

## T. 7 X-Ray Microtomography System - CERTH



Specs:

Sizes up to 12x6 cm

Resolution @  $\mu\text{m}$

Investigation time-scale: hours/days

Possible problems: materials with same X-ray attenuation or materials with low attenuation (e.g. Si)

A 160 keV X-ray Microtomography System for non-invasive/non destructive material structure characterization.

**Post mortem analysis:** Micron resolution images of battery deformation after cycling (pouch cell, cylindrical)

**Operando mode:** An electrochemical cell for sub-micron morphological electrode/electrolyte interface (SEI) analysis

**We can consider:**

- Electrolyte decomposition, electrode volume expansion/contraction, electrode cracking and other morphological considerations
- Complementarity to **TEM/SEM**