

## ABSORPTION CORRECTION

$$\# \text{ density} = \frac{Z}{V} \text{ in } \text{\AA}^3$$

$$\text{Abs XS @ 1.8 Angstrom} = \frac{\text{Abs XS}}{1.8}$$

$$\text{density} = \frac{Z \times \text{molar mass}}{N_A \times V \text{ in } \text{m}^3}$$

$$N_A = 6.023 \times 10^{23}$$

Input Parameters : (Mantid)

	V (rod)	
Attenuation Cross section	2.8	Abs XS / 1.8
Scattering " "	5.1	
Sample # density	0.0721	$\frac{Z}{V} \text{ in } \text{\AA}^3$
Sample radius (assuming cylinder)	0.3175	
Cylinder sample height	5	
# of Wavelength points	200	
Number of Slices (vertical)	20	(computation time linear)
Number of Annuli	3	( " " cube )