

Functionalization of Fibers Using Azlactone-Containing Polymers: Layer-by-Layer Fabrication of Reactive Thin Films on the Surfaces of Hair and Cellulose-Based Materials

Maren E. Buck¹ and David M. Lynn^{1,2*}

¹Department of Chemistry, 1101 University Avenue, and ²Department of Chemical and Biological Engineering, 1415 Engineering Drive, University of Wisconsin-Madison, Madison, WI 53706

Supporting Information

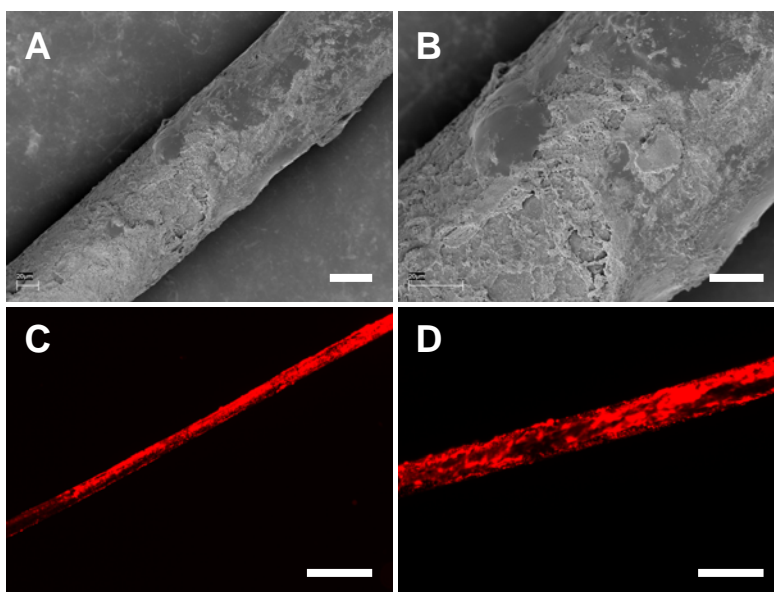


Figure S1. (A-B) SEM images of horsehair coated with 10 PEI/PVDMA bilayers fabricated in DMSO. (C-D) Fluorescence microscopy images of horsehair coated with 10 PEI/PVDMA_{TMR} bilayers deposited from DMSO. Scale bars: A) 40 μm , B) 20 μm , C) 500 μm , and D) 20 μm .

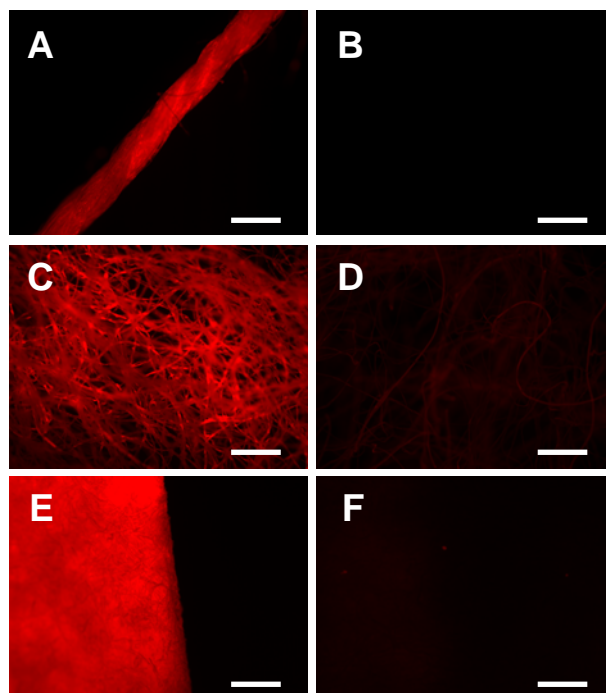


Figure S2. A-B) Fluorescence microscopy images of a piece of cotton thread coated with 10 PEI/PVDMA bilayers (A) and an uncoated piece of thread (B), both treated with TMR-cadaverine. C-D) Fluorescence microscopy images of a cotton ball coated with 10 PEI/PVDMA bilayers (C) and an uncoated cotton ball (D), both treated with TMR-cadaverine. E-F) Fluorescence microscopy images of a piece of filter paper coated with 10 PEI/PVDMA bilayers (E) and a piece of uncoated filter paper (F), both treated with TMR-cadaverine. Scale bars = 500 μm .