

Kristin D. Krantzman
Chemistry and Biochemistry

2011 Distinguished Research Award



Dr. Kristin D. Krantzman received an A.B. in Chemistry from Occidental College and a Ph.D. from the University of California, Los Angeles. She started her career at the College of Charleston as an assistant professor in the Department of Chemistry and Biochemistry in 1992. In 2005, she became the first female faculty member in the Department of Chemistry and Biochemistry to ever be promoted to the position of Full Professor. Her research in the area of theoretical chemistry has focused on the use of molecular dynamics simulations to study interactions between gas particles and solid surfaces. As a faculty member at the College of Charleston, she has published twenty six papers in peer-reviewed journals such as the Journal of Physical Chemistry, the International Journal of Mass Spectrometry and Ion Processes, and Applied Surface Science. She collaborates with researchers around the world including faculty members from the Pennsylvania State University in the United States, the University of Duisburg-Essen in Germany, Jagiellonian University in Poland and the University of Surrey in England. She has worked with thirty-one undergraduate students on research projects and nineteen of these students have been co-authors on scientific publications. She has given numerous invited seminars at universities including Miami University, the University of Duisburg-Essen, The Pennsylvania State University and Washington University at St. Louis. She regularly presents talks about her research at international meetings. She is currently working on using molecular dynamics simulations to model multiple ion bombardment of a silicon surface with C₆₀ projectiles. She teaches general chemistry and physical chemistry courses.