

**Priyanka Ghosh, Ph.D.**  
**U.S. Food & Drug Administration (FDA)**



Dr. Priyanka Ghosh is a senior pharmacologist within the Division of Therapeutic Performance. Her areas of expertise include products in the topical and transdermal drug delivery area. In her current role, Dr. Ghosh is responsible for multiple regulatory science research initiatives related to topical and transdermal drug products, including projects related to development of noninvasive imaging techniques for evaluation of cutaneous pharmacokinetics, under the GDUFA regulatory science program. She is actively involved in development of general and product-specific guidances, addressing controlled correspondences, pre-ANDA meeting requests, and citizen petitions in her area of expertise. Prior to joining FDA, Dr. Ghosh completed her Bachelor's degree in Biotechnology from West Bengal University of Technology (India) and a Ph.D. in Pharmaceutics and Drug Design from the University of Kentucky.

## **PRESENTATION: Advanced Technologies and Evolving Paradigms for the Characterization of Topical Semisolid Dosage Forms**

**Speaker:** Priyanka Ghosh, Ph.D.

It can be challenging to evaluate whether a proposed semisolid drug product will be suitable for its intended purpose (i.e. complex product quality assessment). Depending upon formulation and manufacturing processes, even products that have similar formulations could theoretically have differences in their arrangement of matter that may have the potential to impact dosage form performance. Furthermore, it can be challenging to evaluate potential failure modes for semisolid drug products, because of the wide variety of complex microstructures that can exist within dosage forms that are non-specifically termed creams, lotions, gels, ointments, etc. The goal of the presentation will be to discuss current paradigms/technologies that can be utilized to better characterize semisolid dosage forms, to help identify potential risk factors and failure modes in the proposed drug product performance.