

LITHIUM-ION BATTERY RECYCLING PRIZE



U.S. DEPARTMENT OF ENERGY

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Submission Title: Lithium Failure Detection Unit

Submission Track: Safe Storage and Transportation

Abstract:

Lithium-ion thermal runaway events threaten the ability to deliver lithium-ion batteries (LIBs) to recycling facilities. The current standard monitoring methods (thermal imaging and smoke detection) are ineffective because they are slow to react. LIBs release carbon monoxide gas before and after a thermal runaway. We aim to improve response times by monitoring the carbon monoxide concentration in drums containing LIBs. Through this early detection method, the number of incidents, hours of operational downtime and dollars of property damage will be significantly reduced. The 90% recovery target will become more viable.

Lithium-Ion Battery Recycling Prize

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