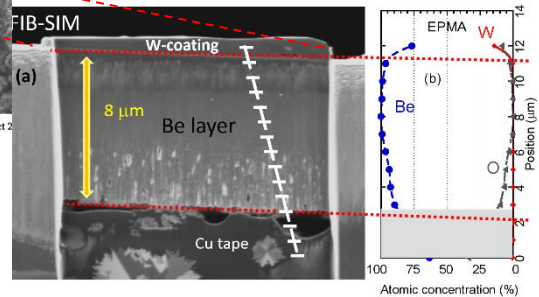
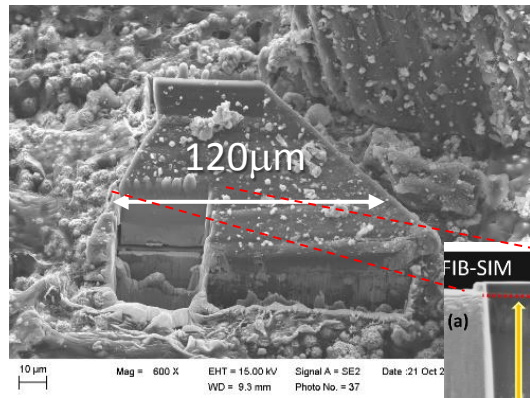
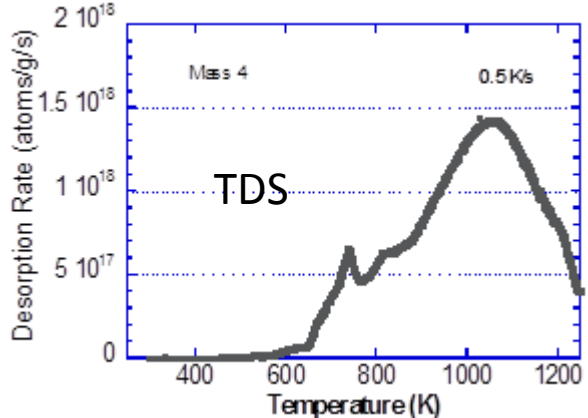


Comprehensive Analysis of Metal Dust Particles in JET-ILW, and Impact on Fusion Reactor

EXS/P6-19

Comprehensive ex-situ analyses for JET dust particles were started in Rokkasho center, and it has been carried out based on Broader Approach (BA) agreement. Analyses for ILW dust particles (W, Be, others) in 2011-2012 were started.



For ILW dust particles (at In. Div.)

- Thick beryllium oxide layer of 2 μm is shown on Be flake dust (total thickness of 8 μm)
- Tritium Specific activity : 0.1GBq/g (LSC)
- Deuterium retention : 1.2 x 10²¹ atoms/g @ 4.4mg (TDS)

Cross-section image of beryllium flake dust measured by SIM on FIB. A broken line shows measurement positions by EPMA. (b) An atomic concentration is measured by EPMA for the cross-section.