

Industrial & Physical Pharmacy Seminar IPPH 69600

Monday, March 27, 2023 3:30 PM in RHPH 164

"Novel Ionizable Polymers for Optimized ASD Release"



Emily Benson
Graduate Student, Taylor Group
First Seminar

Abstract:

Amorphous solid dispersions (ASDs) are a common formulation strategy for poorly-water soluble drugs. Certain ionizable cellulose polymers have been found to excel at stabilizing the amorphous state upon release; however, their dissolution rate performance limits their potential for use in ASDs. These polymers are often repurposed from other uses such as enteric coatings and have not been optimized for use in oral formulations nor studied extensively for ASDs. This seminar outlines a plan to evaluate the rate determining steps in these polymers' dissolution as well as how interactions with drugs affect them. Using this information, novel polymers will be synthesized and assessed on their ability to enhance dissolution performance of different drugs.