

**The 11<sup>th</sup> Synchrotron,  
Advanced Technology  
for Industry: SATI)**

**24 September 2018**



**SYNCHROTRON  
THAILAND  
CENTRAL LAB**

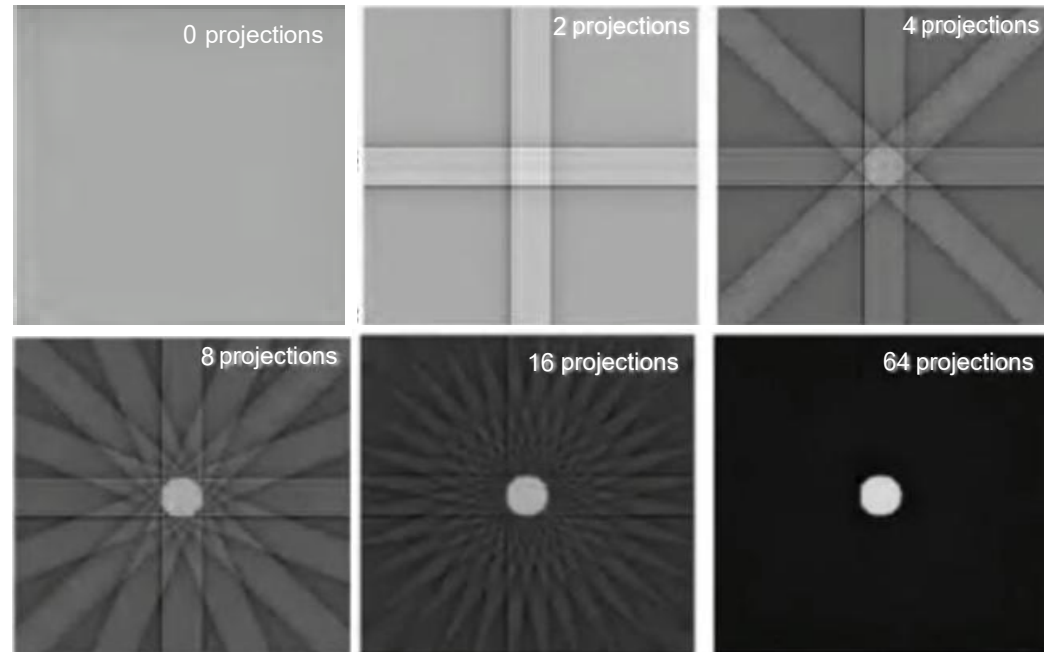
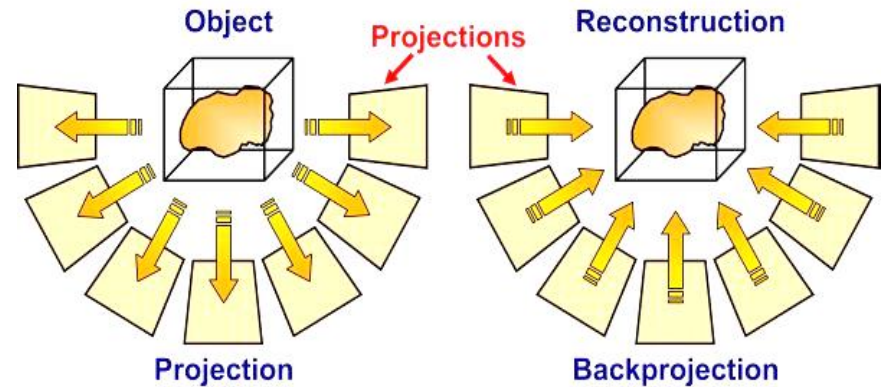
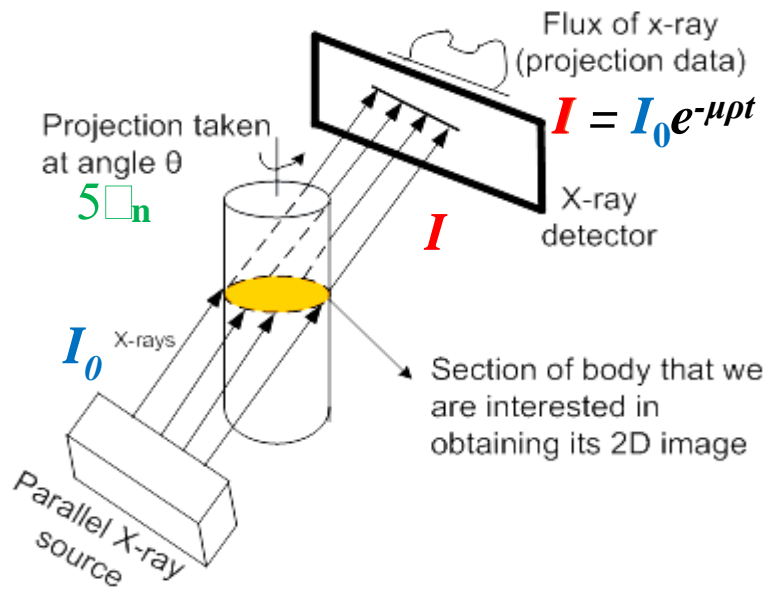
# **X-ray MicroCT: Revealing the Matter Inside Your Products in 3D**

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**P. Pakawanit and C. Rojviriya\***

\*Beamline manager  
SLRI, Thailand

# Principle of X-ray MicroCT

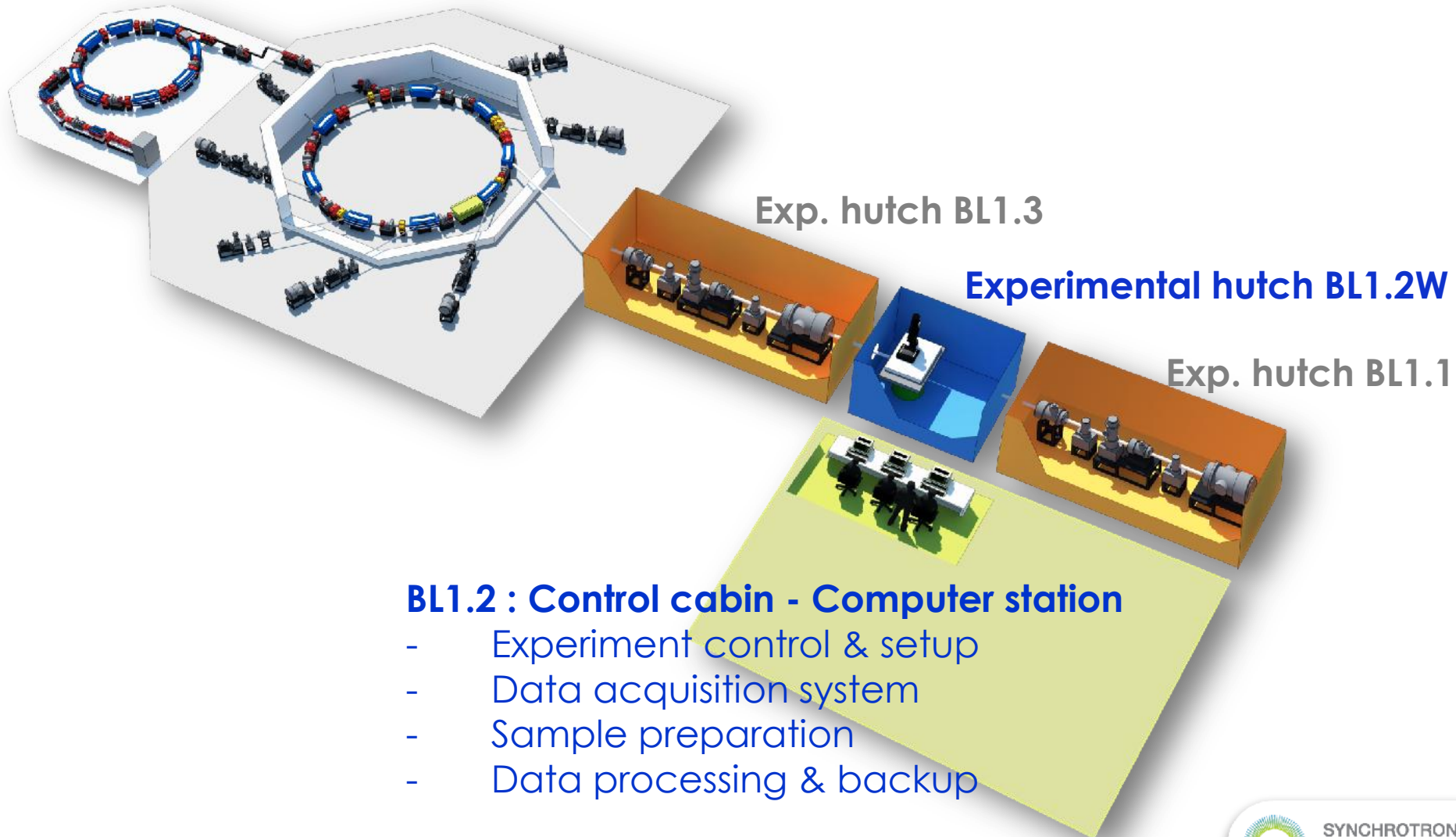


# X-ray MicroCT Beamline

X-ray Tomographic Microscopy

Beamline 1.2W

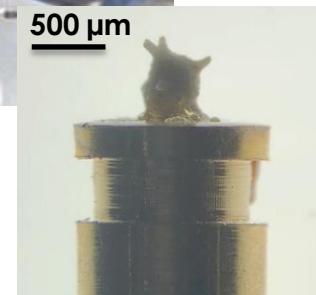
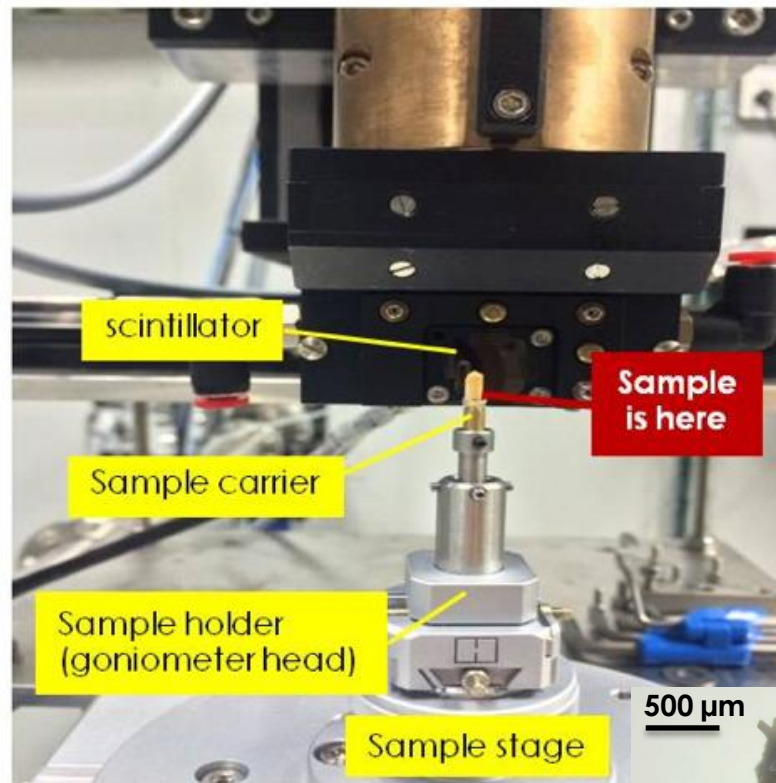
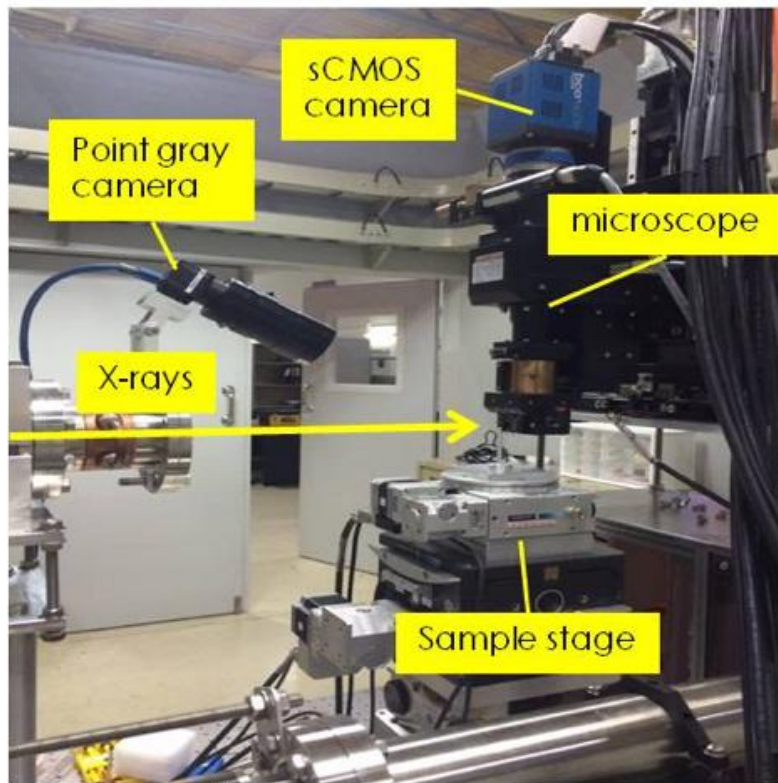
Experimental station



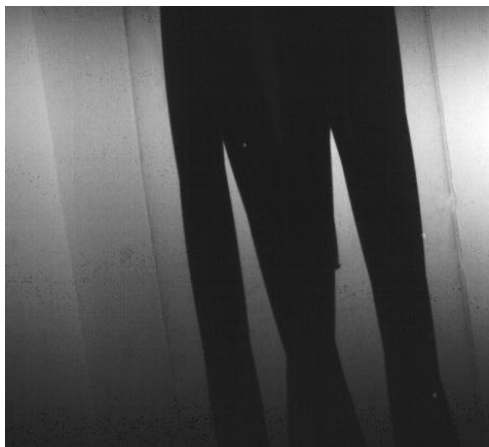
# Experimental hutch of X-ray MicroCT Beamline



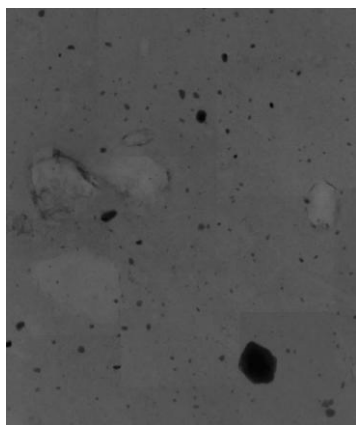
# Experimental setup & Sample preparation



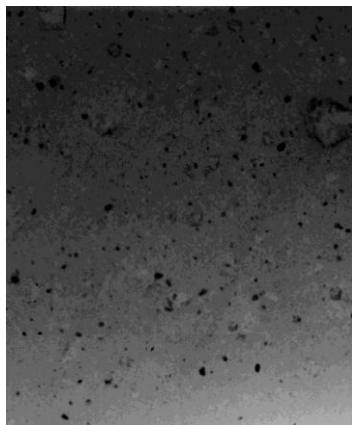
# X-ray imaging



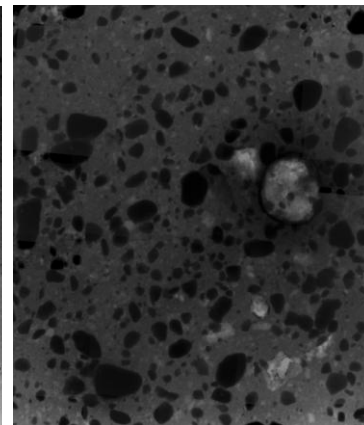
12 wt% PZT



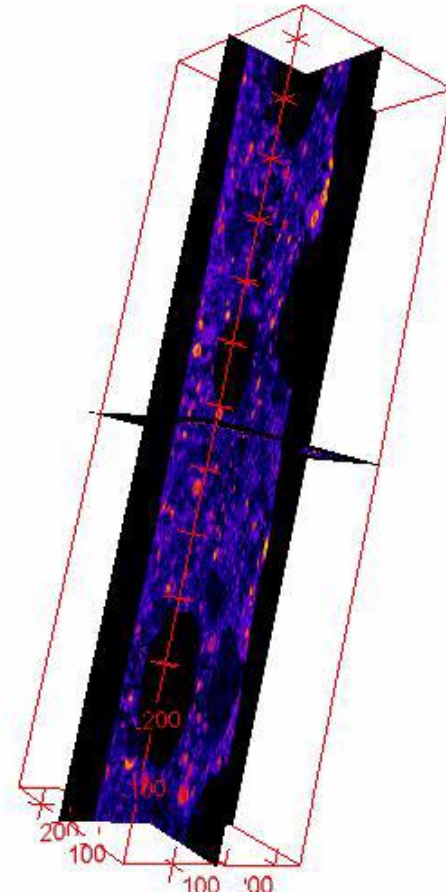
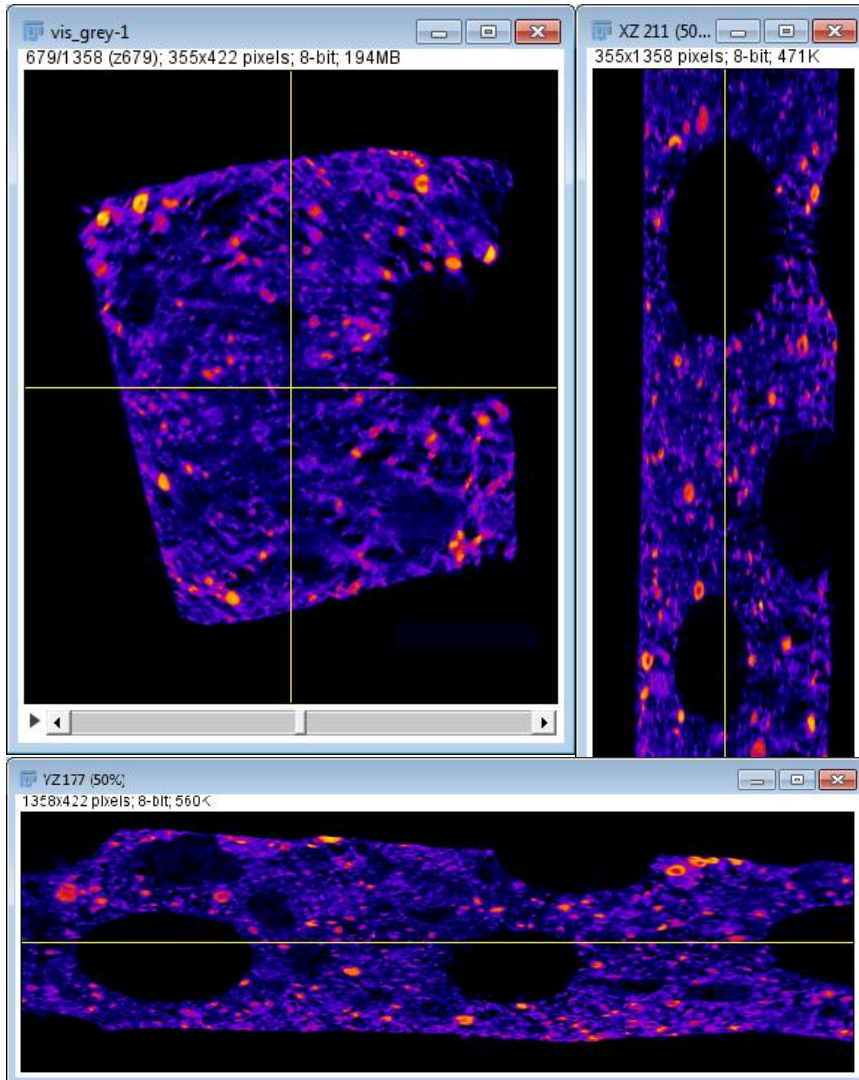
20 wt% PZT



50 wt% PZT

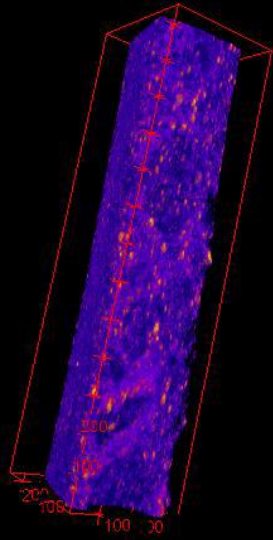


: Distributions and pores

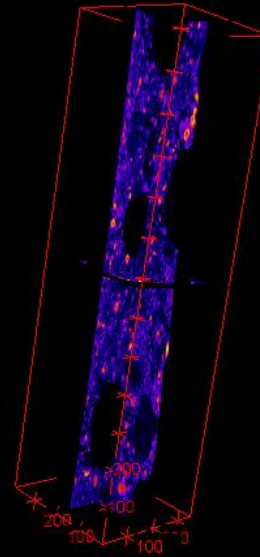


**BaTiO<sub>3</sub>/polydimethylsiloxane**

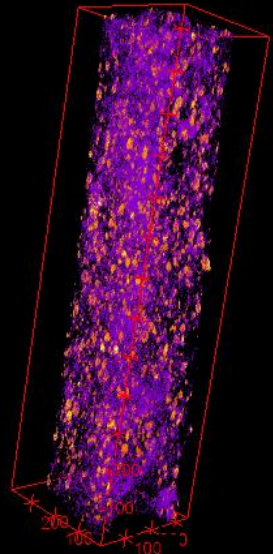
volume



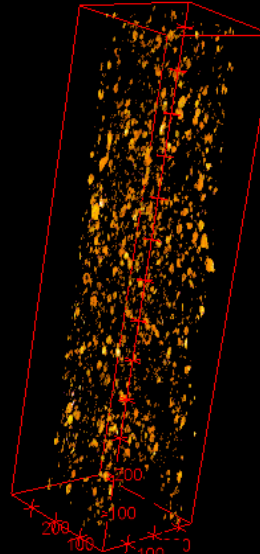
orthoslice



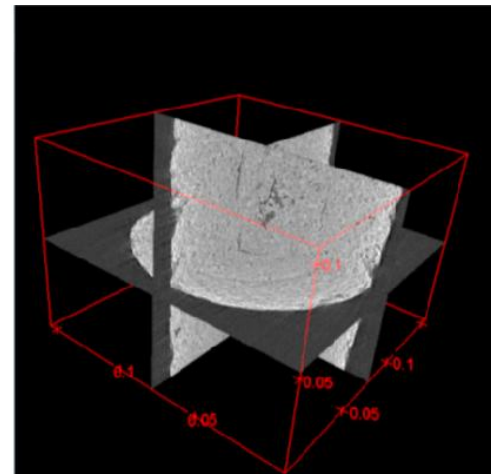
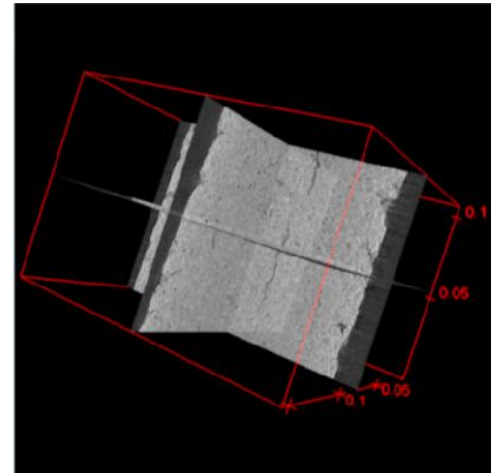
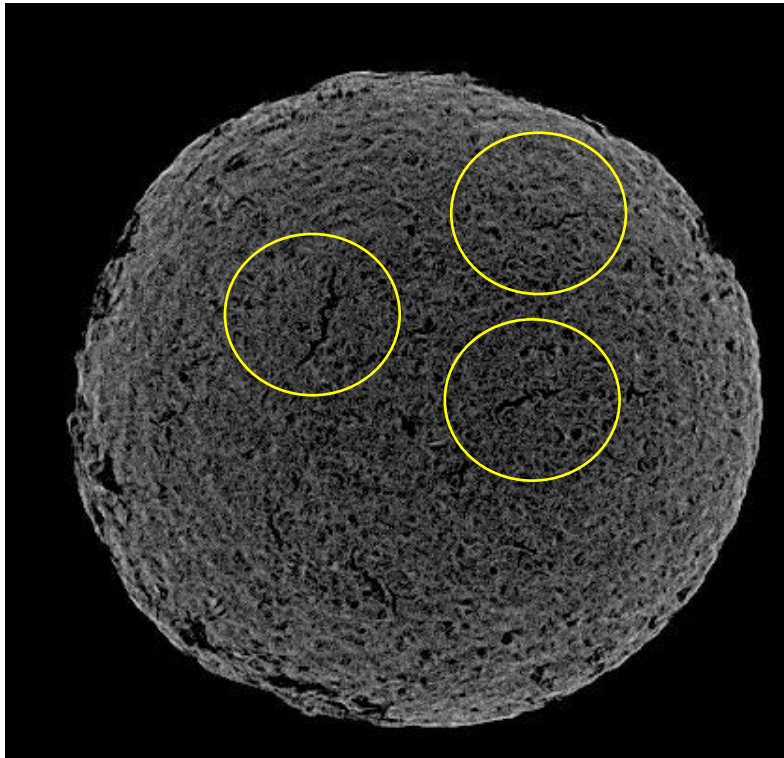
Threshold 110

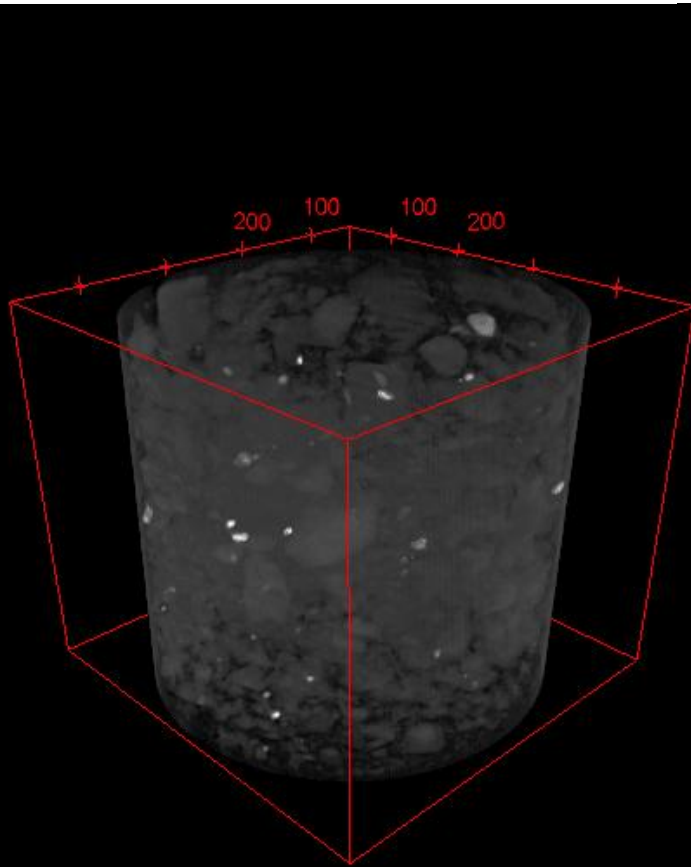


Threshold 120

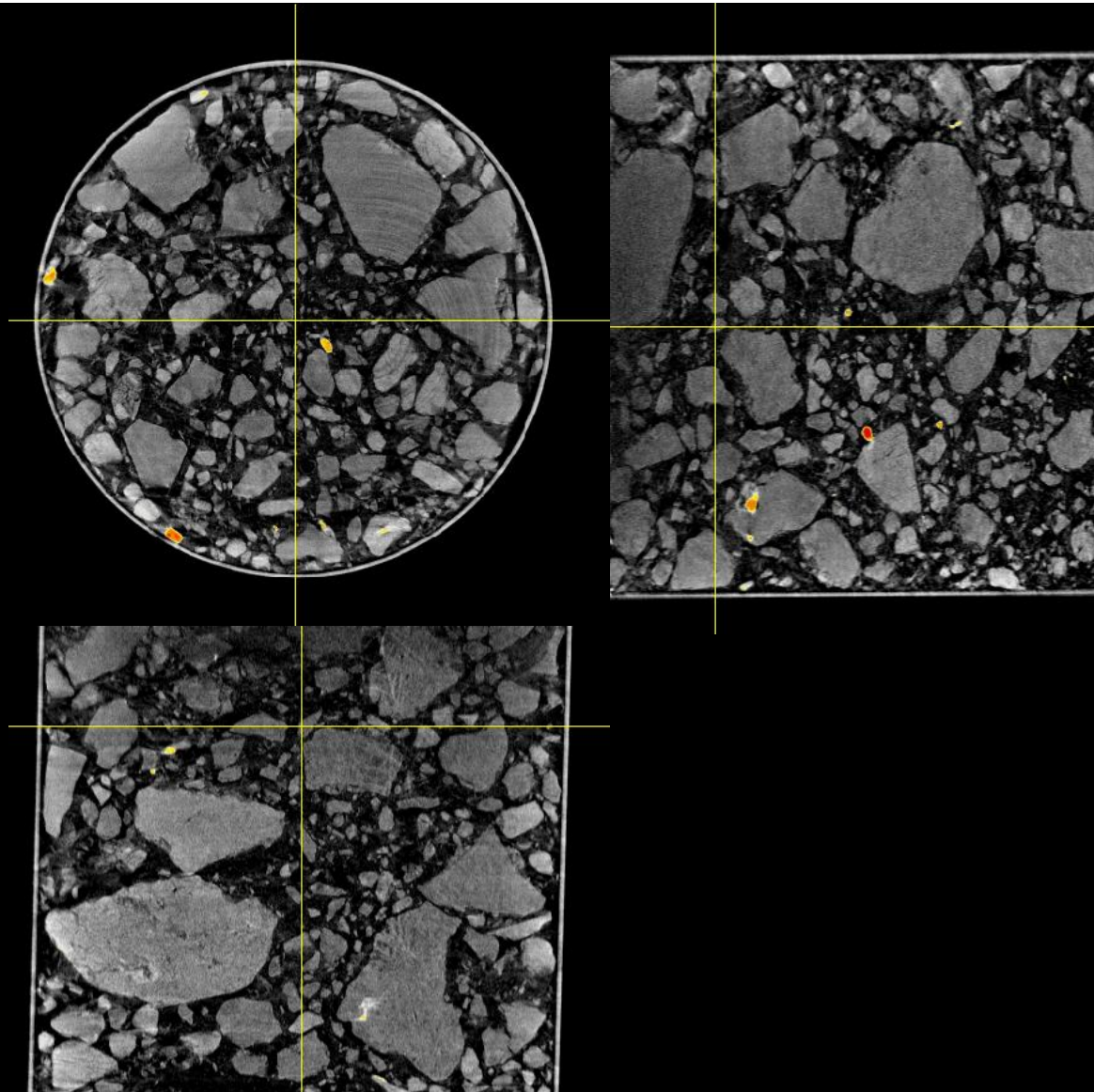


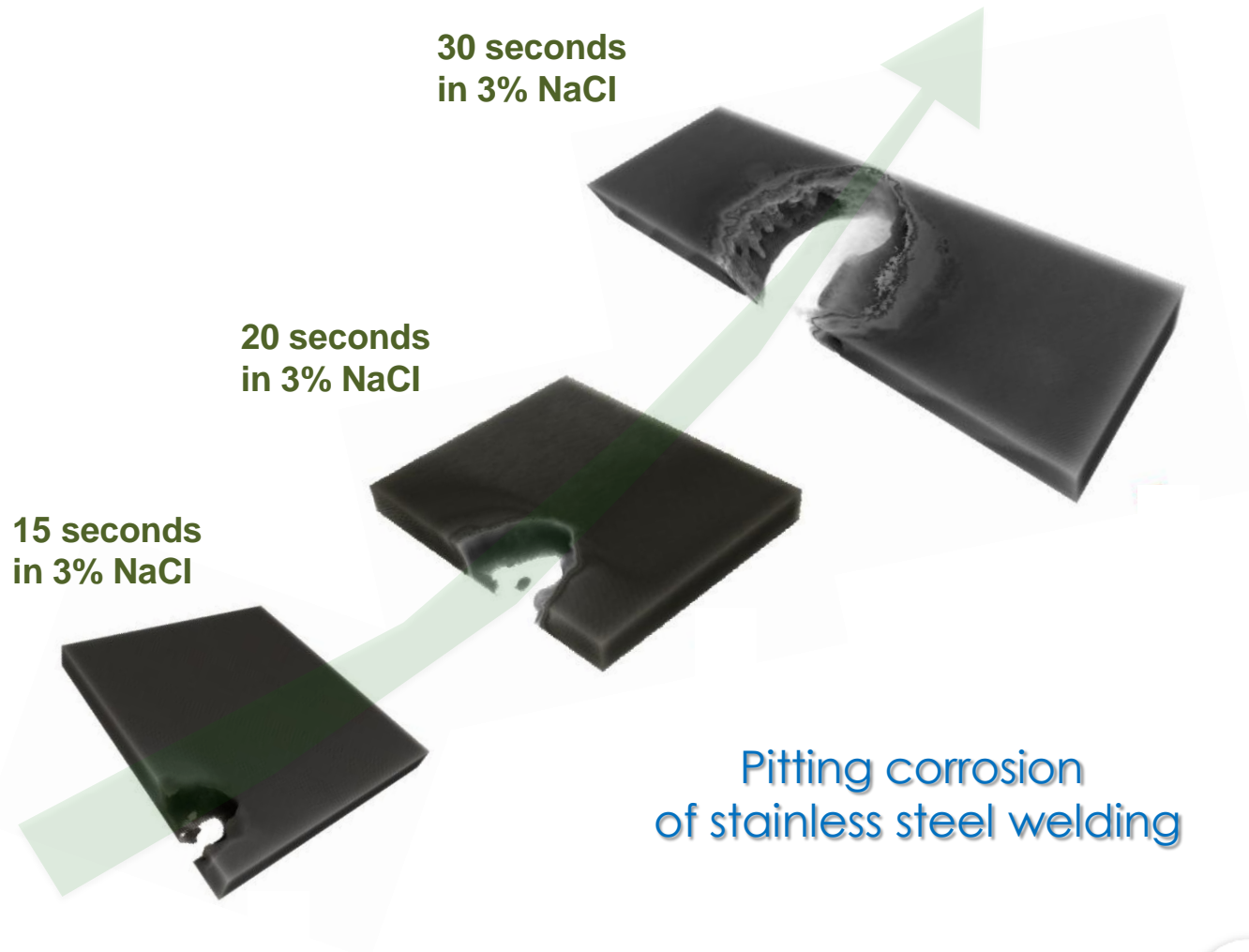


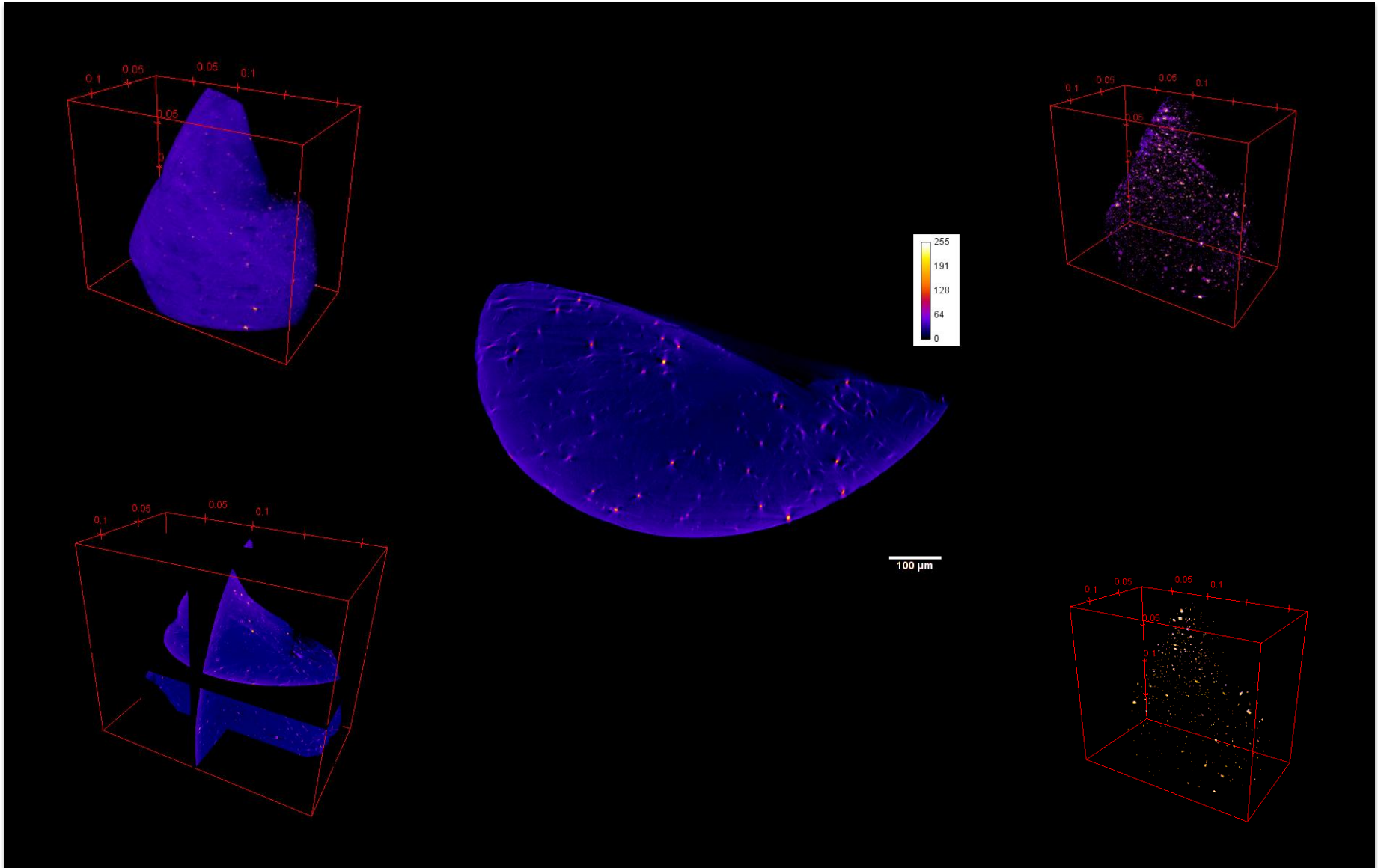




Biochar-soil  
(Biomass + Charcoal)







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