

## Sample Results Summary Sheet

Please return this form to the Curator for each allocated Sample

**Sample ID:** RA-QD02-0068

**PI:** Akira Tsuchiyama

**Type and date of analysis performed:**

Tomography     Jan/25/2011 (7 keV)

                     Jan/24/2011 (8 keV)

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

Mode	OI	LPx	HPx	PI	Tr	Tae	Chm	CP	Kam
Vol %	56.1	1.66	2.08	37.7	2.24	0.28	-	-	-

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

N/A

**Sample handling:**

Exposed in atmosphere.

**State of sample pre-analysis:**

Attached to carbon 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-QD02-0068

Operation Date Jan/25/2011 (7 keV)

Jan/24/2011 (8 keV)

operated by Y. Ogami( 7 keV)

T. Matsumoto ( 8 keV)

analyzed by A. Shimada

Mode	Ol	LPx	HPx	Pl	Tr	Tae	Chm	CP	Kam
Vol %	56.1	1.66	2.08	37.7	2.24	0.28	-	-	-

A ( $\mu\text{m}$ )	B ( $\mu\text{m}$ )	C ( $\mu\text{m}$ )	V ( $\mu\text{m}^3$ )	Porosity (%)
16.1	26.3	49.3	54770	7.22

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

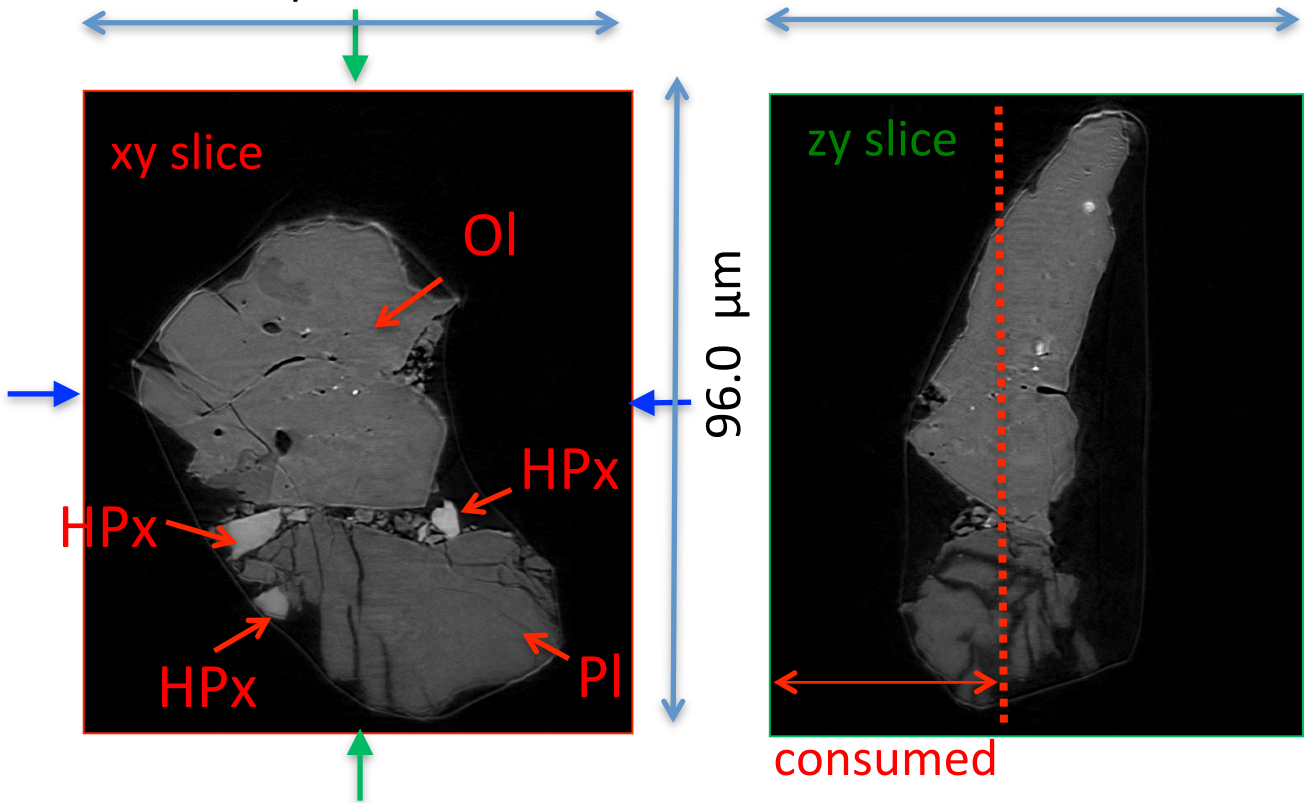
dz: CT image interval

LAC: linear attenuation coefficient of X-ray

RA-QD02-0068 7 keV

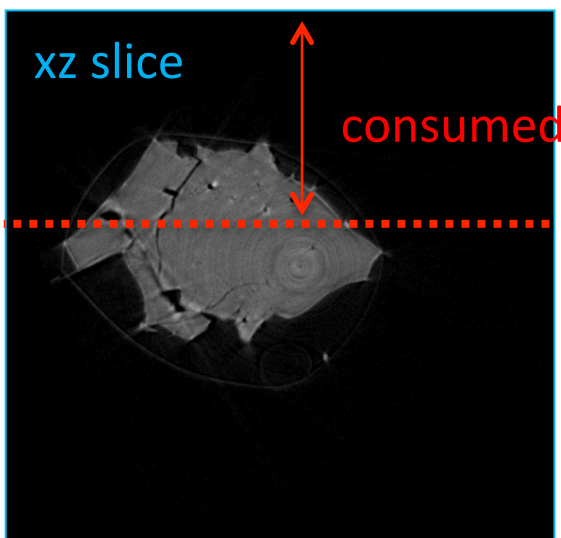
81.9  $\mu\text{m}$

79.6  $\mu\text{m}$

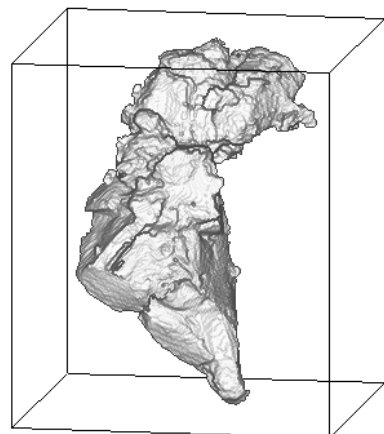


7keV/xy/393.tif

7keV/zy/478.tif



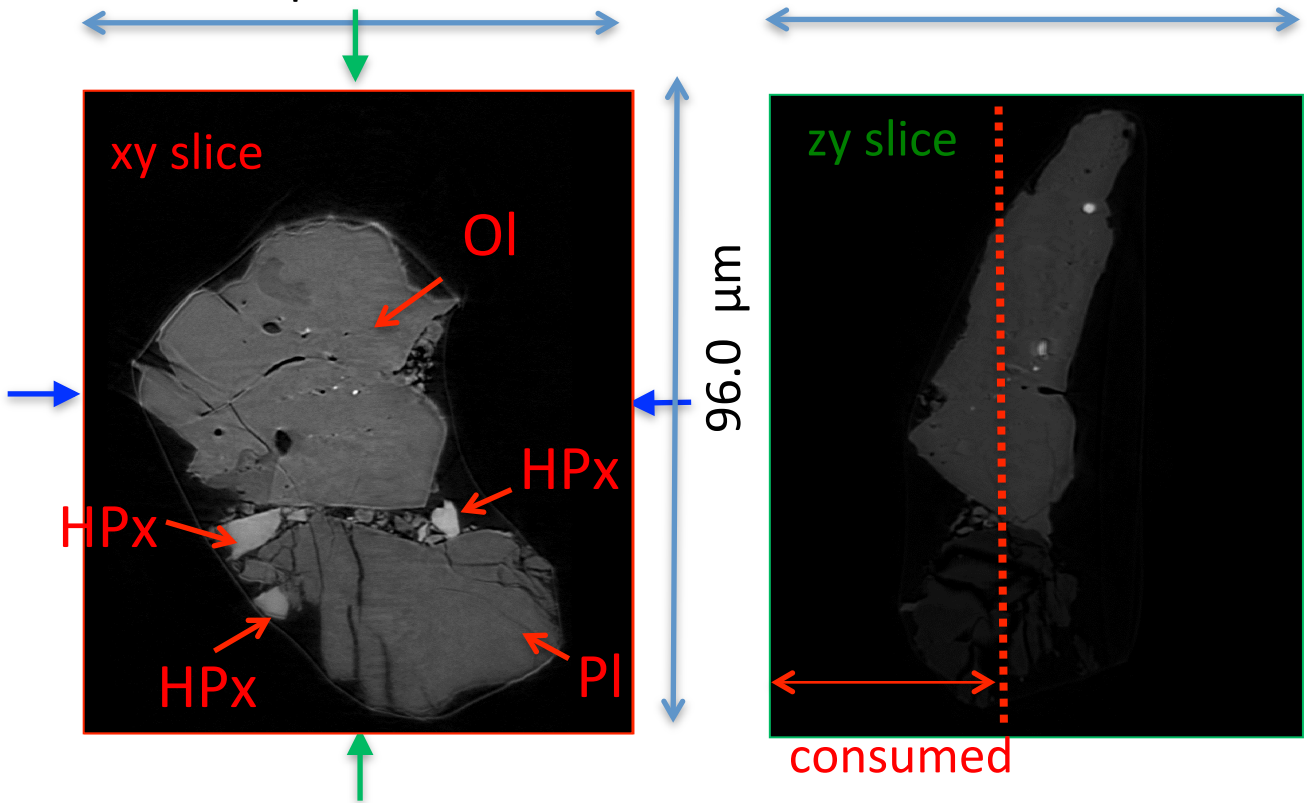
7keV/xz/560.tif



# RA-QD02-0068 8 keV

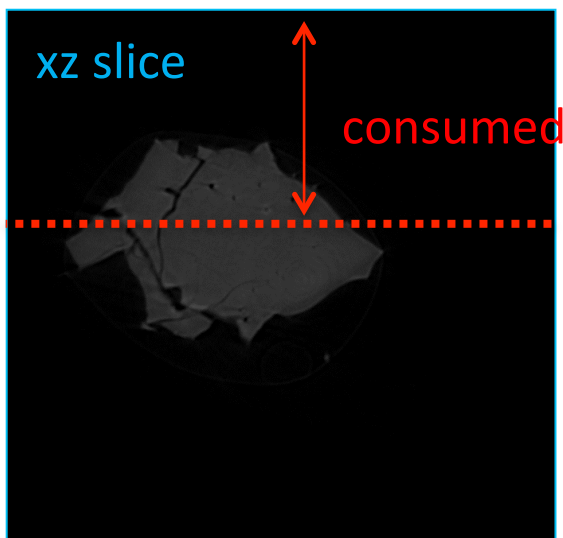
81.9  $\mu\text{m}$

79.6  $\mu\text{m}$



8keV/xy/393.tif

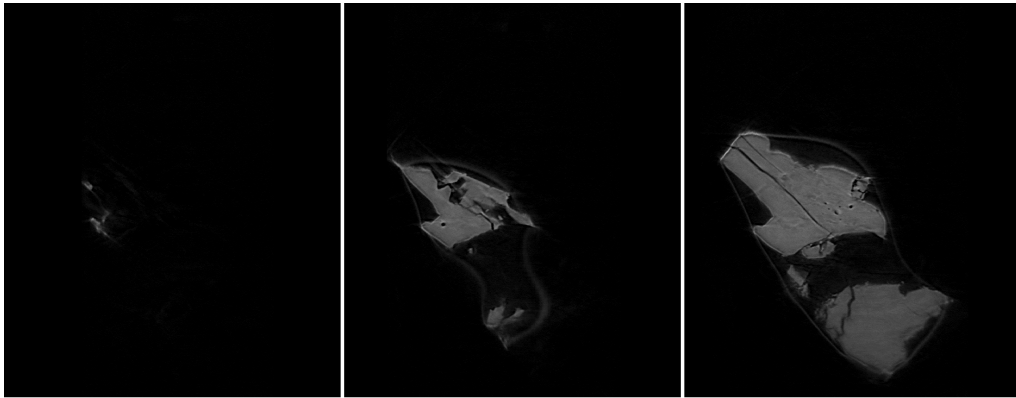
8keV/zy/478.tif



8keV/xz/560.tif



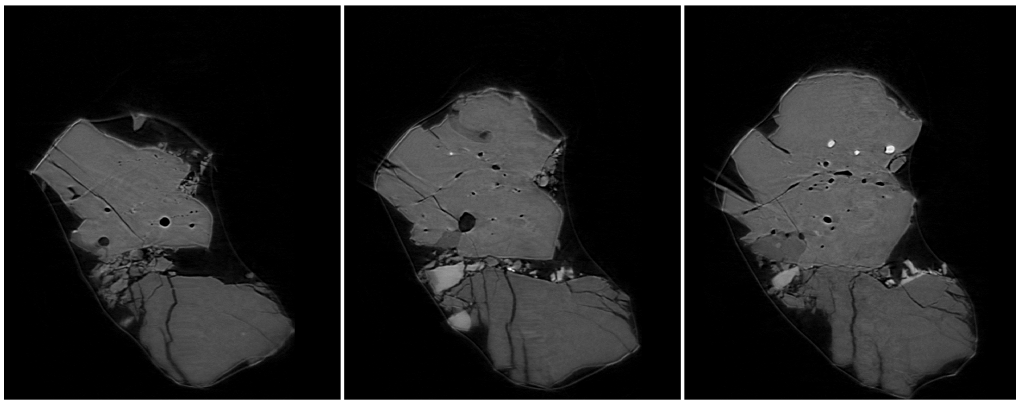
# RA-QD02-0068 7 keV catalogue



203.tif

247.tif

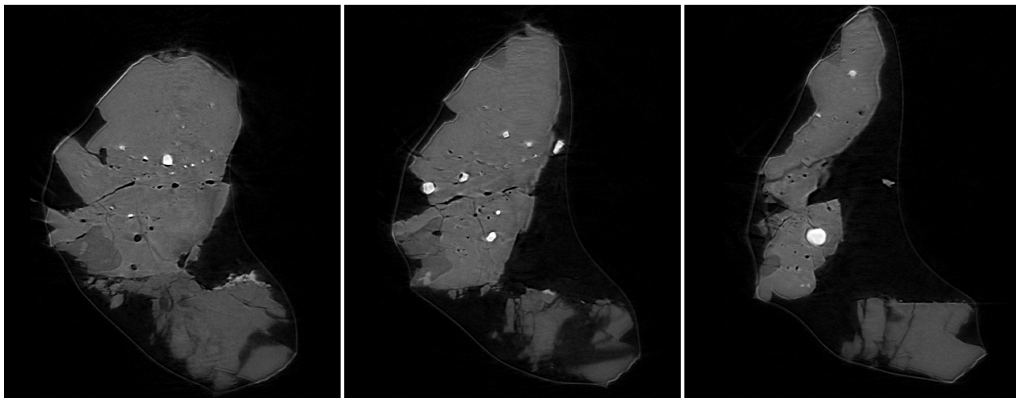
291.tif



335.tif

379.tif

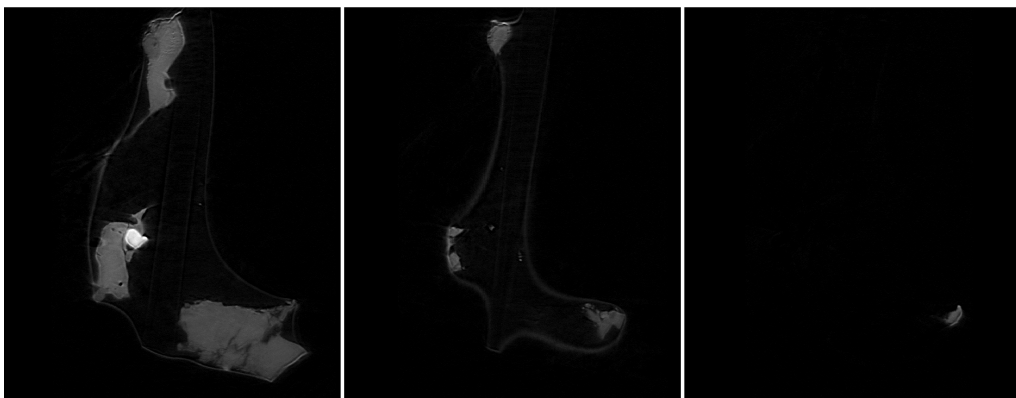
423.tif



467.tif

511.tif

555.tif



599.tif

643.tif

687.tif

dZ = 3.76948 um

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

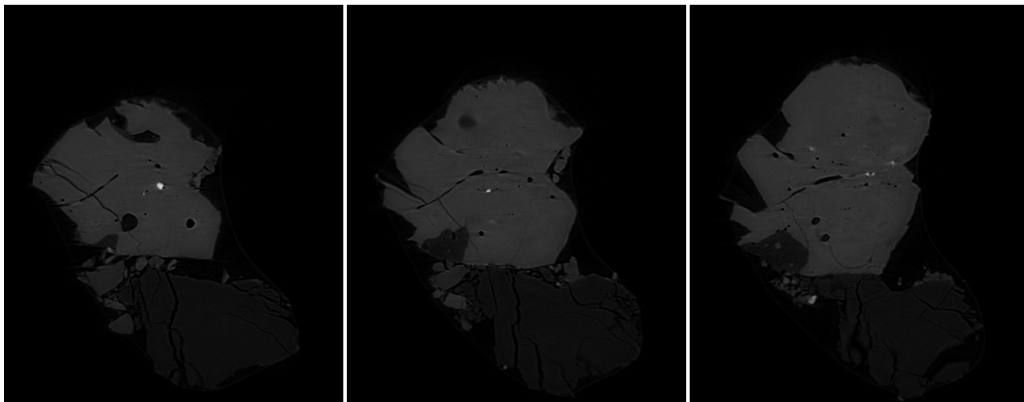
# RA-QD02-0068 8 keV catalogue



239.tif

281.tif

323.tif



365.tif

407.tif

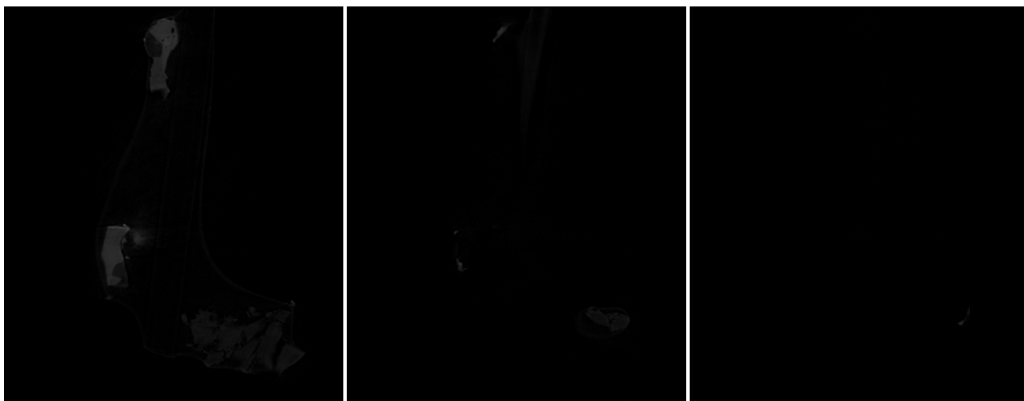
449.tif



491.tif

533.tif

575.tif



617.tif

659.tif

701.tif

dZ = 3.59814 um

10 um  
1581 cm<sup>-1</sup> (LAC)

# RA-QD02-0068 Dual energy histogram

