

**Hybrid Osmotic-electrokinetic Membrane Extraction**

**Market Readiness & Economics**

1-2 Days

~\$4000/mt LCE

**Continuous Process**  
Short Process Duration  
Demand-based Production Capacity Variable

**Low Operational Expenditure**  
Efficient, Economical & Commercially Available Membranes

**Improved Water & Energy Efficiency**

~10%

80%

25%

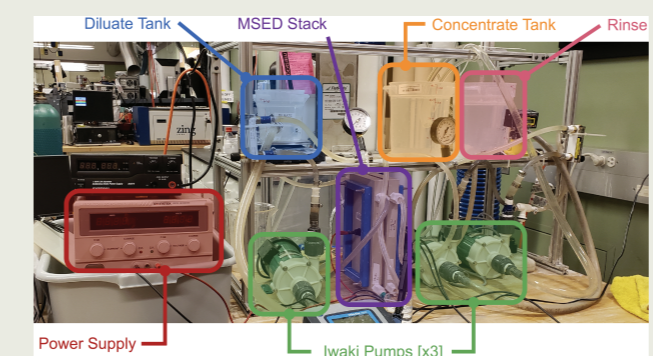
**Lowered Water Consumption**  
Water Recovery with Intermediate Membrane Stages

**Minimal Waste Production**  
No Addition of Chemical Solvents and Absorbents  
Aqueous Waste Streams Suitable for Re-injection

**Improved Energy Efficiency**  
Free Energy Recovery minimizes Electricity Consumption  
High Thermodynamic Efficiencies of Unit Operations

**Innovative Isolation Strategy**

**Lab-scale Experiments**



Process Understanding  
Equipment Design

**System Design & Optimization**

