Abstract Submitted for the MAR05 Meeting of The American Physical Society

Conformational changes of adsorbed proteins SCOTT ALLEN, RICKEY YADA, JOHN DUTCHER, University of Guelph — The adsorption of bovine serum albumin (BSA) and pepsin to gold surfaces has been studied using surface plasmon resonance (SPR). Proteins are adsorbed from solution onto a gold surface and changes in the conformation of the adsorbed proteins are induced by changing the buffer solution. We selected pH and ionic strength values for the buffer solutions that are known from our circular dichroism measurements to cause conformational changes of the proteins in bulk solution. We find that for both BSA and pepsin the changes in conformation are impeded by the interaction of the protein with the gold surface.

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Date submitted: 01 Dec 2004 Electronic form version 1.4