

ESC-Based SOC Cell Expert

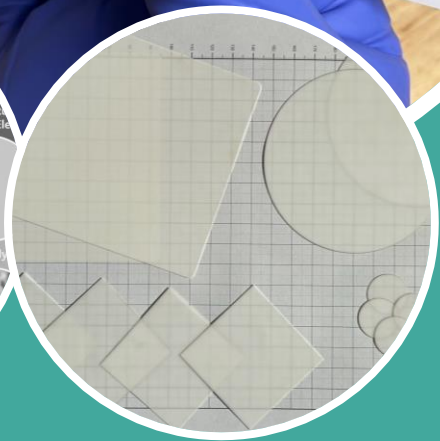
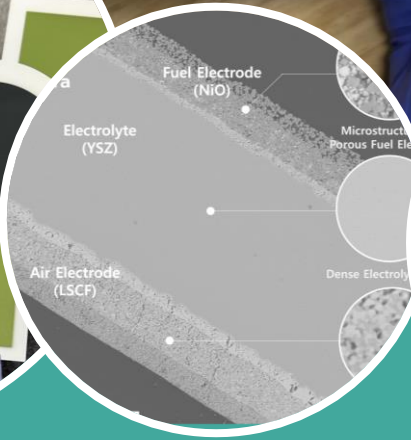


VoltaCera

A technology-driven company
developing electrolyte-
supported cells in-house

Design · Fab · Test

- ✓ In-house Manufacturing
- ✓ Custom Cell Design
- ✓ Validated Performance
- ✓ Integrated Capability



Applications

- Hydrogen Production (SOEC)
- Power Generation (SOFC)
- Co-electrolysis for SynGas
- e-fuel & Energy Systems

Why ESC?

- Structural Robustness
- Long-term Durability
- Compatible with SOFC & SOEC
- Designed for Scalability

From design to validation,
we develop cells optimized for your stack and system.

What We Offer

✓ Solid Oxide Cells (SOC / ESC)

- Design & fabrication of ESC planar cells
- Operation under SOFC-SOEC-rSOC
- Optimized geometry for stack integration

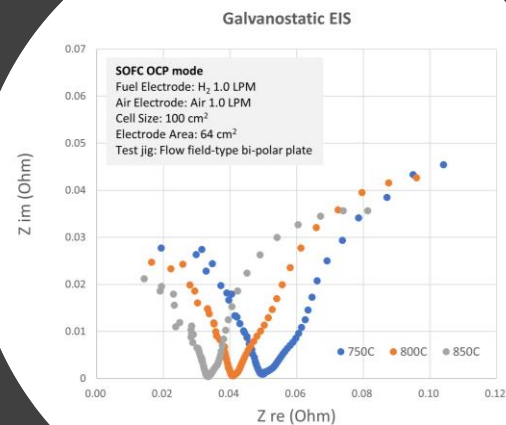
✓ Electrolyte Substrates

- YSZ and ScSZ-based ceramic substrates
- 3YSZ, 5YSZ, 8YSZ, 6ScSZ, 10Sc1CeSZ
- Controlled thickness, strength, conductivity
- From lab-scale to pilot-scale applications

✓ Single Cell Testing & Analysis

- I-V, OCV, EIS characterization
- Durability tests
- Thermal/redox cycling tests
- SEM cross-sectional analysis
- Degradation mechanism evaluation

For samples, performance data, or collaboration inquiries, please contact us below.



3YSZ-Based Cell I-V Performances

