

Non Invasive Porosity & Corrosion Characterization in 3D

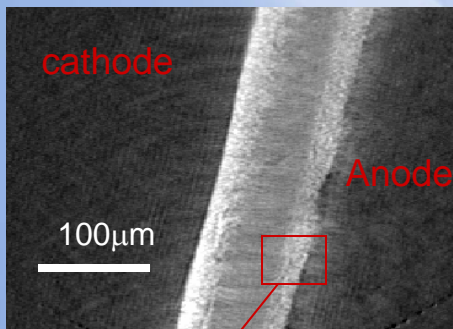
of Functional Membranes and Composites

μm to sub 50nm Resolution with novel micro and nanoCT

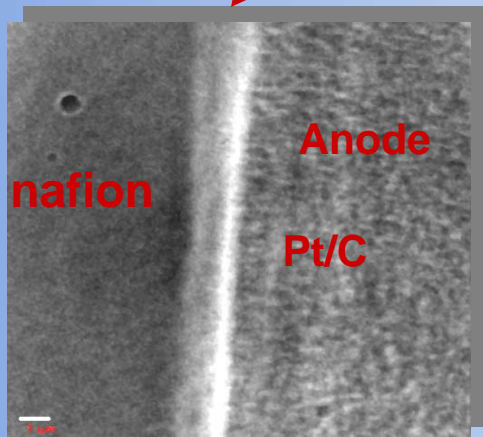
1. Proton Exchange Membranes (PEM) Fuel Cells

Unused Membrane

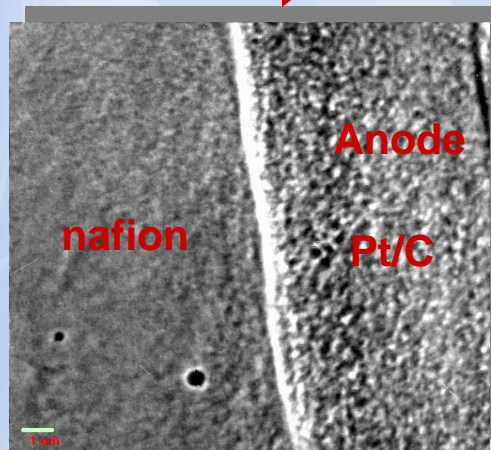
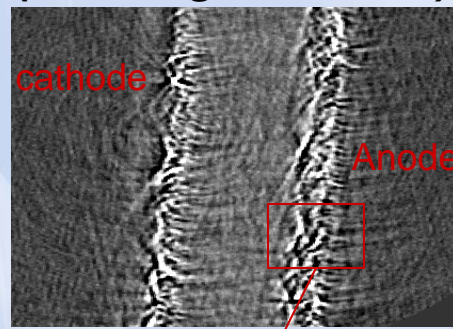
CT slice @
0.7 μm
resolution
with
MicroXCT



CT slice @
50 nm
resolution
with
nanoXCT

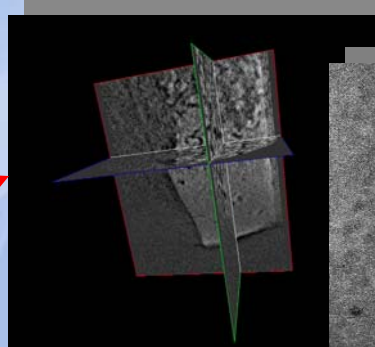
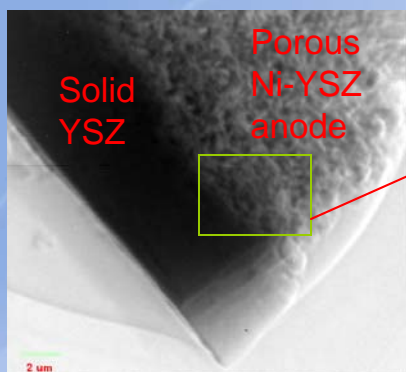


**Failed Membrane
(showing corrosion)**



2. Porosity Studies in Solid Oxide Fuel cell (SOFC)

3D image
@ 50 nm
resolution
with
nanoXCT



CT slices @ 50 nm
resolution showing pores

