

# Identifying unknown chemistry

## simple discharge test – 24 hrs

1. Assemble a battery pack from a cell stack and EVM with a bq20zXX or bq275xx battery gauging device. Thermistor must touch the battery cells, use thermistor connections with flexible wires to do so!
2. Connect EV 2300 to the battery pack using SMB (or I2C, or HDQ connection depending on the communication device uses )
3. Start EV Software
4. Start EV Software logging. Alternatively use external tester such as Arbin to log time, voltage, current and temperature. Voltage must be measured with better than 1mV error.
5. Charge cell to the manufacturer specified voltage, until **taper current reaches C/100**
6. Wait **2 hrs**
7. Discharge at **C/10 rate** to manufacturer specified **termination voltage** (use 3V if unknown)
8. Wait **5 hrs**
9. Use **chemselect\_cont.mcd** worksheet to find chemical ID (MathCad 11 or higher is needed). After opening worksheet in mathcad, change column assignments for t,V,I,T to match actual data-file column numbers.

# Example of resulting data plot

