

# NETL SUPPORTS R&D OF AWARD-WINNING TECHNOLOGY TO DECREASE LITHIUM-ION BATTERY COSTS

*This technology represents a domestic, abundant and inexpensive alternative to graphite.*



Semplastics received Voltage Award from the Battery Innovation Center.

NETL supported Semplastics R&D of polymer-derived ceramic composite lithium-ion battery anodes that utilize coal as an alternative to graphite.

- The technology received the Voltage Award from the Battery Innovation Center that recognizes an emerging company and/or technology with the highest potential to make a difference in batteries and electrification.
- The technology addresses a growing demand for lithium-ion anode materials used in battery electric vehicles (BEVs), energy storage, and other products.
- If all BEVs utilized this technology, the total global annual BEV production could be addressed with less carbon than two months' operation of a single coal-fired power plant.
- The innovative technology also promotes remediation of existing coal waste sites throughout the U.S.

RESEARCH PRIORITY



DOMESTIC CRITICAL  
MINERALS PRODUCTION

PERFORMER

  
**Semplastics**

NETL ANNUAL  
**ACCOMPLISHMENTS**  
2023



U.S. DEPARTMENT OF  
**ENERGY**

Fossil Energy and  
Carbon Management

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