

"Understanding the microstructure of semisolid topical products: Impact of manufacturing and formulation parameters"

Speaker: Dr. Abu Badruddoza, Pfizer Drug Product Design

Abstract: Microstructure is how matter is organized at microscale in topical semi-solid formulations such as creams, ointments, and gels. Formulation parameters as well as processing conditions play key roles in semi-solid microstructure which, in turn, impacts critical quality attributes and product performance (e.g., release and skin permeation) of topical products. To keep up with the changing regulatory environment, a detailed understanding and controlling of the microstructure is imperative in delivering high quality products. This session will discuss how various formulation and processing parameters can influence the microstructure of different semisolid products, their microstructure characterization as well as the impact of microstructure on their stability and performance attributes.