

## Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

**Sample ID:** RA-QD02-0049-2

**PI:** Akira Tsuchiyama

**Type and date of analysis performed:**

Tomography July/05/2011(7keV)

July/005/20111(8keV)

**Elements or phases identified:** (Mg, Si, olivine, pyroxene, aromatic carbon, etc.)

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	92.06	-	0.354	6.97	0.618	-	-	-	-

**Contaminant phases identified:** (Al, SUS, carbon particles, etc.)

N/A

**Sample handling:**

Exposed in atmosphere.

**State of sample pre-analysis:**

Attached to glass fiber with resin.

**State of sample post-analysis:**

N<sub>2</sub> hold in sample holder.

**Analysis data Notes:** (summary of the attached analysis data and/or images)

See attached sheets.

# RA-QD02-0049-2

Operation Date July/05/2011 (7 keV)  
July/05/2011 (8 keV)  
operated by T. Matsumoto (7 keV)  
T. Matsumoto (8 keV)  
analyzed by T. Matsumoto

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	92.06	-	0.354	6.97	0.618	-	-	-	-

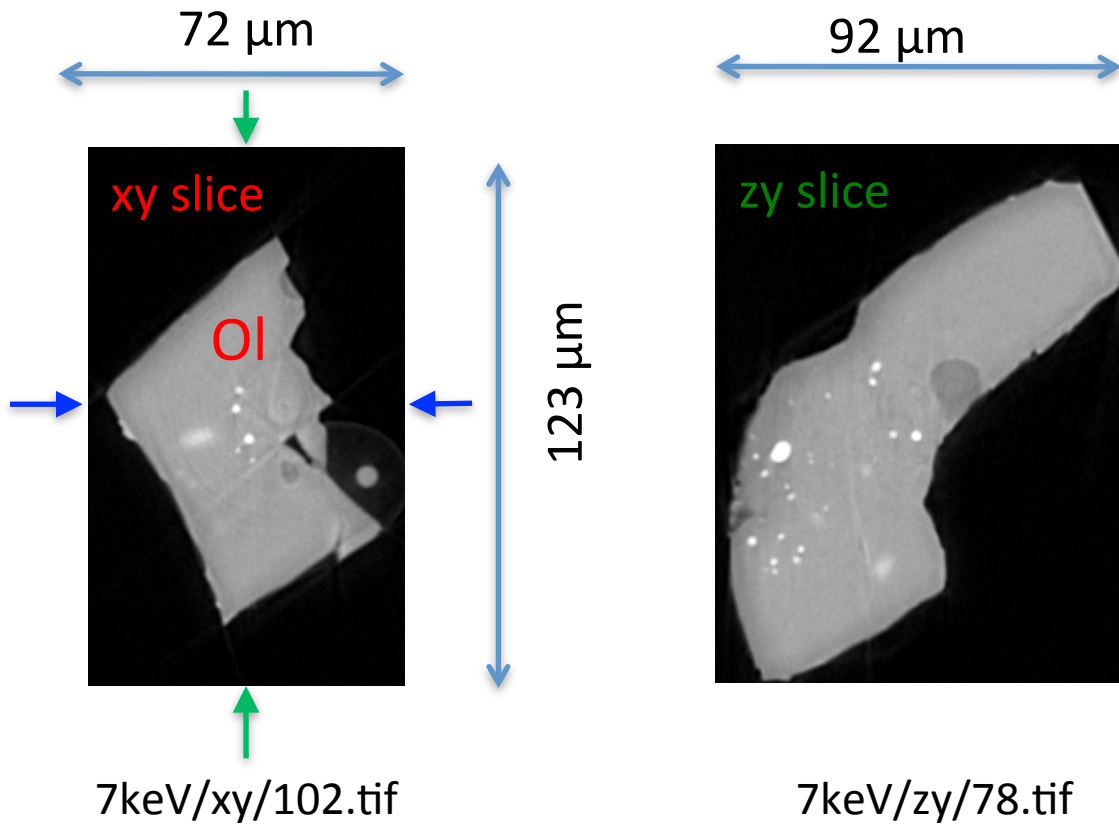
A ( $\mu\text{m}$ )	B ( $\mu\text{m}$ )	C ( $\mu\text{m}$ )	V ( $\mu\text{m}^3$ )	Porosity (%)
49.0	59.8	74.7	781079	0.00026

Ol: olivine  
LPx: low calcium pyroxene  
HPx: high calcium pyroxene  
Pl: plagioclase  
Tr: troilite  
Tae: taenite  
Chm: chromite  
CP: calcium phosphate  
Kam: kamacite

A, B, and C: shortest, middle, and longest axial radii, respectively,  
of a best-fit ellipsoid for the particle

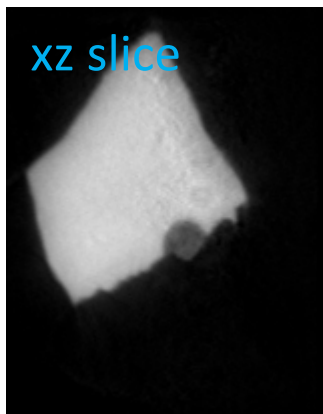
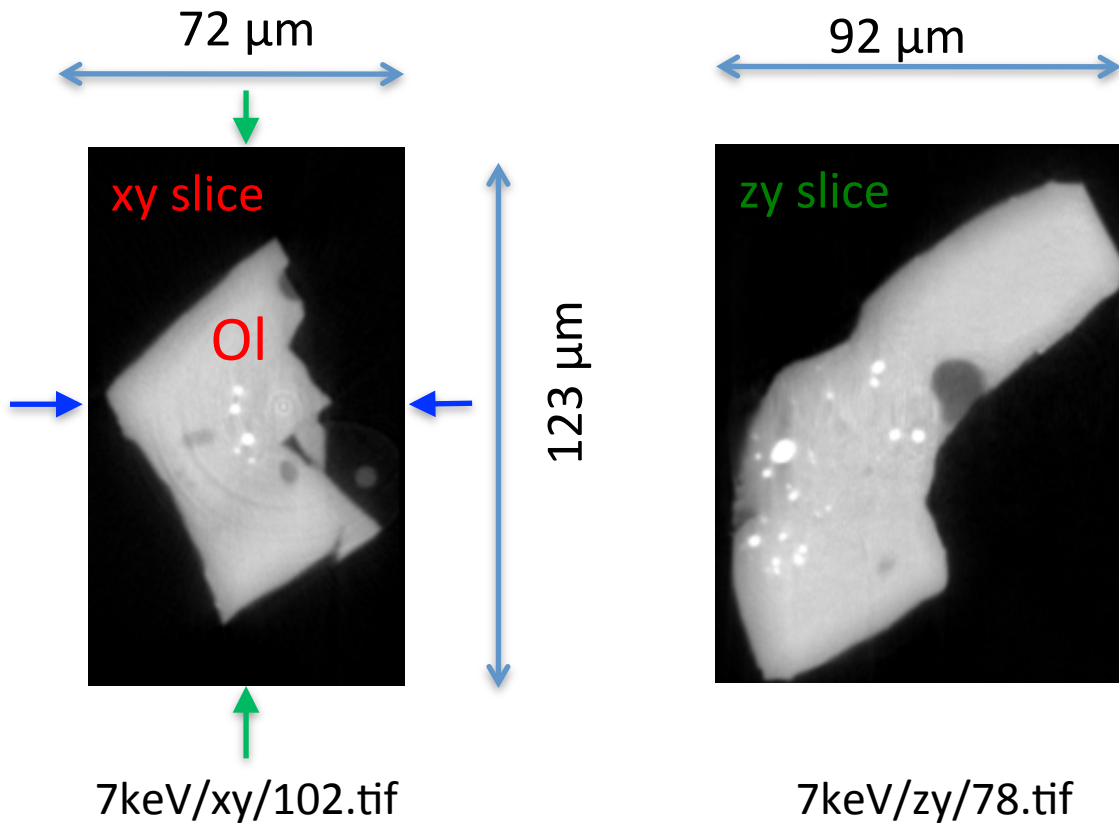
V: particle volume without pore  
dz: CT image interval  
LAC: linear attenuation coefficient of X-ray

RA-QD02-0049-2 7 keV



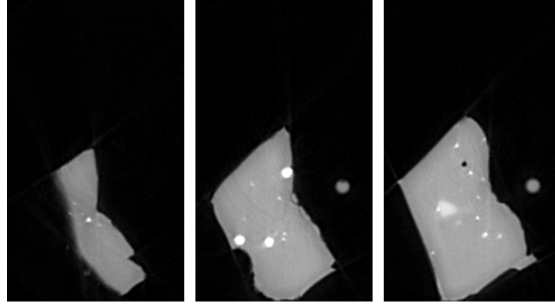
7keV/xz/133.tif

RA-QD02-0049-2 8 keV



7keV/xz/133.tif

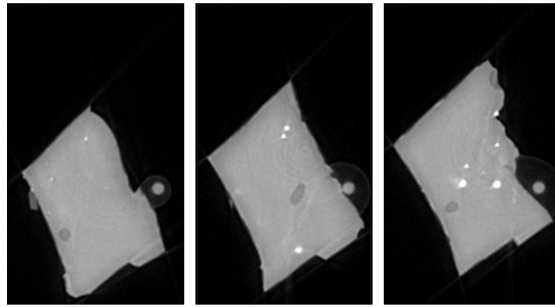
# RA-QD02-0049-2 7 keV catalogue



015.tif

031.tif

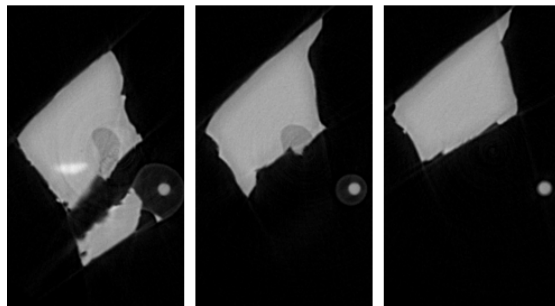
047.tif



063.tif

079.tif

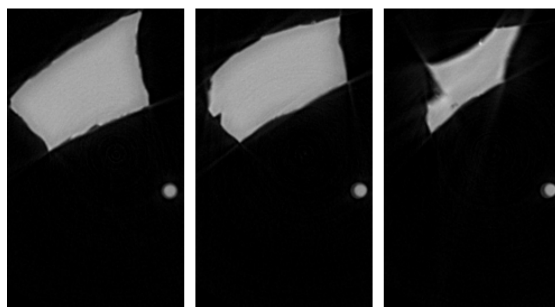
095.tif



111.tif

127.tif

143.tif



159.tif

175.tif

191.tif

dZ = 7.3um

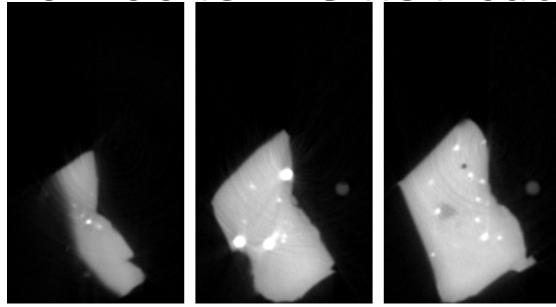


58 um



287 cm-1 (LAC)

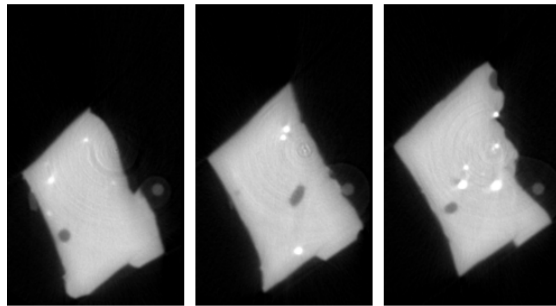
# RA-QD02-0049-2 8 keV catalogue



015.tif

031.tif

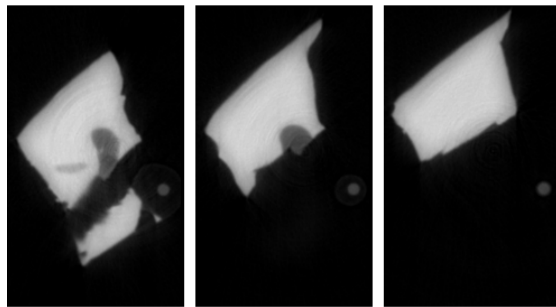
047.tif



063.tif

079.tif

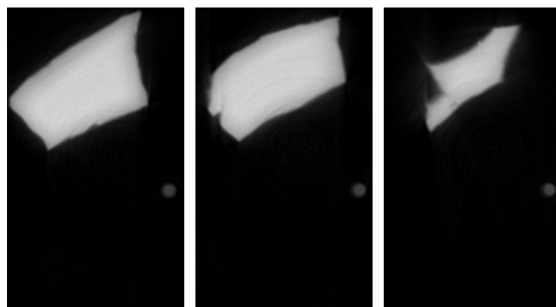
095.tif



111.tif

127.tif

143.tif



159.tif

175.tif

191.tif

dZ = 7.3um

58 um



431 cm<sup>-1</sup> (LAC)

# RA-QD02-0049-2 Dual energy histogram

