

Todd Emrick is a Professor of Polymer Science and Engineering at the University of Massachusetts Amherst. He is a synthetic organic/polymer chemist with a Ph.D. in organic chemistry from the University of Chicago (1997) and postdoctoral research experience in polymers at the University of California Berkeley (1998-2000). He co-leads the Non-flammable Polymer Materials research cluster at UMass Amherst and for a decade was the director of the National Science Foundation-supported Materials Research Science and Engineering Center (MRSEC) on Polymers at UMass Amherst. He has published >300 peer-reviewed manuscripts in the areas of polymer synthesis and materials chemistry, and is an inventor >20 issued patents. He is a member of the National Academy of Inventors (2014), is an American Chemical Society Fellow, and received the Carl S. Marvel Award for Creative Polymer Chemistry from the American Chemical Society. Professor Emrick's work at UMass Amherst consists of new approaches to polymer materials synthesis, including functional polymers, aqueous polymer assembly, self-healing materials, electronically active polymers, and polymers with ultra-low flammability. In the polymer flammability area, his work is focused specifically on discovery of new monomers that are integrated easily into commodity polymers, possess no halogen or inorganic component, and impart markedly reduced flammability to polymer products such that they can be considered for future use in aircraft and other applications that require low flammability components.