Contribution ID: **86** Type: **Poster**

Structural behavior of delithiated LixNi0,8Co0,15Al0,05O2 (0<x<1) battery cathodes

Wednesday, 16 March 2022 18:44 (1 minute)

In the current contribution, a systematic ex-situ neutron powder diffraction study on differently electrochemical delithiated NCA cathode materials is presented. A set of structural parameters was obtained by using full-profile Rietveld refinement. Lithium occupations have been found linearly reflecting the increasing state-of-charge. In contrast, the refined occupations of transition metals do not change on the state-of-charge, indicating the absence of antisite defects in the NCA material.

Primary author: HÖLDERLE, Tobias

Co-authors: MÜLLER-BUSCHBAUM, Peter (TU München, Physik-Department, LS Funktionelle Materialien); SENYSHYN, Anatoliy (1Forschungs-Neutronenquelle Heinz Maier-Leibnitz (FRM II))

Presenter: HÖLDERLE, Tobias

Session Classification: Postersession

Track Classification: Main conference: Engineering Materials and Applications