Project "Odyssey" – Phase 2 Research Findings

Overview: Phase 2 of Project Odyssey focused on optimizing electrode materials and cell architecture to improve energy density and thermal stability. Three prototype chemistries were fabricated and evaluated.

Methodology: Each prototype was constructed using identical cell formats with varying cathode compositions and electrolyte additives. Cells were tested under standard conditions for energy density, cycle life and impedance growth.

Results: Prototype C exhibited the highest energy density, as shown in the chart below, while maintaining acceptable impedance and thermal performance. Prototype B showed moderate improvements over Prototype A. Detailed data analysis indicates that the inclusion of high‑nickel content and proprietary additive X contributes significantly to performance.

Conclusion & Next Steps: Based on these findings, Phase 3 will refine Prototype C chemistry and scale up manufacturing. Additional testing under high‑rate charge/discharge conditions and long‑term cycle life will be conducted.

