

# 2022 Resource Sustainability Annual Project Review Meeting Poster Session



## Carbon Ore Processing

**U.S. Coal to Conductive Inks**

James Hnat, Minus 100, LLC

## Critical Minerals Sustainability

**Rare Earth Oxide (REO)-Based High-Voltage Li-Ion Batteries for Electric Drive Vehicle Applications**

(SC0022475)

Kevin Wood, Solid Energies Inc

## Hydrates

**Numerical Simulation Support of Gas Hydrate Field Testing at the Prudhoe Bay Unit Kuparuk 7-11-12**

**Pad on Alaska North Slope (FWP-1022410, Task 2.0)**

Evgeniy Myshakin, Leidos Research Support Team (LRST)

**Development of Strength and Pore Pressure in Hydrate-Bearing Layered Sediments Under Undrained Monotonic Shear (FWP-1022410, Task 4.1)**

Jeong Hoon Choi, Leidos Research Support Team (LRST)

**Pressure Core Characterization Tools for Geomechanical and Hydrological Properties of Hydrate-Bearing Sediments (FWP-1022410, Task 5.0)**

Jeong Hoon Choi, Leidos Research Support Team (LRST)

**Application of Machine Learning to Assess Saturations and Morphology in Permafrost and Marine Gas Hydrate-Bearing Sediments (FWP-1022410, Task 9.0)**

Leebyn Chong, Leidos Research Support Team (LRST)

## Offshore

**Integrated Geologic and Techno-Economic Assessment of Offshore Saline Systems for Deepwater and Ultra-Deepwater Reuse Potential (FWP-1022409 - Task 11)**

Kelly Rose and Gabe Creason, National Energy Technology Laboratory

**Kick Signatures through Advanced Multiphase Data (FWP-1022409 - Task 12)**

Felipe Simoes Maciel, Louisiana State University

**Automated Turbidity Current Mapping for Hazard Forecasting (FWP-1022409 - Task 6)**

Isabelle Pfander, National Energy Technology Laboratory, Leidos Research Support Team

**Applied AI/ML Models: In Support of Offshore Hazard Recognition and Infrastructure Risk Prevention**

(FWP-1022409 - Tasks 5, 6, 10)

Jennifer Bauer, National Energy Technology Laboratory

**Onshore**

**Digital Library for DOE Field Laboratories (FWP-1022415, Task 22)**

Dustin Crandall, National Energy Technology Laboratory

**Improving Well Integrity and Reducing Gas Migration Issues in Well Cement (FWP-1022415, Task 28)**

Richard Spaulding, National Energy Technology Laboratory