Figure S1. Plot of $\log(E_a)$ versus $\log(a)$ for sodium sodalites. The relationship between $E_a$ and $a$ determined from this plot is:

$$E_a = 2.89 \times 10^9 a^{-2.88}$$
Figure S2. Top: Absorption wavelength versus lattice parameter, including lithium substituted synthetic hackmanite. Bottom: log($E_a$) versus log($a$) including lithium substituted synthetic hackmanite. Regression lines fit only the sodium sodalites.
Figure S3. Micrograph of synthetic hackmanite, Na₈[Al₂SiO₄]₀·[Cl₁,SO₄₋,Sn₋]₀·[Cl₁,SO₄₋,Sn₋]₂