

The Data Clearing House in the WeNDeLIB Li-battery Project

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ABSTRACT

The project's name *WeNDeLIB* is a German acronym for: *Materials with New Design for Improved Lithium Ion Batteries*.

The project aims to overcome current difficulties and drawbacks related to storage of electrical energy. Besides lifetime, electrical performance, safety of batteries and cells are outstanding properties which can be optimized.

Therefore, the design of new materials for electrodes in such improved batteries is of great importance. The latter is supposed to be achieved by combined research activity of several groups with experience in different fields. Experimental work will be supported by thermodynamic and kinetic modeling and simulation. In this context, the knowledge of fundamental thermodynamic material properties is crucial.

GTT plays the role of the data clearing house with mainly three different tasks:

- Firstly, thermochemical base data on various chemical systems is provided for all participants to support appropriate calculations. Usually, thermochemical information is stored in databases of different formats depending on the employed software.
- The second important task is to make this information available for all users by translation of the databases in different formats.
- The third task is checking the available thermochemical data for consistency and correctness.

In the presentation, the *WeNDeLIB* project will shortly be introduced; the tasks of clearing house and the role of GTT will be outlined.