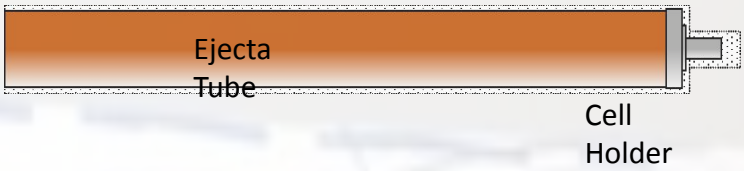
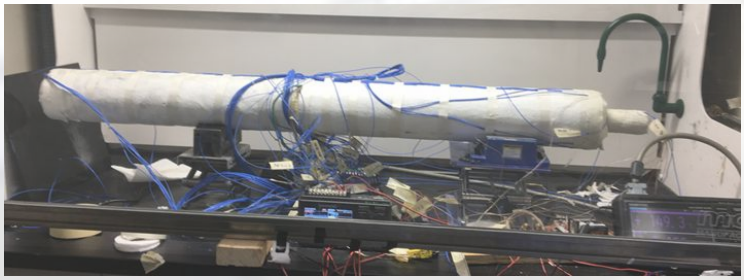
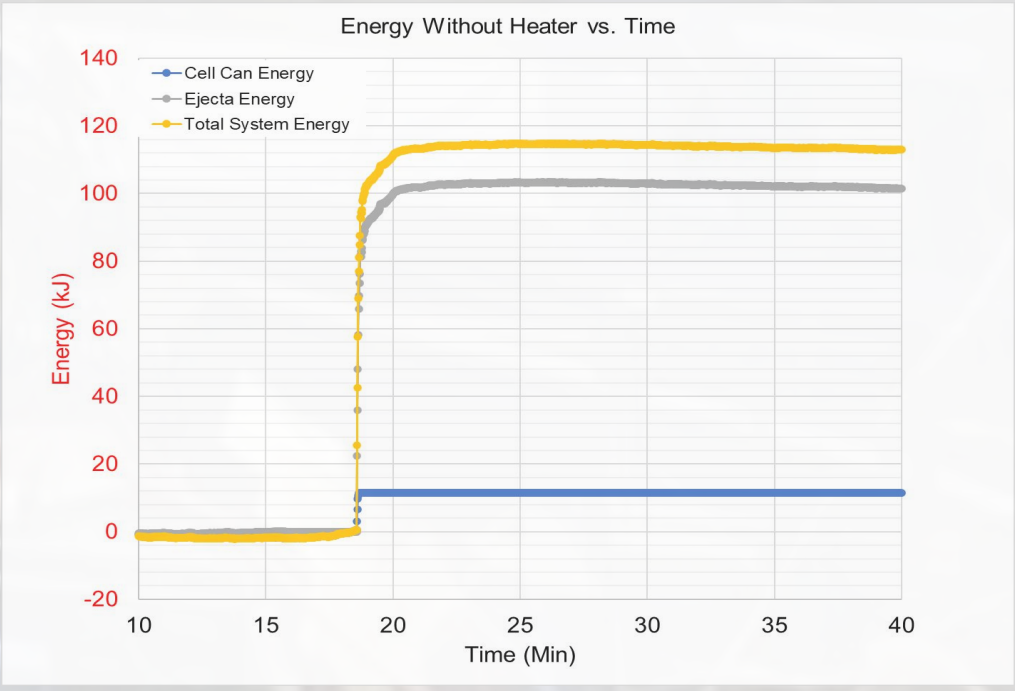
FRACTIONAL THERMAL RUNAWAY CALORIMETER

Fractional Thermal Runaway Calorimetry is an experimental assessment that is performed to estimate
the fraction of total energy released through a cell's casing and through its ejecta material in the event of a thermal runaway.
The purpose of this model is to account for all the energy released by a cell in the event of thermal runaway in Belmont Scientific's fractional thermal runaway calorimeter (FTRC). It seeks to do this by calculating energy gain and conductive losses over the whole system over time. The goal is to estimate the cell can energy, ejecta energy, and total energy of the cell.







Cell ID	Initial Voltage	Weight Loss	Max. Cell T	Cell Vent T	Cell Heating Rate	Max. Total Energy	Max. Holder Energy	Max. Ejecta Energy	Cell Can Fraction	Cell Ejecta Fraction
Typical	V	%	C	C	C/min	kJ	kJ	kJ	-	-
21700	4.137	86	343	155	7.3	115	11	104	0.13	0.87

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