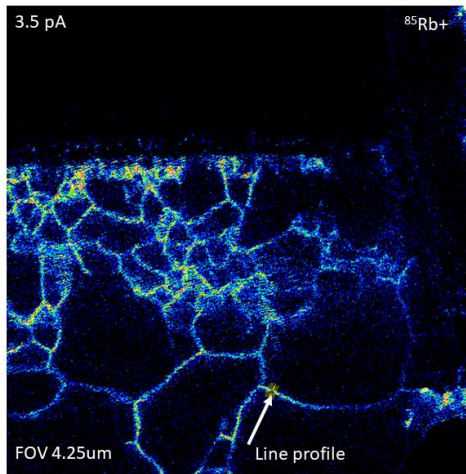




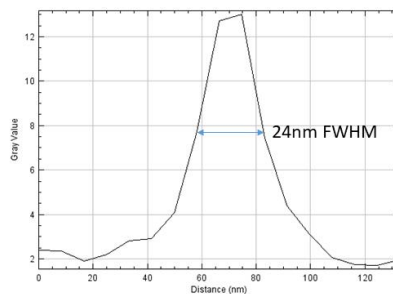
Figure 1: SIMS:ZERO system equipped with a cesium low temperature ion source. This system is installed at zeroK NanoTech.

CIGS Cu(In,Ga)Se<sub>2</sub> – Rb doped  
Section View – Positive Ions

**ZERO**K



Apparent width of Rubidium signal between grains



Cs+, 16keV, 3.5pA, 51.6mm WD  
CIGS\_Pos\_2107151409368.csv

Figure 2: High-resolution elemental mapping of rubidium in a CIGS solar-cell with SIMS:ZERO. A CIGS solar cell material was sectioned at 45 degrees, then the locations of rubidium were mapped by sputtering at normal incidence and collecting the secondary ions with our double-focusing magnetic sector mass-spectrometer. Rubidium was found to agglomerate at the grain boundaries and can be located with few-nm precision.