# Latex migration in battery slurries during drying: Effect of microstructure of slurry

임상혁, 안경현*
서울대학교
(ahnnet@snu.ac.kr*)

Coating and drying process is one of the most important process in a variety of industrial field such as display, paint, energy industry. The production of final products puts through many processes such as preparation, coating, and drying. The quality of product depends on various operating conditions at each process. In addition, materials such as ink, slurry and paste is composed of particle, binder and additive. The materials have complicated microstructure due to interaction between particles and binders. Therefore, it is important to understand the microstructure in paste or slurry and complicated behavior at each manufacturing processes in order to produce high-quality products.
Battery slurry is composed of graphite as active material and CMC as binder. Many problems such as delamination, and poor conductivity appear due to inhomogeneous particle distribution in film induced by latex migration during drying. The inhomogeneous particle distribution might be induced by microstructure of slurry and drying conditions. In this talk, the relationship between particle distribution in dried film and microstructure of slurry will be discussed.