



Contribution ID: 35

Type: **Invited Talk**

Temperature dependent crystal structure of Ethylene Carbonate

Monday, May 27, 2024 4:05 PM (25 minutes)

Neutron and synchrotron radiation diffraction studies are often conducted to investigate the structure of batteries and their components. While most of the research in this field has focused on the electrode materials, there have been fewer studies on the electrolytes that mediate charge transfer. This work presents a systematic approach to determining the structure of ethylene carbonate, which is a solvent commonly used in the liquid electrolytes of state-of-the-art Li-ion batteries.

Primary author: WESTPHAL, Lea (TUM/MLZ)

Co-authors: SENYSHYN, Anatoliy; PORCHER, Florence (LLB, CEA/Saclay (France)); AVDEEV, Max (Australian Nuclear Science and Technology Organisation); MÜLLER-BUSCHBAUM, Peter (TU München, Physik-Department, LS Funktionelle Materialien); Dr BARAN, Volodymyr (DESY, FS-PETRA-D, P02.1)

Presenter: WESTPHAL, Lea (TUM/MLZ)

Session Classification: Presentations