

		C	O	H	Wood
Material properties					
Material density ρ	(g cm ⁻³)				0.6
Relative fraction	(%)	50	44	6	
Number density N	(cm ⁻³)	1.51E+22	9.94E+21	2.17E+22	4.67E+22
Atomic weight A	(g mol ⁻¹)	12	16	1	
Thermal neutron spectrum (NEUTRA)					
Microscopic cross section σ	(cm ²)	4.93E-24	4.00E-24	4.70E-23	
Attenuation coefficient Σ	(cm ⁻¹)	0.07	0.04	1.02	1.13
relative share of Σ	(%)	6	4	90	
Mass attenuation Σ/ρ	(cm ² g ⁻¹)				1.88
Cold neutron spectrum (ICON)					
Microscopic cross section σ	(cm ²)	5.29E-24	4.23E-24	6.02E-23	
Attenuation coefficient Σ	(cm ⁻¹)	0.08	0.04	1.31	1.42
relative share of Σ	(%)	6	3	91	
Mass attenuation Σ/ρ	(cm ² g ⁻¹)				2.37

Table 1: Theoretical microscopical cross-sections and attenuation coefficients for a simplified physical model of wood (density 0.6 g/cm³) at the imaging beamlines NEUTRA (thermal spectrum) and ICON (cold spectrum), only carbon, oxygen and hydrogen are considered as constituents (source [1]).