## Abstract Submitted for the CUWIP22 Meeting of The American Physical Society

Beginning Stages of Creating a Bioactive Glass Bead Drug Delivery Patch<sup>1</sup> MARIE SYKES, Ursinus College — Bioactive glass beads are a highly durable material anywhere meant to be completely safe for the human body. The aim of the research is to find a new way to slowly deliver a drug over time in the form of the patch, with the first baseline goal is to create a vitamin patch to deliver a standard dose of vitamins over the course of a week or longer. Over the course of the past semester since we begun research, we have documented various types of such beads and powdered beads to test whether or not they are a suitable candidate for drug delivery through microscopic data, spectroscopic data, and their degradation process in heat. The type of beads we work with are typically anywhere from typically sized ten to three hundred micrometers

<sup>1</sup>Bioactive Glass Beads in Drug Delivery

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