

# **BattINFO: The ontology for the Battery Interface Genome - Materials Acceleration Platform (BIG-MAP)**

**Simon Clark<sup>1</sup>, Jesper Friis<sup>2</sup> and Tejs Vegge<sup>3</sup>**

<sup>1</sup> SINTEF Industry, New Energy Solution, Sem Sælands Vei 12, 7034 Trondheim, Norway,  
simon.clark@sintef.no

<sup>2</sup> SINTEF Industry, Materials Physics, Richard Birkelands vei 2B, 7034 Trondheim, Norway,  
jesper.friis@sintef.no

<sup>3</sup> Denmark Technical University (DTU), DTU Energy, Anker Engелunds Vej, 2800 Kongens Lyngby,  
Denmark, teve@dtu.dk

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The Battery Interface Ontology (BattINFO) is an ontology of batteries and their interfaces developed for the Battery Interface Genome – Materials Acceleration Platform project (BIG-MAP) and BATTERY 2030+, which is based on the top-level European Materials and Modelling Ontology (EMMO) [1].

BattINFO [2] aims to formalize the current state of knowledge on battery interfaces to support the development of computational tools and the deployment of interoperable data in the BIG-MAP project and beyond. The definitions included in BattINFO are based as far as possible on accepted standards defined by the International Union of Pure and Applied Chemistry (IUPAC) or other preeminent textbooks on the subject. BattINFO classes and their relations to each other are designed with three goals in mind: (i) to be scientifically rigorous and accurate, (ii) to reflect current battery orthodoxy and dominant jargon, and (iii) to be flexible to describe a range of battery chemistries, not only Li-ion.

## **REFERENCES**

- [1] J. Friis, B. T. Løvfall, E. Ghedini, G. Goldbeck, G. Schmitz, and A. Hashibon, “Documentation on Materials Modelling Ontology in UML,” Brussels, 2020.
- [2] <https://github.com/BIG-MAP/BattINFO/>