pourdeyhimi has taught undergraduate and undergraduate courses in textile and fiber science, technology and engineering, as well as microscopy and image analysis applications to textiles, nonwovens and materials problems. His students have won several awards, including the Fiber Society Best Paper Award and the INTC Best Paper Award. A significant number of his former students have gone on to hold high-ranking industry positions.

When he joined the NC State faculty in 1999, Behnam Pourdeyhimi was internationally known for his research. After earning a Ph.D. in textiles from Leeds University in 1982, he served as a research scientist at NC State University and Cornell University. He was a faculty member at the University of Maryland from 1984 to 1995 and at Georgia Tech from 1995 to 1999 before returning to NC State. In recognition of his contributions to human health and safety worldwide, and his dedication to teaching, research and extension work, the Board of Governors takes great pride in presenting the 2015 Oliver Max Gardner Award to Dr. Behnam Pourdeyhimi, the William A. Klopman Distinguished Professor of Textile Materials and associate dean for industry research and extension at North Carolina State University.