

Alfred J. Crosby

BIOGRAPHY: Alfred J. Crosby is a Professor in the Polymer Science & Engineering Department at the University of Massachusetts Amherst and Co-Director of the Center for Evolutionary Materials. He has contributed significantly to the science and technology of soft materials, especially in the context of adhesion and bio-inspired materials. Prof. Crosby has received numerous awards and recognition for his research, including the Adhesion Society Excellence in Adhesion Award, the National Science Foundation CAREER Award, the Army Research Office Young Investigator Award, the Adhesion Society Outstanding Young Scientist Award, the American Chemical Society Rubber Division's Sparks-Thomas Award, the College of Natural Sciences Outstanding Research Award, and Northwestern University's Early Career Achievement Award in Materials Science and Engineering.



He has been elected to the National Academy of Inventors and as a Fellow of the American Physical Society, and his research has been covered extensively in the popular media, including Discovery Channel, Popular Science, CNET, NPR, Bloomberg Businessweek and CNN Money/Fortune Magazine, which named the Geckskin® project one of the Top 5 Science Breakthroughs of 2012.

Crosby received his B.S. degree in Civil Engineering and Applied Mechanics at the University of Virginia in 1996 and his Ph.D. in Materials Science and Engineering at Northwestern University in 2000, with his doctoral dissertation research entitled: *Deformation and Failure of Thin Viscoelastic Adhesives*. He was awarded a National Research Council Research Fellowship in 2000 to conduct his postdoctoral research on *Combinatorial Characterization of Polymer Thin Film Mechanics and Adhesion* in the Polymers Division at the National Institute of Standards and Technology. Since joining the UMass faculty in 2002, Prof. Crosby has been recognized with the ESPCI-Michelin Visiting Professor Fellowship (2011, 2013, 2015), the ESPCI-Saint-Gobain Chair Lectureship (2012), and l'Université Paris Diderot Visiting Professorship (2017). He was selected to participate in three National Academy of Engineering Frontiers of Engineering Symposia (2008, 2010, and 2011), and was invited to co-organize a National Academy of Engineering US-Japan Frontiers of Engineering Symposium on Bioinspired Materials (2011).

Prof. Crosby has published more than 138 peer-reviewed scientific publications, 4 book chapters, and 17 patents or patent applications. Several of his publications are in high impact journals, and his publications have been cited over 7240 times. He has an H-index of 49. He has graduated 24 Ph.D. students and 14 postdoctoral researchers, all of whom hold distinguished positions in academia, industry, and government laboratories around the world. He has delivered more than 186 plenary and invited lectures at national and international conferences, workshops, and university symposia, including 5 Gordon Research Conferences, one Telluride Workshop on Polymer Physics, and a TEDx talk at UMass Amherst. He was the Chair for the 2013 Gordon Research Conference on Macromolecular Materials, and the Chair for the 2012 Adhesion Society Annual Meeting. He is an Associate Editor for *Soft Matter*, and he is the current Vice-Chair of the Adhesion Society. He has served on several advisory boards, including the Pressure Sensitive Tape Council, the editorial advisory board for the *Journal of Polymer Science: Part B: Polymer Physics*, *Macromolecules*, and *Macromolecular Chemistry and Physics*, and the Bausch and Lomb Scientific Advisory Board. He has consulted for numerous *Fortune 500* companies, including as an expert witness on several soft materials-related corporate dispute cases. He is a co-founder of Felsuma, LLC, which commercialized the Geckskin® technology.