

TALC

Chemical formula: $\text{Mg}_3[(\text{OH})_2|\text{Si}_4\text{O}_{10}]$

Crystal system: monoclinic

Color in thin section: colorless

Form: irregular flakes

Cleavage: perfect on {001}

Indices of refraction: $n_\alpha = 1.538 - 1.554$ $n_\beta = 1.575 - 1.599$ $n_\gamma = 1.575 - 1.602$

Birefringence: 0.030 – 0.050

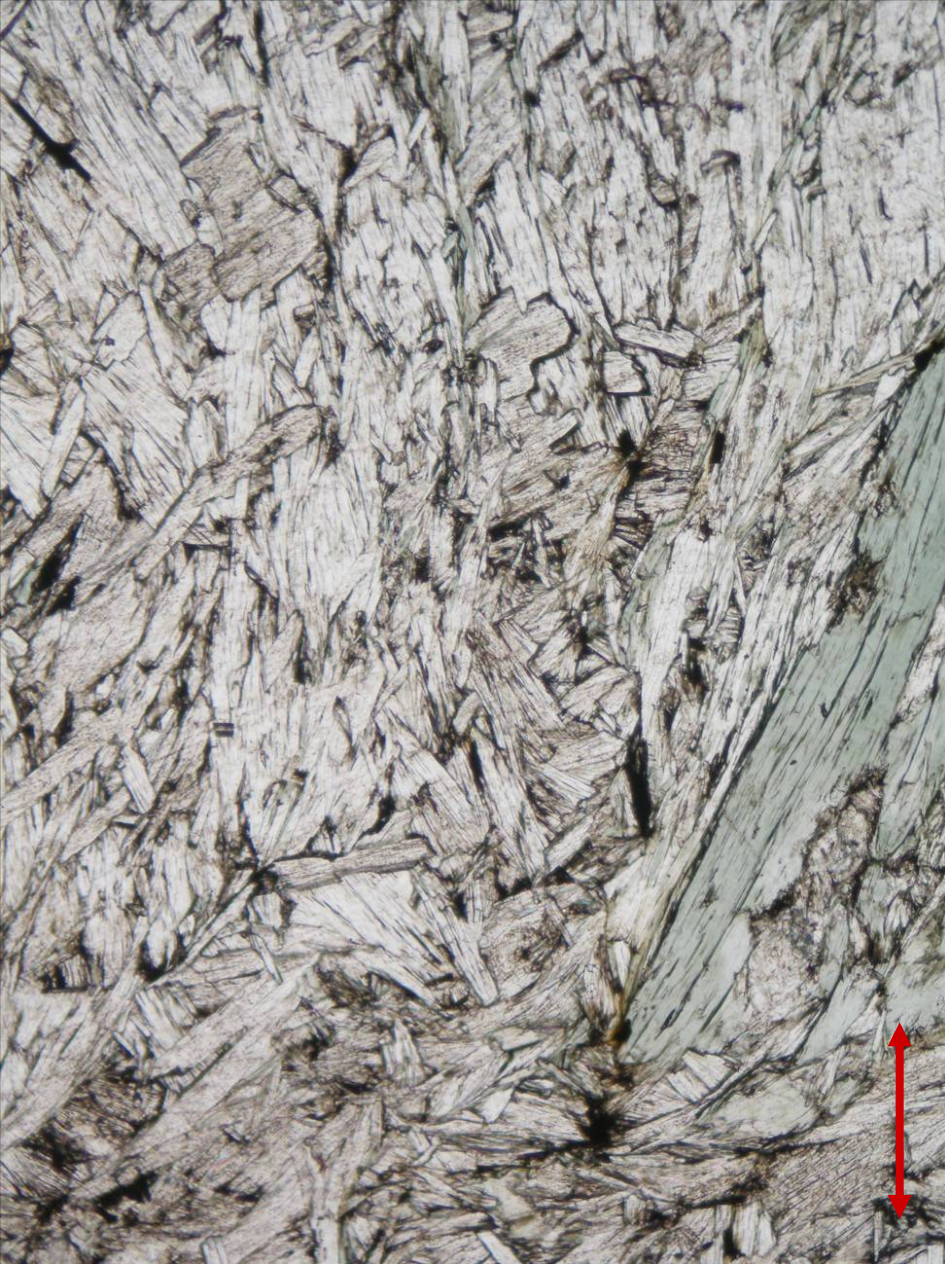
Optic sign: biaxial negative

Sign of elongation: positive

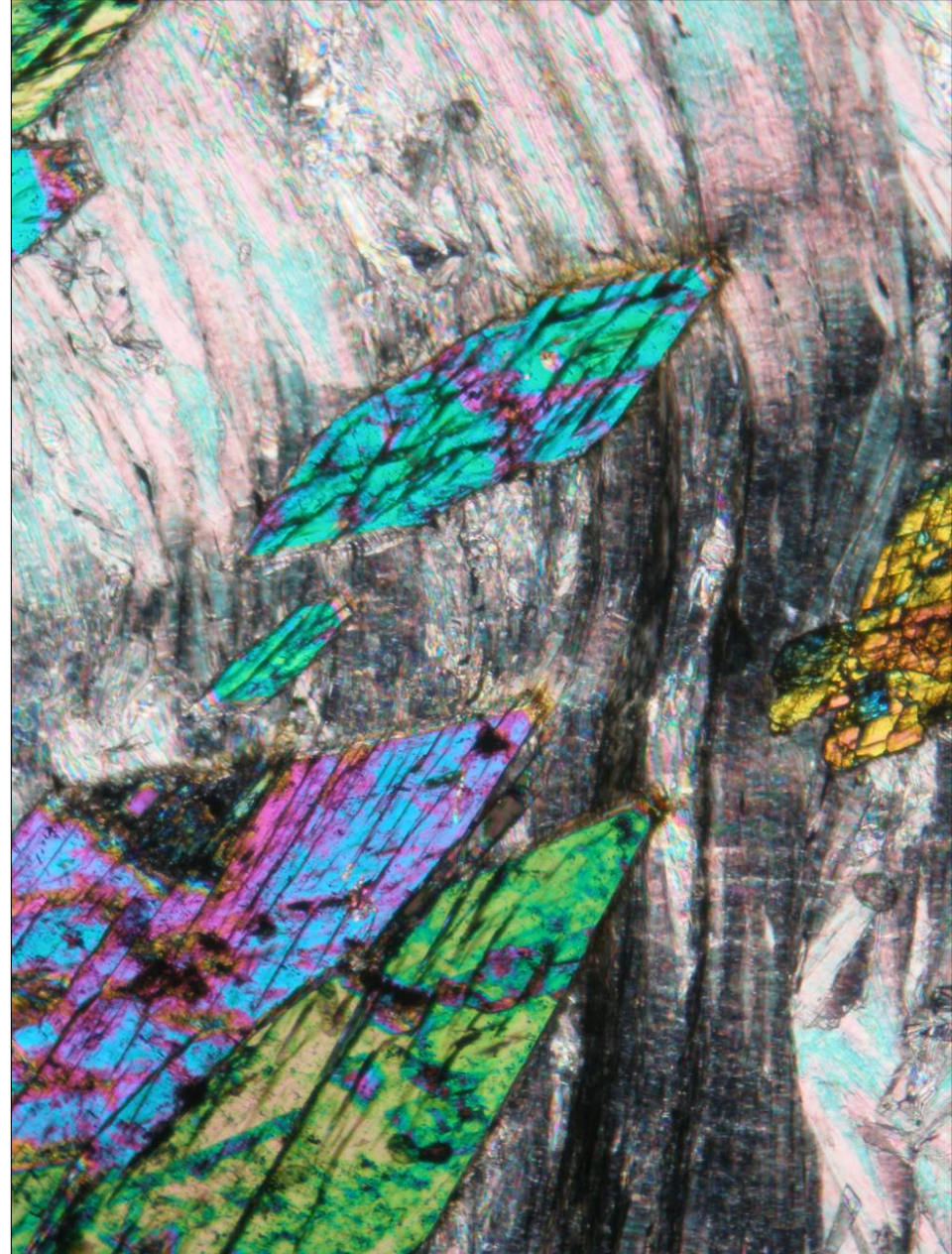
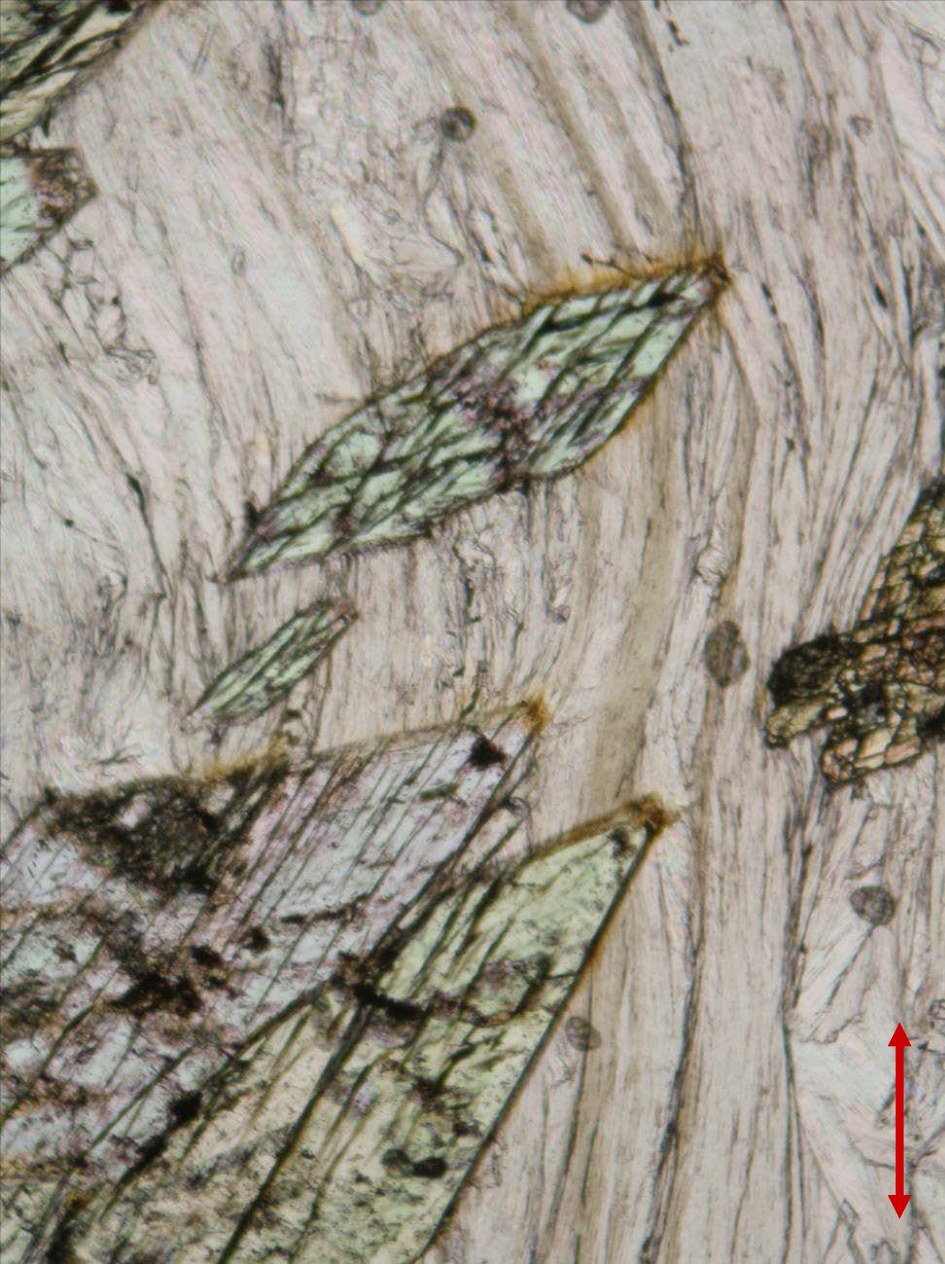
Alteration: may be altered to chlorite (clinochlore)

Occurrence: talc schist, soapstone, serpentinite, dolomite marble

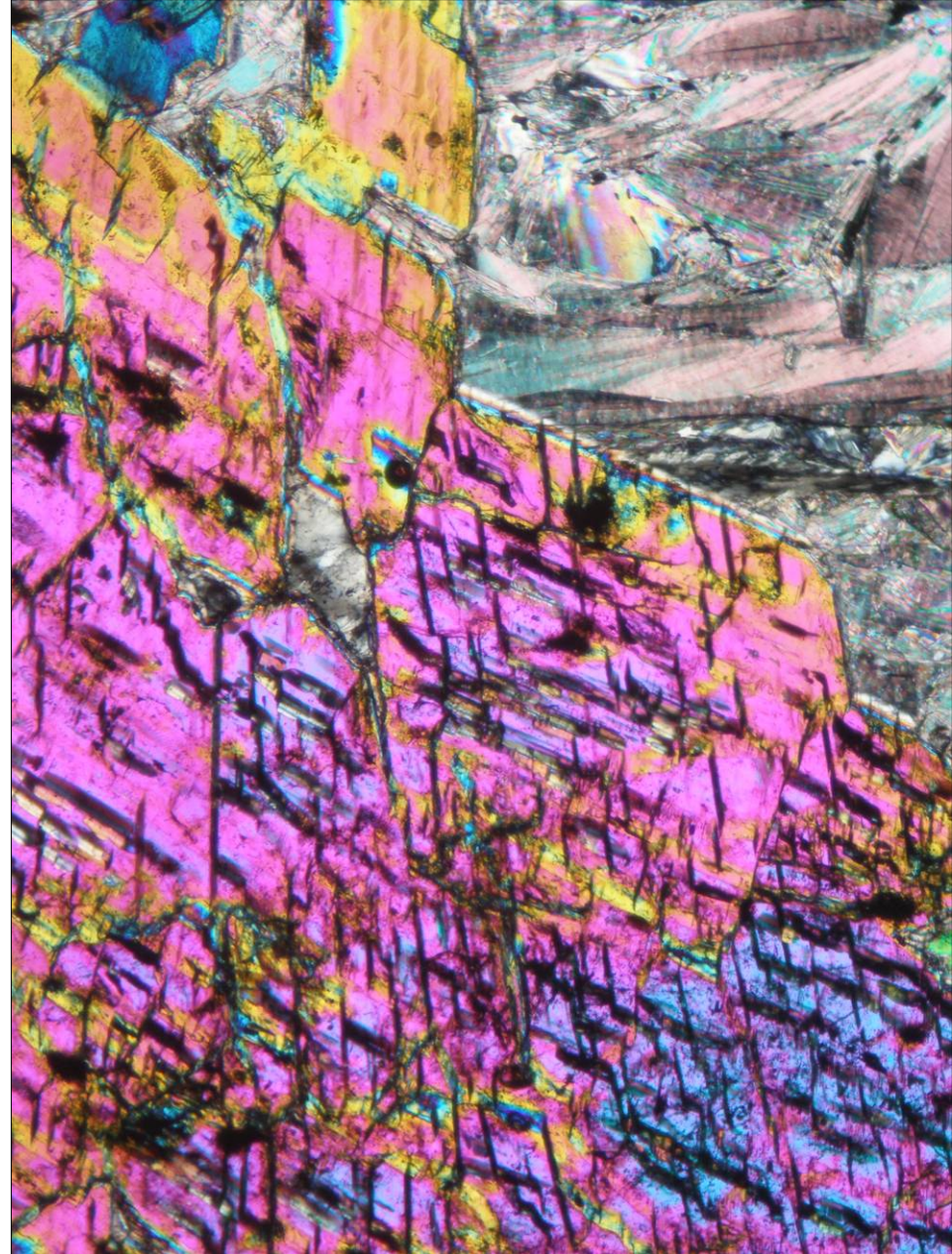
Similar minerals in thin sections: muscovite



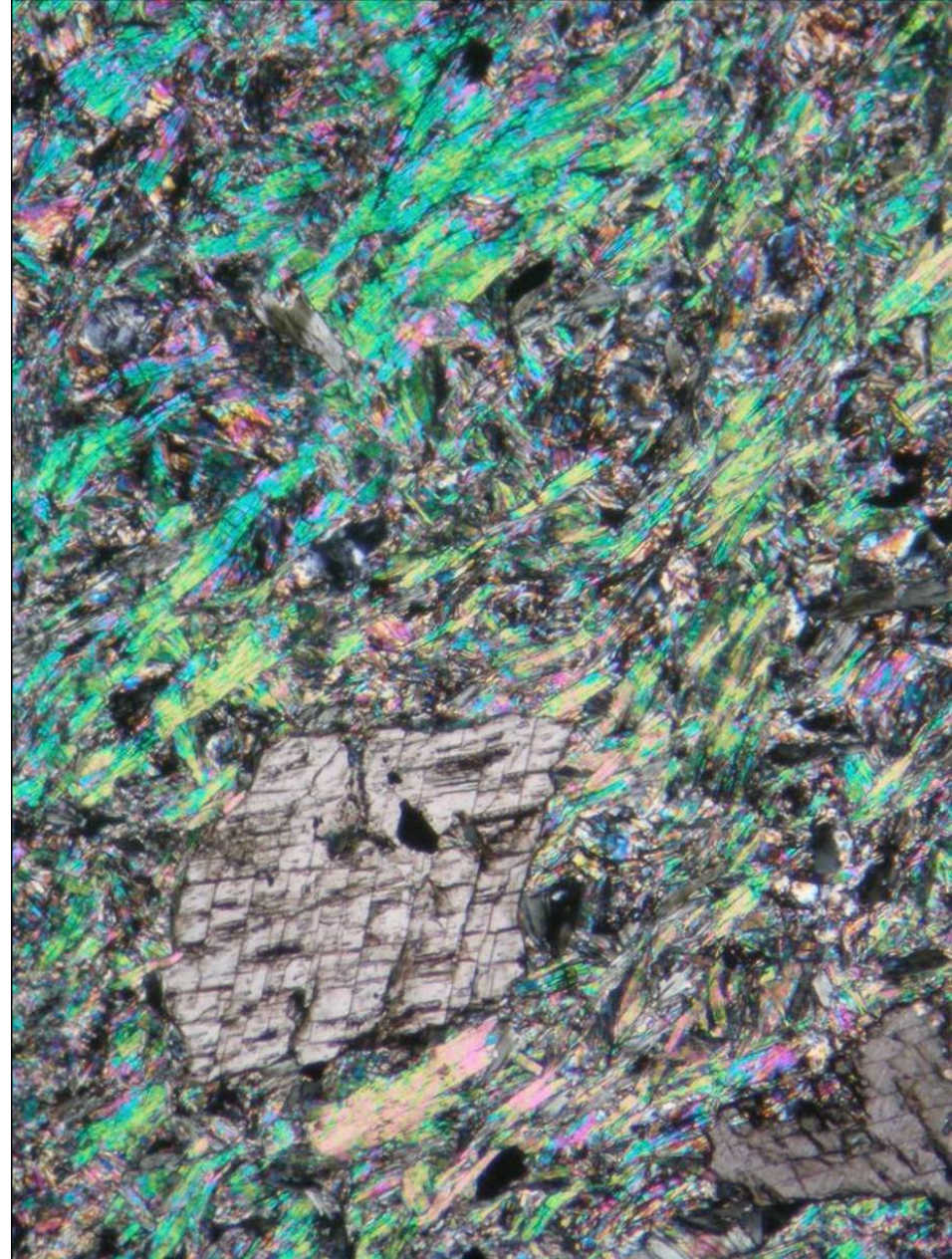
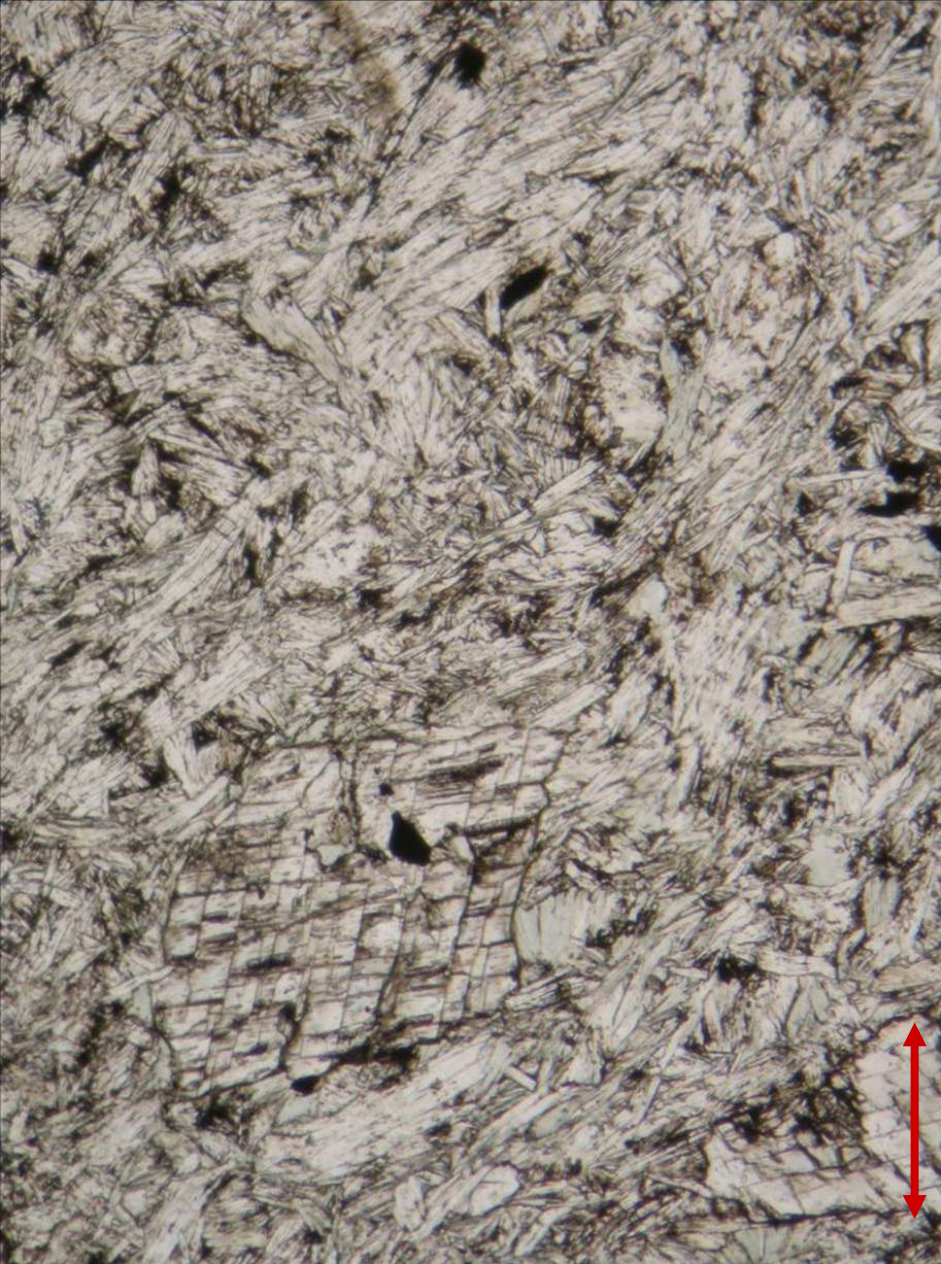
Talc and chlorite porphyroblast in talc schist from Sobotín, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 1.8 mm. Photo: JiZi.



Talc and tremolite-actinolite in actinolite-talc schist from Sobotín, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 1.8 mm. Photo: JiZi.



Talc and tremolite-actinolite in talc schist from Sobotín, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 2 mm. Photo: JiZi.



Talc and dolomite in talc schist from Rejhotice, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 1.7 mm. Photo: JiZi.