

세미나 초록

성명	정지원
소속	건국대학교 화학공학부 (대학원: 재료공학전공)
발표 주제	리튬-이온 배터리의 후막 양극 개발을 위한 도전재 분산 연구
발표 내용	<p>Since the introduction of the first commercial battery in 1991, based on the pioneering research of Prof. J. B. Goodenough, M. S. Whittingham and A. Yoshino, the fundamental goal of battery research has been to improve the energy density of batteries. Now we are beginning to see the fruits of their labours. Used only in small devices, the battery is now being applied to drones and even more, efforts to apply it to trailers and aircraft have followed. Following the efforts, various approaches to improve the energy density of the battery. Things like adopting cathode or anode material with high theoretical capacity, modifying the surface or crystal structure, doping, and changing the electrode design are suggested as a strategy to improve the energy density. Controlling the thickness of the electrode is one of the ways to change the electrode design. In this presentation, we will show how the thickness of the electrode, especially the cathode part, can improve the battery performance for advanced Li-ion batteries. We will discuss olivine structured LiFePO_4 based thick cathode for liquid Li-ion batteries.</p>