

# **KULR Technology Group, Inc. Sustainability Solutions**

Keith Cochran
President and COO

ARPA-E Workshop: Circular Economic Materials, Design, and Manufacturing of Rechargeable Batteries

June 12-13, 2023, The Drake, Chicago, IL







Michael Mo Founder & CEO



Keith Cochran
President & COO



William Walker CTO



Shawn Canter CFO



Ted Krupp

VP of Sales &

Marketing



Tony Martinez<br/>VP of Operations



- 7 astronauts live aboard ISS
- Cost of space station \$150 billion
- \$3.1 billion NASA spends/year on-going
- 254 miles away from Earth
- 10 years to build
- 30 missions to assemble
- Collaboration of 5 space agencies and 15 countries
- We offer our commercial customers the same technology that we provide to NASA protecting the ISS and its astronauts









- KULR ONE Platform
  - Safe
  - Modular
  - Multiple applications
  - Recyclability
- Battery Life Data
  - Cell Screening
  - FTRC Testing
  - Cell-Check
- Recycling





## **KULR Solutions Platform Overview**

Products

Internal Short Circuit (ISC)	Thermal Runaway Shield (TRS)	SafeX	Fiber Thermal Interface (FTI)	Thermal Capacitor	Screened Cells
<ul><li>Trigger Cells</li><li>Consistent &amp; Reliable</li></ul>	<ul><li>Thermal Runaway prevention</li></ul>	<ul> <li>Safe &amp; reliable Li-ion storage &amp; transportation</li> </ul>	<ul> <li>High thermal conductivity no residue &amp; reworkable</li> </ul>	<ul> <li>Cyclically absorbs and provides heat</li> </ul>	<ul><li>High-quality and reliability</li><li>N. America sourced supply</li></ul>







## **KULR ONE Platform**

Developing safe and reliable lithium-ion energy storage for our customers

- 1. Safety
- 2. Reliability
- 3. Performance
- 4. Intelligence
- 5. Modularity
- 6. Customization





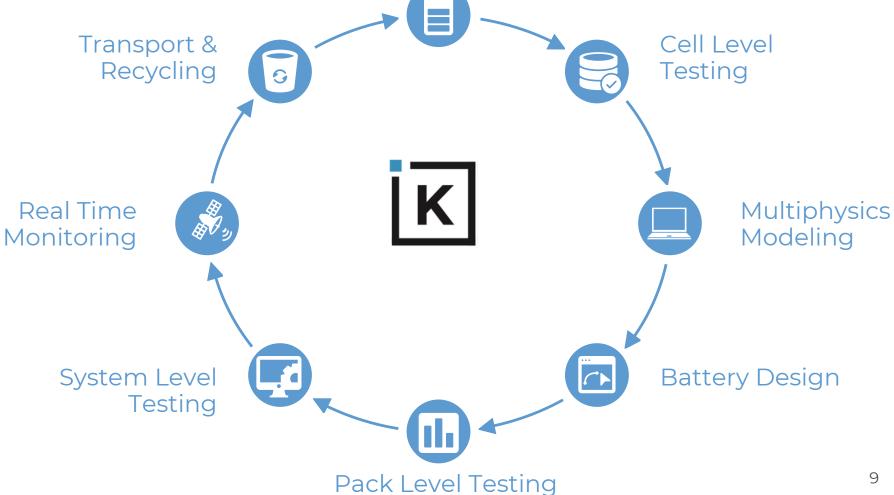




# **KULR ONE Design Solutions**

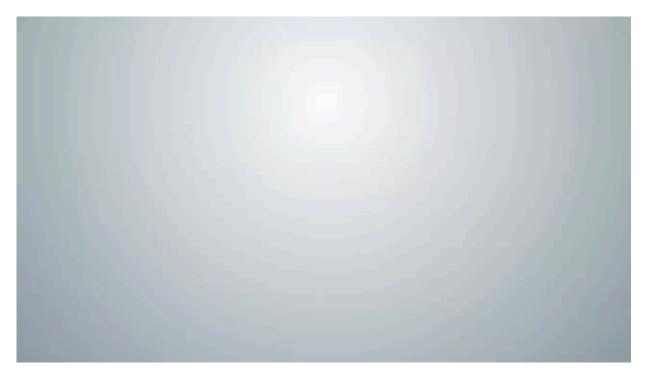
Holistic Approach to Battery Design & Safety

- 1. Credible
- 2. Agile
- 3. Prepared
- 4. Responsive



Cell Supply















# **SafeX Battery Storage Solution**

#### **Product Description**

- Patented DOT permitted Passive Propagation Resistant (PPR) storage & transportation system for lithium-ion batteries.
- Used by NASA in crewed space vehicles since 2019

### **Value Proposition**

- Mitigates thermal runaway with KULR's patented Thermal Runaway Shield (TRS) technology
- DOT permitted for up to 2.5kWh per case
- No particulates generated during handling
- Light weight, reusable, sustainable and cost effective

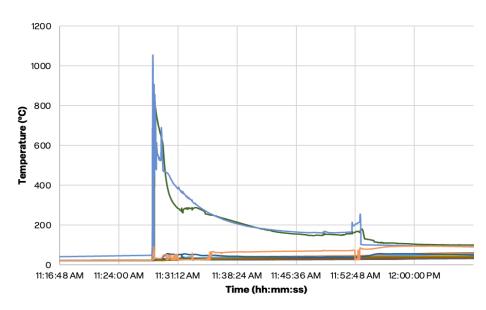










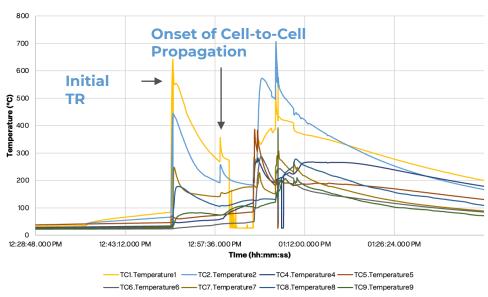


SafeCASE 2.5 kWh Li-ion Battery Contents, 100% SOC

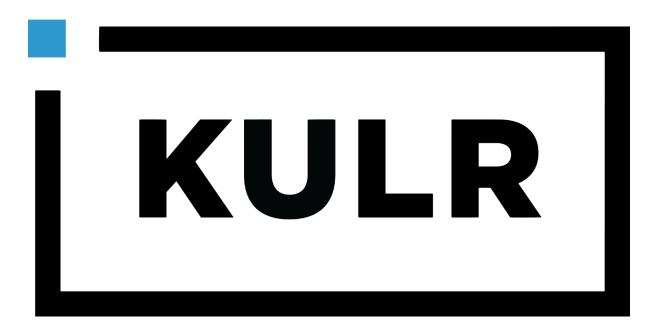




Battery Cells



SafeSLEEVE 300 Wh Li-ion Battery Contents, 100% SOC



www.kulrtechnology.com