

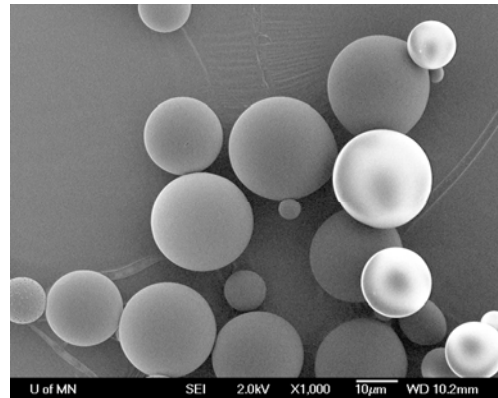
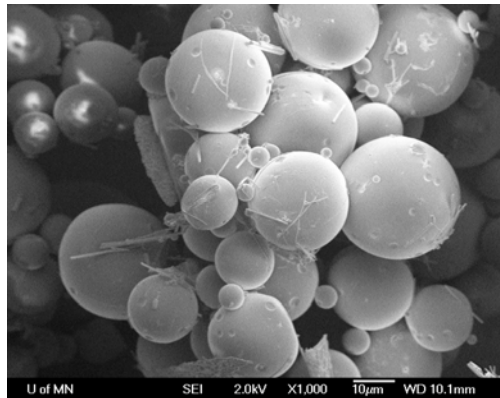
Enhancing Drug Loading in Polymeric Microparticles

Jayanth Panyam (PI) and Komal Shahani

Department of Pharmaceutics, University of Minnesota

NNIN Facility utilized: Characterization Facility

- SEM characterization of drug loaded microparticles
 - ◆ Polymeric microparticles loaded with an active drug
 - ◆ Loading efficiency depends on method used



- RESULTS
 - ◆ Conventional solvent evaporation technique results in precipitation of the drug outside the microspheres
 - ◆ Rapid evaporation enables more of the drug to be loaded inside
 - ◆ Relative precipitation rates of drug and polymer may govern drug loading in polymeric microparticles

- Publications
 - ◆ Shahani, K. and Panyam, J. (2009) Sustained release curcumin microparticles. Pending.