Relaxation Effects in Self-Discharge Measurements of Lithium-Ion Batteries

- Explain and separate the short-term and long-term relaxation effects of self-discharge measurements
- Separate effects by conditioning groups
- Compare three electrical self-discharge methods
  1. Voltage decay
  2. Voltage hold
  3. Capacity loss

Short-term

- Voltage relaxation disturbs for 12 – 20h
- Voltage hold method takes longer to fully stabilize

Long-term

- Anode overhang is the main reason for long measurement times
- Prior storage conditions are important for evaluating self-discharge