## Abstract Submitted for the MAR13 Meeting of The American Physical Society

Zeta Potential Measurements of Glyoxalated Polyacrylamide (GPAM) Resins SUMIT LIBI, APSANA SHRESTHA, DAVID NORWOOD, Southeastern louisiana University, STEVEN BOONE, Bercen Inc. — We will describe the use of a NICOMP 380 ZLS light scattering instrument (Particle Sizing Systems) to measure the zeta potential of glyoxalated polyacrylamide (GPAM) resins used in the paper industry. These experiments are part of a broader study of GPAM molecule properties (molecular weight, RMS radius, contour and persistence length) intended to understand differences in performance between various GPAM resins (specifically, differences in drainage performance during paper processing and wet/dry strength of paper). Additionally, zeta potential measurements help to understand the long term stability of these resins. Data and results obtained from the experiment will be presented.

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Date submitted: 20 Dec 2012 Electronic form version 1.4