

Abstract Submitted
for the MAR11 Meeting of
The American Physical Society

Characterization of Polyethylene Glycol Modified Hemoglobins

GIL SALAZAR, JAMES BARR, WAYNE MORGAN, LI MA, Physics Department Georgia Southern University — Polyethylene glycol modified hemoglobins (PEGHbs) was characterized by liquid chromatography and fluorescence methods. We prepared four samples of two different molecular weight PEG, 5KDa and 20KDa, modified bovine and human hemoglobin. We studied the oxygen affinities, stabilities, and peroxidase activities of PEGHbs. We have related oxygen affinities with different degrees of modifications. The data showed that the modification on the beta subunits was less stable than that of the alpha subunits on the human Hb based samples especially. We also compared peroxidase activities among different modified PEGHbs.

Gil Salazar
Physics Department Georgia Southern University

Date submitted: 19 Nov 2010

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