FCM Short Stack Kit

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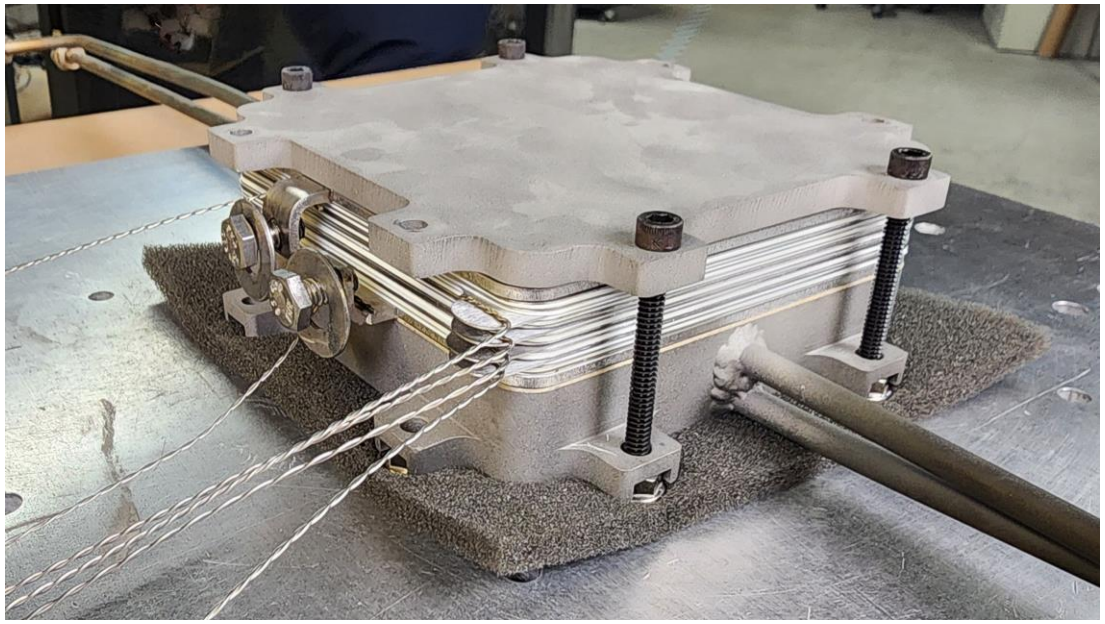
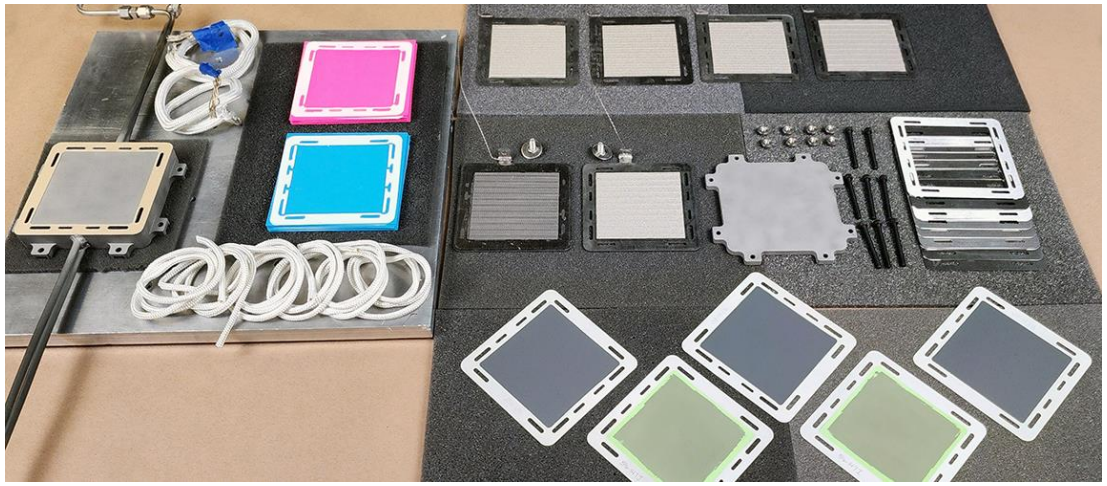
Reversible Platform for Cell Validation

- Researchers need to validate their innovations on large area cells and in a stack configuration
  - Nexceris guidance from button cell to large planar cells to stacks
  - Ensures testing reproducibility and trusted results
  - Validated by national labs
  - Customized cells can be tested
  - Compact design and ease of assembly
- Quickly switch between SOFC and SOEC modes
- Supports up to 5 electrolyte supported cells with 81cm^2 active area





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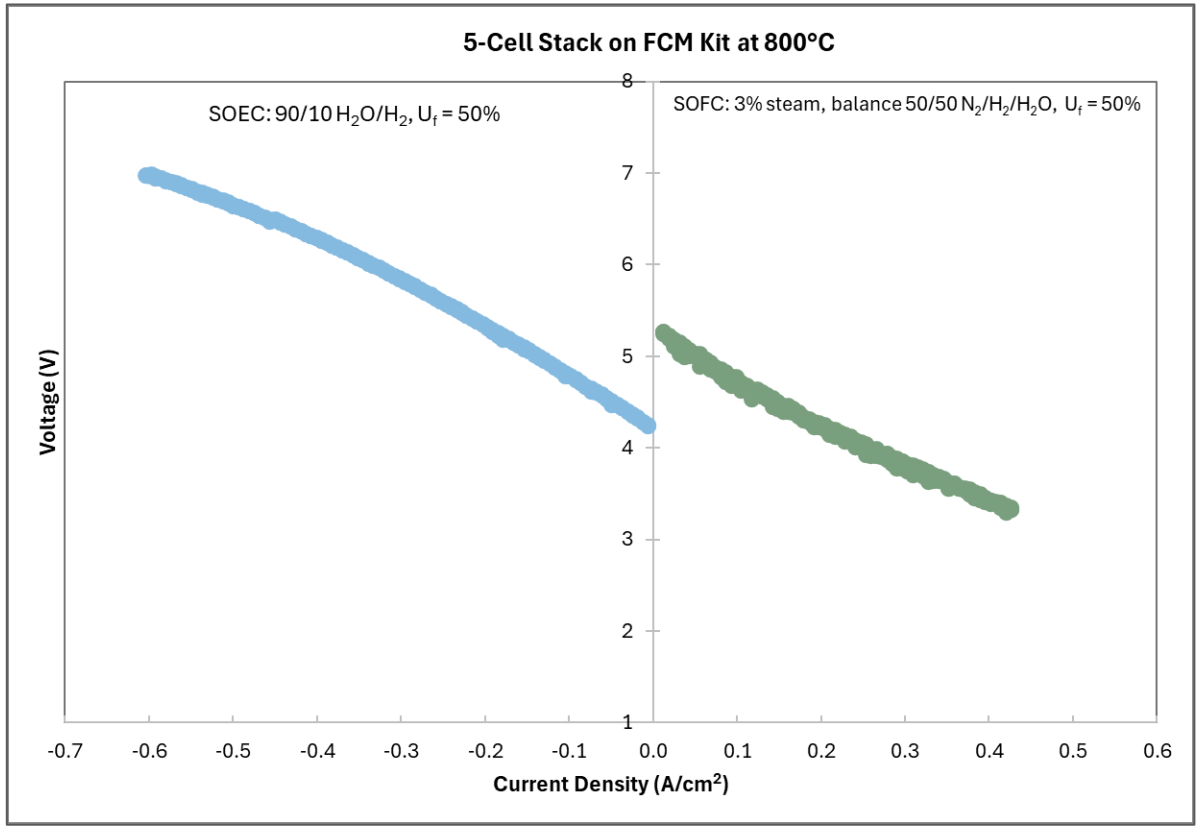
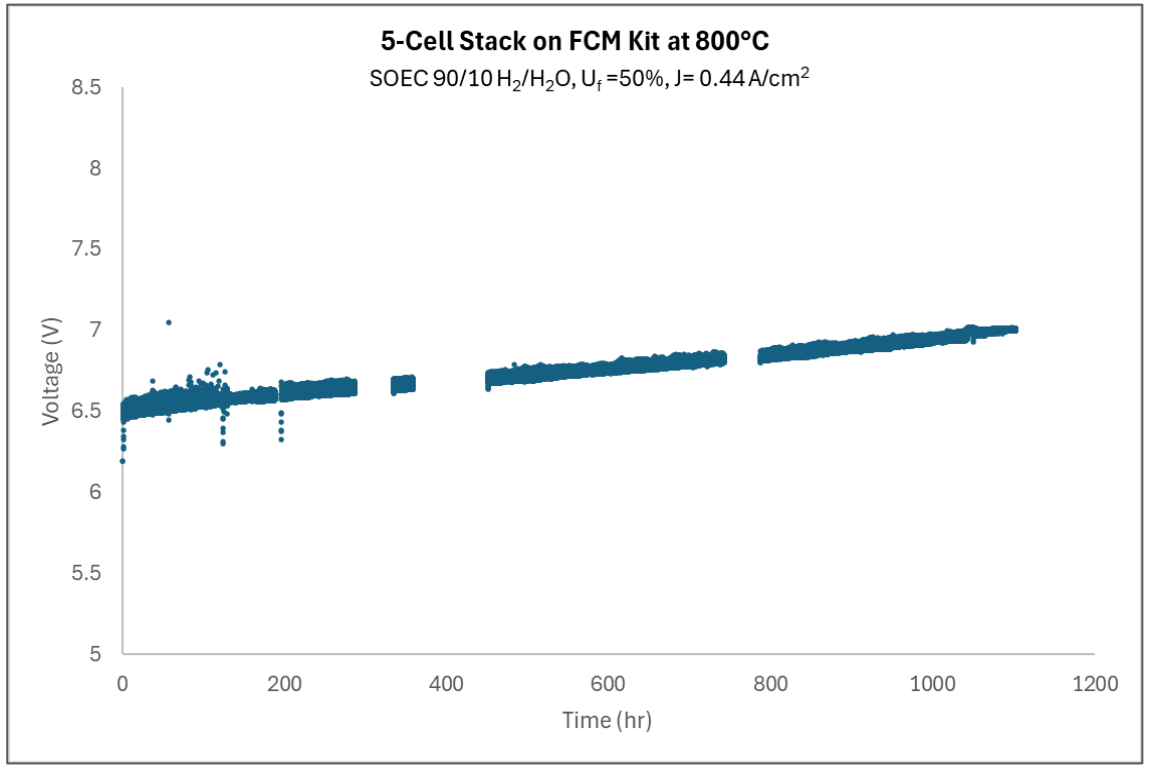
Performance

- Initial performance at 800C:
  - SOEC, 90% H2O and 50% Uf: 0.60 A/cm^2 at 1.35V
  - SOFC, 48% H2 and 50% Uf: 0.40 A/cm^2 at 0.7V





- Long-term evaluation
  - After 1100 hours, overall stack voltage increased by 0.81V (737 mV/khr, 13% increase)
  - DAQ issues caused some intermittent data loss
  - Protective coatings from Cr poisoning **not** used in this test

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