Energy PhD Seminar September 28, 2016 14:00, room 402

Sergei Vavilov

Anode coatings for lithium-silicon batteries

Thin film coatings are used for surface modification and material properties engineering in photovoltaics, battery research and nanocomposites. The talk will introduce several methods of thin film coating: sol-gel process, atomic layer deposition, electrodeposition and chemical vapor deposition. I will compare the processes, the thicknesses and porosities of resulting coating layers. I will explain how different coating methods are used in the lithium-ion battery research, though I'll try to reduce the particular details so that you could come up with a coating process when designing your next material.