

Siemens Healthcare Diagnostics:

Siemens Healthcare Diagnostics (Siemens DX) is a major manufacturer of a broad spectrum of immunoassay, chemistry, hematology, molecular, urinalysis, and blood gas testing systems. The Edgewater facility located in Norwood, Massachusetts is the headquarters for the Point Of Care (POC) business unit. One particular immunoassay system is the the Stratus[®] CS Analyzer. The Stratus CS is used for acute care diagnostics and provides quantitative cardiac assays for fast, accurate evaluation of patients presenting with suspected myocardial ischemia. The Stratus CS can be used in laboratory or point-of-care testing and is managed by the Edgewater site. The European Union (EU) regulation REACH (Registration, Evaluation, Authorisation, & Restriction of Chemicals) identifies certain Substances of Very High Concern (SVHC) that face eventual restriction or banning for sale or use anywhere within the EU. Siemens DX has a number of products that contain a few of these substances as well as other potential chemicals of concern. One of these substances, a well-known, commercially available surfactant in the family of octylphenol ethoxylates (OPEs), is contained in the Stratus CS TestPak assays.

Siemens Healthcare DX, specifically the POC business unit, is seeking assistance from UMass faculty to conduct research on alternative surfactants that are not classified as SVHCs. In immunoassay methods, surfactants are often used to “wash” the assays and/or to prevent unwanted reactions of the proteins with the components of the assay. If these unwanted reactions are not prevented, the accuracy and the sensitivity of the tests are impacted. Possible replacement surfactants are being investigated by Siemens DX.

The results of this research will be of value to other Siemens product lines also using the same surfactant.

For further information about the research needs for this project, please contact Amy Zercher, Sr. Scientist supporting the Stratus CS assays, at: amy.zercher@siemens.com or (781) 269-3233.