OLI systems, inc.

# Forward Looking: Merging IDAES with Commercial Models

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# Enhanced Optimization and Simulation Tools

- Our goal is deeper technological integration by,
  - Enhancing platform integration with IDAES for more comprehensive solutions.
  - Utilizing open-source capabilities within OLI to expand adoption and progress our joint technologies.
  - Leveraging synergies between PrOMMiS and existing DOE collaborations to accelerate platform growth and develop innovative solutions.

# A Thermodynamic Model for Complex Electrolyte Systems

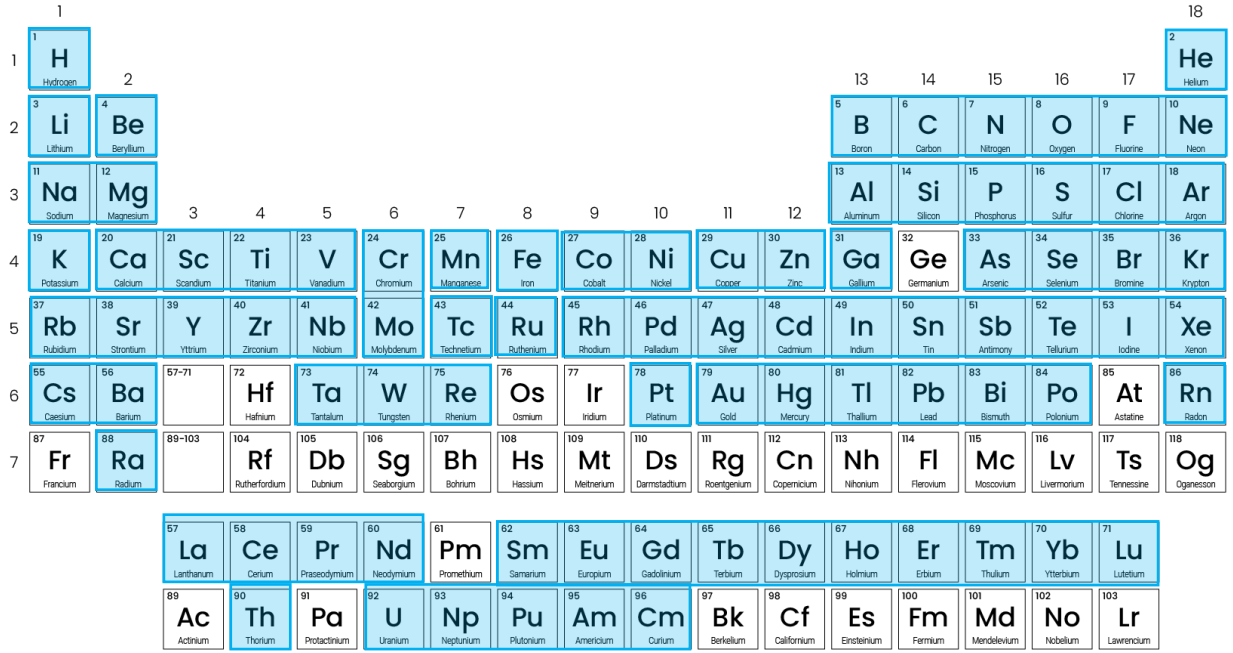
Predictions validated using peer-reviewed measurements

# Current OLI/DOE Open-Source Projects

| Project | Timeline | Description |
|---|---|---|
| Water TAP | 2022-2024 | • Access to thermodynamic calculations via API<br>• API application support<br>• Industry application support |
| PARETO The Produced Water Optimization Initiative | Start in 2024 | • DOE SBIR (Phase 1)<br>• Enable broad industrial use<br>• Incorporate water chemistry |

# 10+years of Critical Materials Chemistry Development

- Founding member of CMI
- Driving innovation in extraction, purification, refining, and recycling
  - REE
  - Lithium
  - Nickel
  - Cobalt
  - Manganese




CMI | Critical Materials Innovation Hub

# Summary

1. Enhance platform integration with IDAES for more comprehensive solutions.
2. Utilize open-source capabilities within OLI to expand adoption and progress our joint technologies.
3. Leverage synergies between PrOMMiS and existing DOE collaborations to accelerate platform growth and develop innovative solutions.