

CELL INTEGRATION

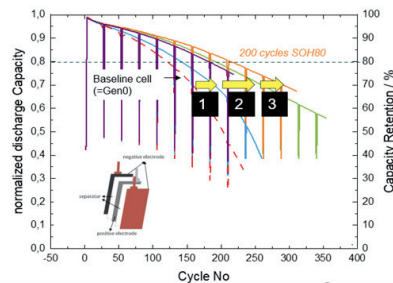
Enhanced energy density by using Si-Anodes



ELECTRODE MANUFACTURING:



POUCH CELL CHARACTERISATION:



SCALING TO 21700:



Lead:

Partners:

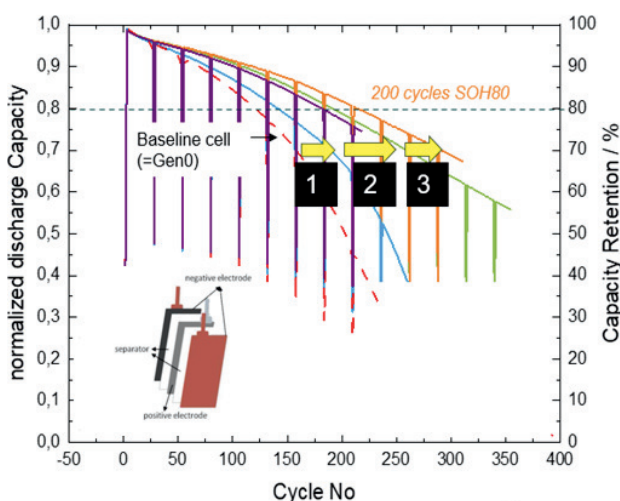
Overall Goal

Manufacture newly developed electrodes and prototype cells and to assess their technical feasibility and electrochemical performance while considering their requirements on material and electrode level and in the formation procedure.

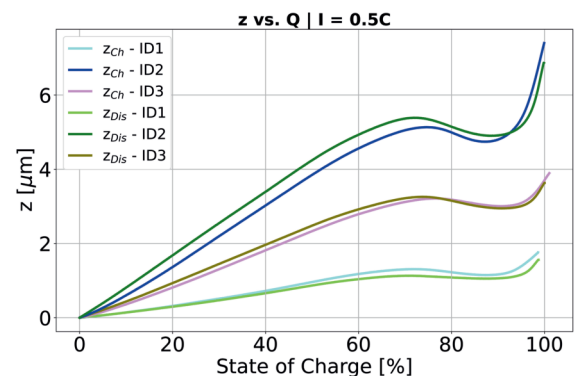
Cell Integration of Electrodes and Electrolytes in Pouch Cell Format

- Enhanced cycleability by varying different parameters:
 - Variation of Si content >> 70%
 - Improved Electrolyte
 - Modified Substrate
- Investigation of pre-compression and pure Si anode.

Progress of G-Si Composite by Using a High Si Content



Volume Expansion Pure Si Anode



Contact for Further Information: Isabel Hanghofer, isabel.hanghofer@varta-ag.com (WP Lead)