

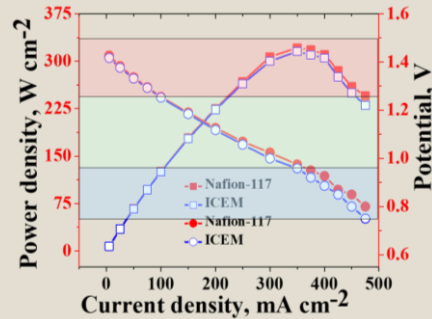
Technology for Demonstration

Vanadium redox flow battery (VRFB) for grid-scale energy storage applications.

Need from membrane:

- High corrosiveness resistance
- High fuel utilization
- Low permeability
- Inexpensive

Validation @ 25 cm² active area



TRL-4

Technology Readiness

Cation exchange membrane

- ❖ Excellent Electrochemical and physicochemical properties.
- ❖ Stable in highly oxidative acidic and basic conditions
- ❖ Low Diffusivity rates of vanadium ions
- ❖ Stable charge/discharge cycles
- ❖ Low self-discharge

Technology/Product Co-development

invitation (Concept of CSMCRI) 10 m²/day scale up

- ❖ Vanadium redox flow battery
- ❖ Organic redox flow battery
- ❖ Zinc ion redox flow battery

