

Aenigmatite

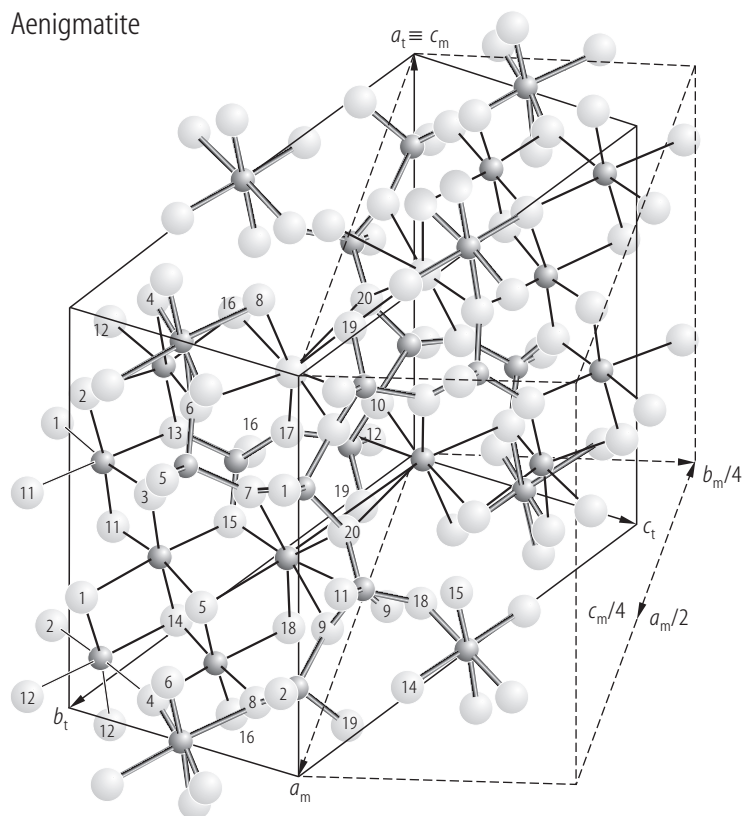


Fig. 1. Aenigmatite. Clinographic view of the atoms in the triclinic cell. The bonds among atoms forming layers are drawn with heavier lines. Only the oxygen atoms are numbered. The cations can be identified from the numbers of the coordinated oxygens [71C1].

Pectolite, Serandite

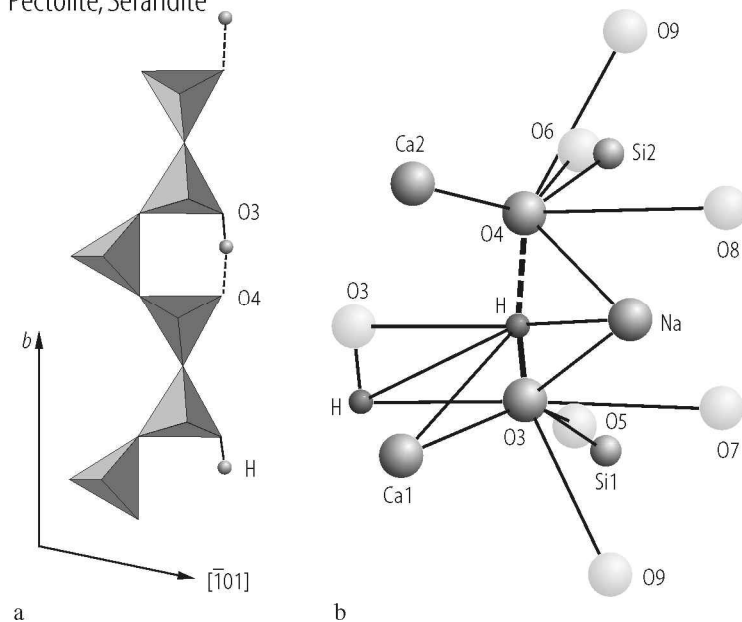


Fig. 2. Pectolite, serandite. **(a)** Schematic drawing of the silicate chain containing the very strong hydrogen bond between O3 and O4. **(b)** The environment of the hydrogen bond showing interatomic distances within a sphere of 2.8 Å around O3, O4 and H [98H1].

Serandite

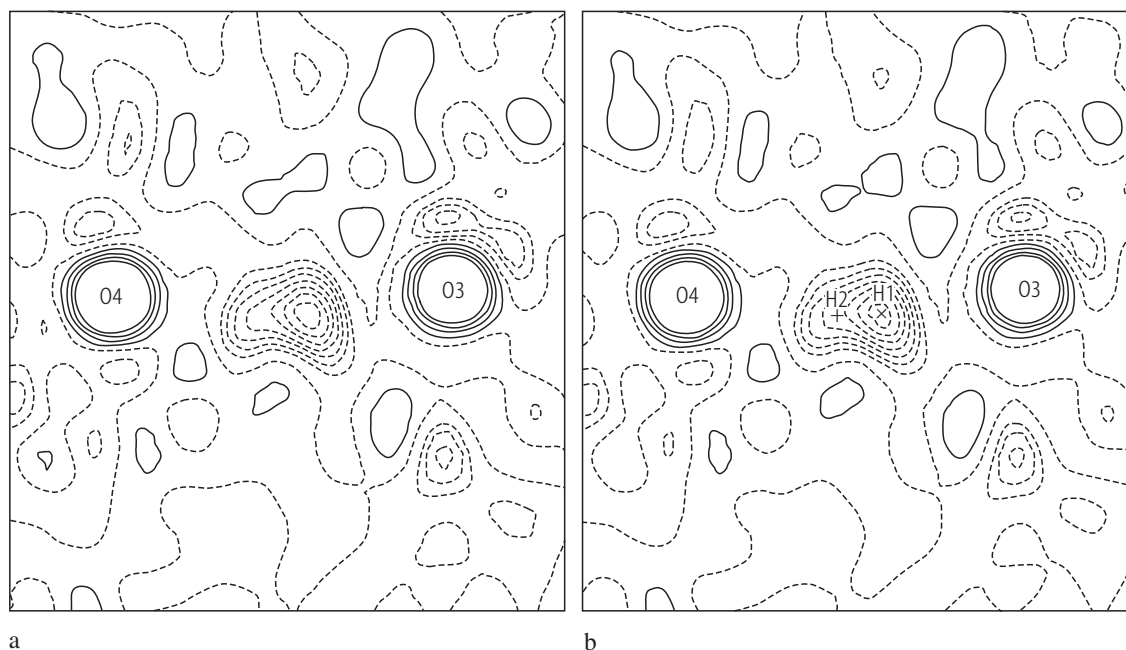


Fig. 3. Serandite. **(a)** Map of the observed scattering density from neutron diffraction study and **(b)** the calculated scattering density for the two-proton model. The model positions H1 and H2 are indicated by (x) and (+), respectively. In both maps, the section contains the

hydrogen bond, O3, O4, and the **b**-axis, which is horizontal. Each map is 4 Å per side and contours are drawn at $-2.0, -1.75, -1.5, -1.25, -1.0, -0.75, -0.5, 0, 0.5, 1.0, 1.5$ and 2.0 ($e\text{\AA}^{-3}$). The zero and negative contours are dashed [00J1].

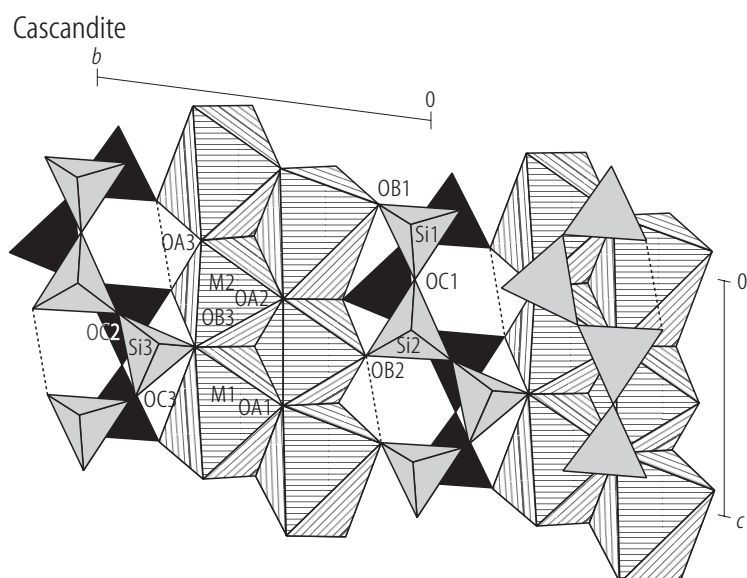


Fig. 4. Cascandite. Crystal structure as projected along a^* onto the (100) plane. Dotted lines indicate hydrogen bonds [82M1].

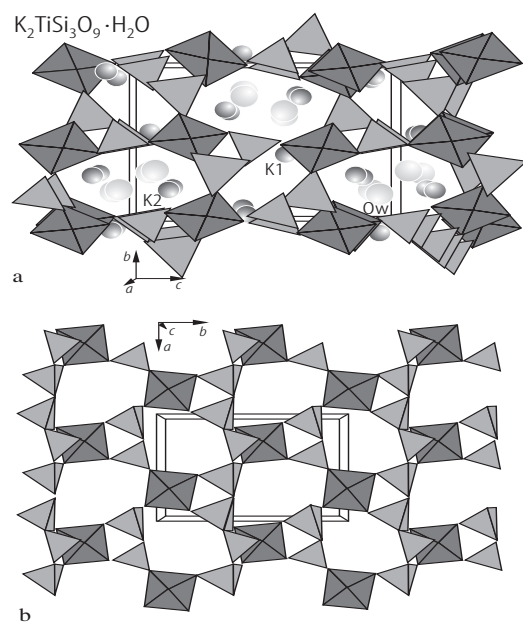


Fig. 5. $K_2TiSi_3O_9 \cdot H_2O$. **(a)** Projection of the structure along $[100]$; **(b)** partial view $(-0.2 < z < 0.7)$ of the infinite wollastonite chains connected by TiO_6 octahedra [97D1].

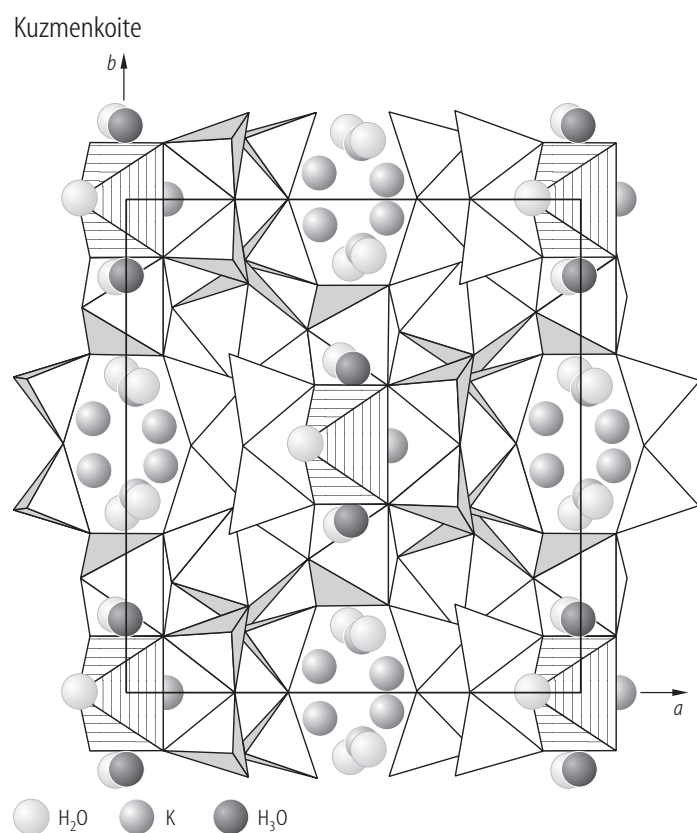


Fig. 6. Kuzmenkoite. Crystal structure projected onto the (001) plane. The Mn-octahedra are hatched with solid lines. Cations, water molecules and H_3O groups are indicated [00R1].

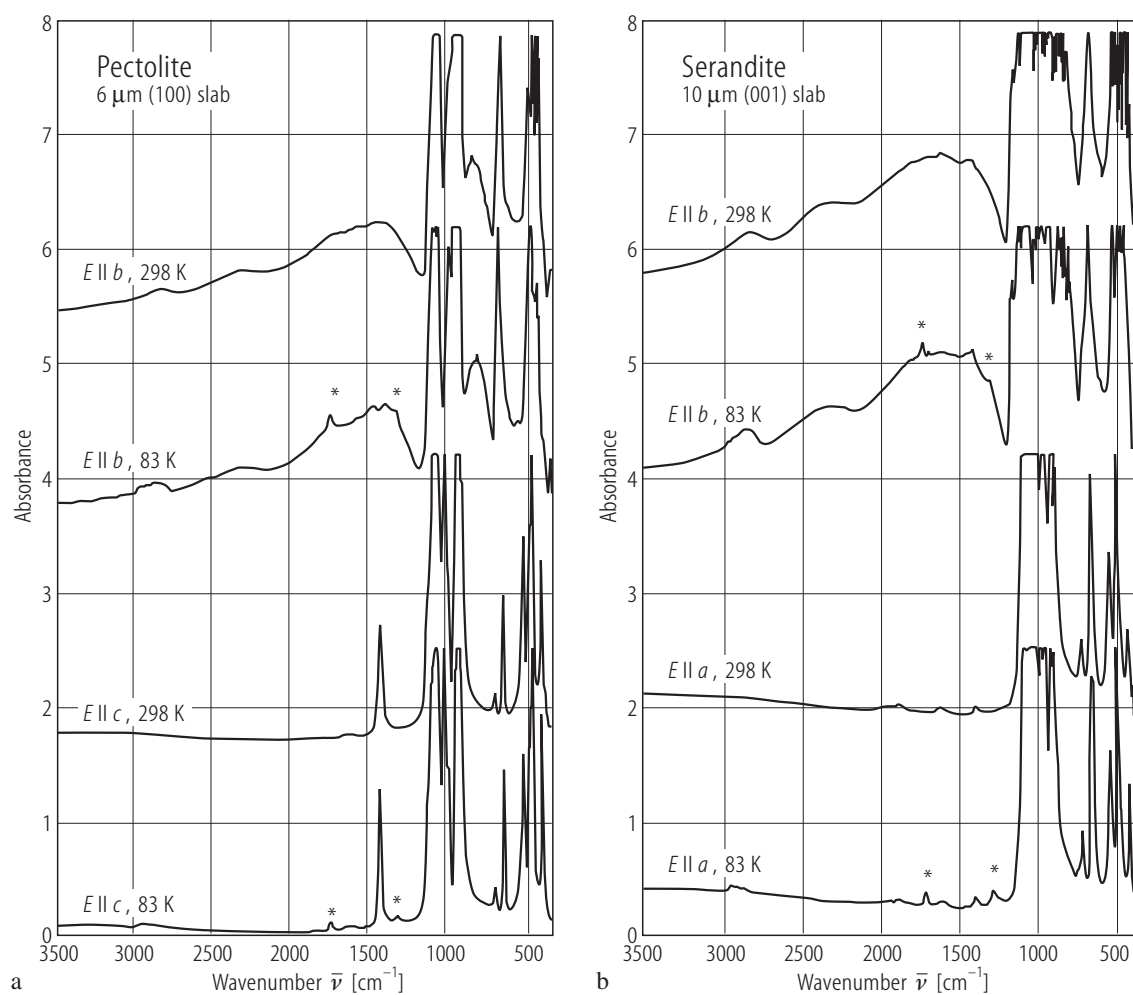


Fig. 7. Pectolite (a) and serandite (b). Polarized FTIR absorption spectra at 83 K and 298 K. Spectra were vertically offset by $A = 1.7, 2.0$ and 1.7 each. Readability was improved by removing excessive noise above $A = 2.5$. Peaks with asterisks are from organic impurity [98H1].