



Shekhar Garde

Dr. Shekhar Garde is the Dean of Engineering and the Elaine and Jack Parker Chaired Professor at Rensselaer Polytechnic Institute. He received B. Chem. Eng. (University of Bombay, 1992) and Ph.D. (U. Delaware, 1997) degrees in Chemical Engineering. He was a Director's post-doctoral fellow at Los Alamos National Laboratory from 1997 to 1999. He joined Rensselaer in 1999 as an Assistant Professor, and was promoted to Associate in 2004, and to Full Professor in 2006. He was appointed the Parker Chaired Professor in 2006 and as the Head of Chemical and Biological Engineering Department in 2007 and served in that role for seven years before becoming the Dean of Engineering.

His research focuses broadly on understanding the role of water in biological structure-function, and specifically on the hydration and water-mediated interactions using statistical mechanical theory and molecular modeling and simulation tools. He has published over 80 peer-reviewed papers in leading scientific journals, which have been cited over 5400 times (per Google Scholar). He has given 130 invited talks at leading universities, industries, and international conferences, including many keynote lectures. He has received several awards including the CAREER Award by the US National Science Foundation (2001), School of Engineering Research Award (2003), Rensselaer Early Career Award (2004), and the 2011 Robert W. Vaughan Lecturership at California Institute of Technology. In 2014, he was elected as the Fellow of the American Institute of Medical and Biological Engineers. Under Garde's leadership, the Chemical Engineering department climbed in US News & World Report Rankings from 33 to 21-22.

Garde is also one of the leaders of a unique animation movie project called the "Molecularium", which aims to excite the next generation about the world of atoms and molecules. He has pioneered integration of data from large-scale molecular dynamics simulations into Disney-Pixar style animation world. He is a co-executive producer of the Molecularium I-MAX/3-D-IMAX movies – *Molecules to the MAX*, which are currently being distributed nationwide. In 2011 he was honored with the *Explore~Imagine~Discover* Award by the Children's Museum of Science and Technology, in the Capital District, NY. The Nanospace portal of the Molecularium project received 'Best of the Web' award in Education by Center for Digital Education in 2013.