Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Pregrowth and Biofilm formation of Bacillus subtilis on Glass Studied via AFM, SEM and Optical Microsopy SYDNEY STUTZMAN, MICHELLE OTTE, JOSEPH CALABRESE, Lock Haven University Department of Biological Sciences, RESHANI SENEVIRATHNE, Don's Food Products, Schwenksville, PA, INDRAJITH SENEVIRATHNE, Lock Haven University Department of Geology and Physics — Lock Haven University of Pennsylvania - Research into surface adhesion properties and the selectivity of bacteria towards glass will provide a better understanding of biofilm formation and how this formation will in turn effect hospital and laboratory settings. Investigation was focused on quantifying the selectivity of non-pathogenic B. subtilis - on soda lime glass substrates. Standardized Corning® 2947-75X25 microscope glass slides were used as the surface for bacterial attachment and facilitation of preliminary growth and formation of biofilms. Observations will be discussed both quantitatively and qualitatively. Structure morphology was investigated via Atomic Force Microscopy, Scanning Electron Microscopy and complemented with Optical Microscopy.

Sydney Stutzman
Lock Haven University Department of Biological Sciences

Date submitted: 06 Nov 2013 Electronic form version 1.4