

# WOLLASTONITE

*Chemical formula:*  $\text{Ca}_3[\text{Si}_3\text{O}_9]$

*Crystal system:* triclinic or monoclinic

*Color in thin section:* colorless

*Form:* bladed or columnar crystals; acicular to fibrous aggregates; twins are common

*Cleavage:* perfect on {100}, good on {001} and {-102}

*Indices of refraction:*  $n_\alpha = 1.616 - 1.645$   $n_\beta = 1.628 - 1.652$   $n_\gamma = 1.631 - 1.656$

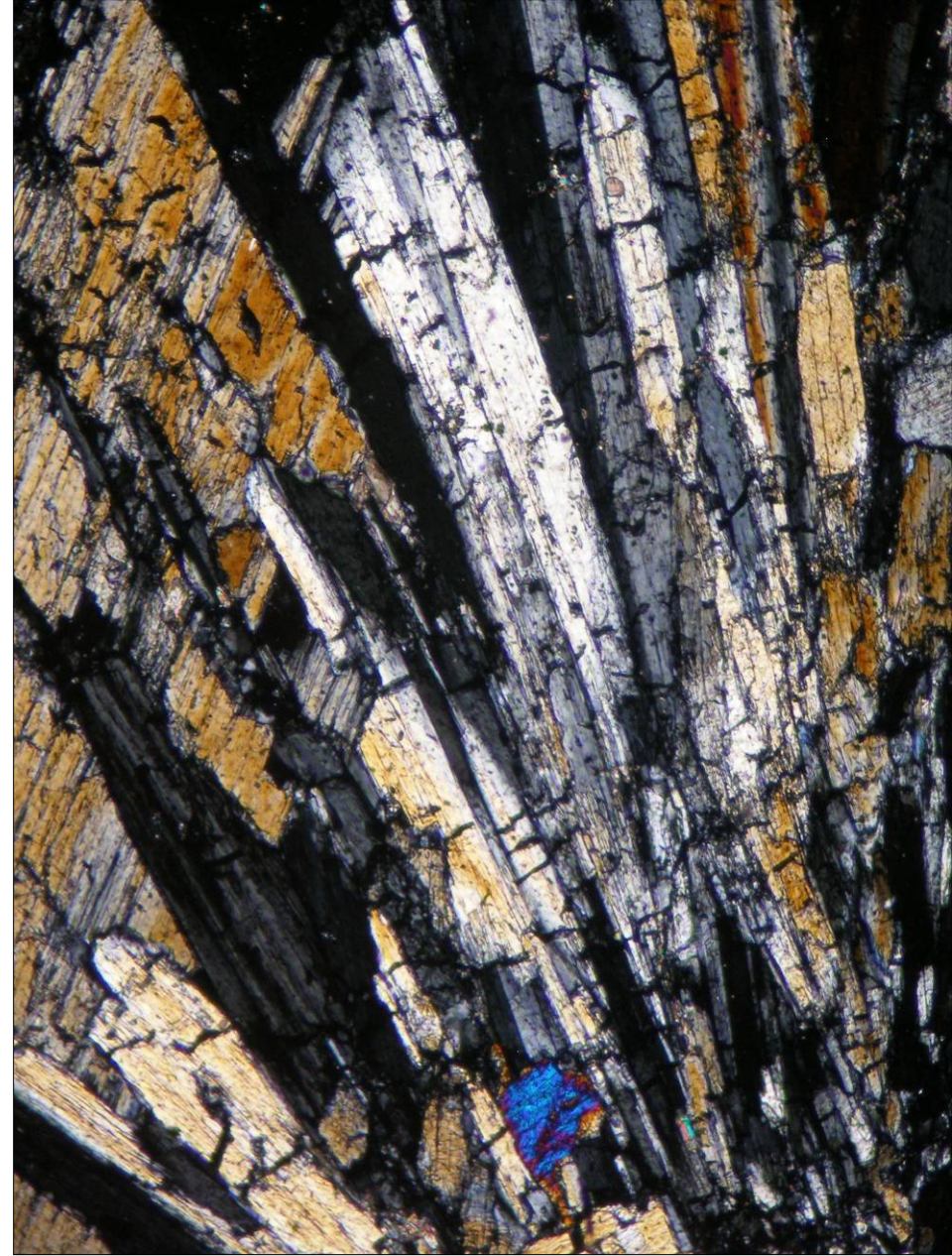
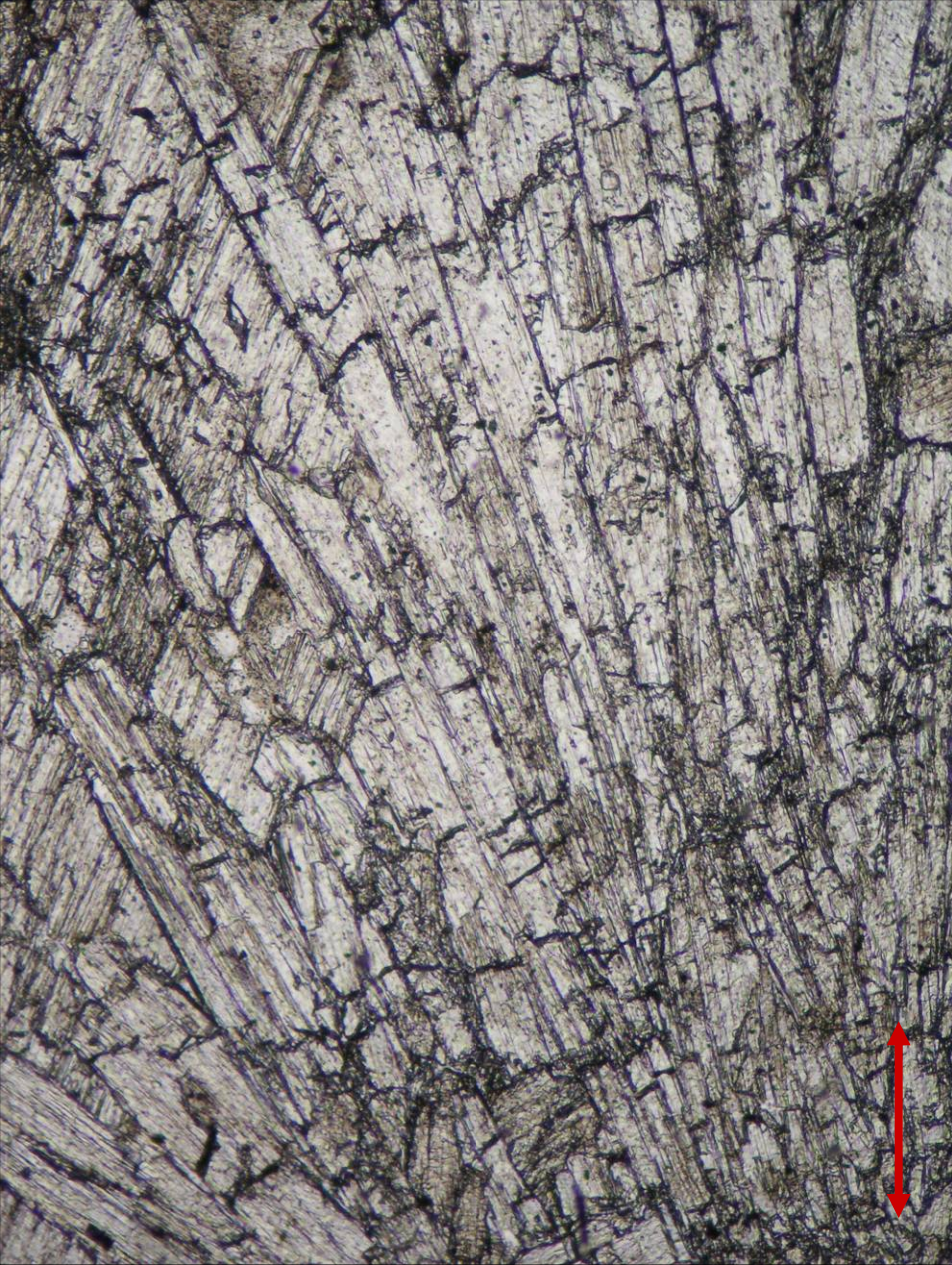
*Birefringence:* 0.013 – 0.017

*Optic sign:* biaxial negative

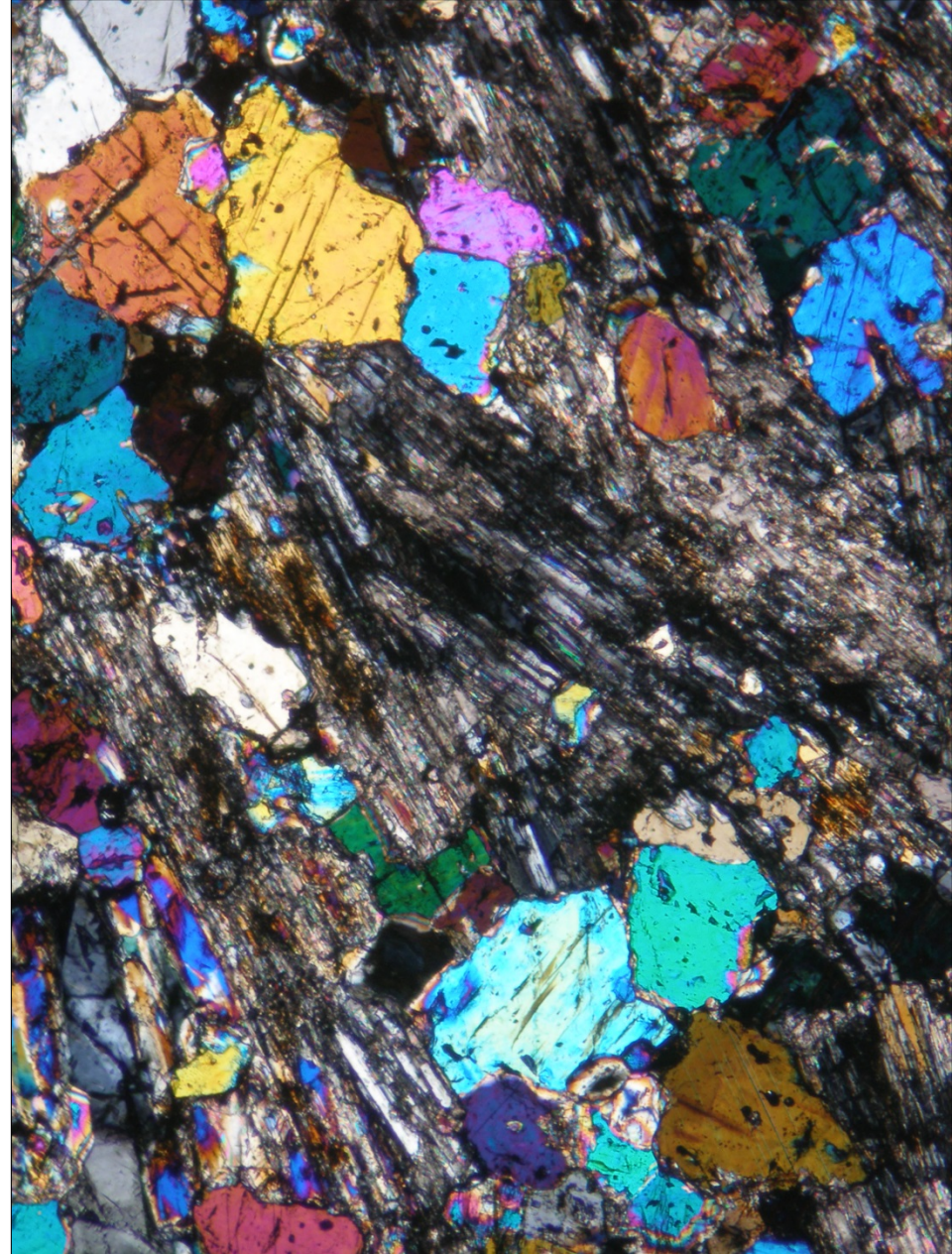
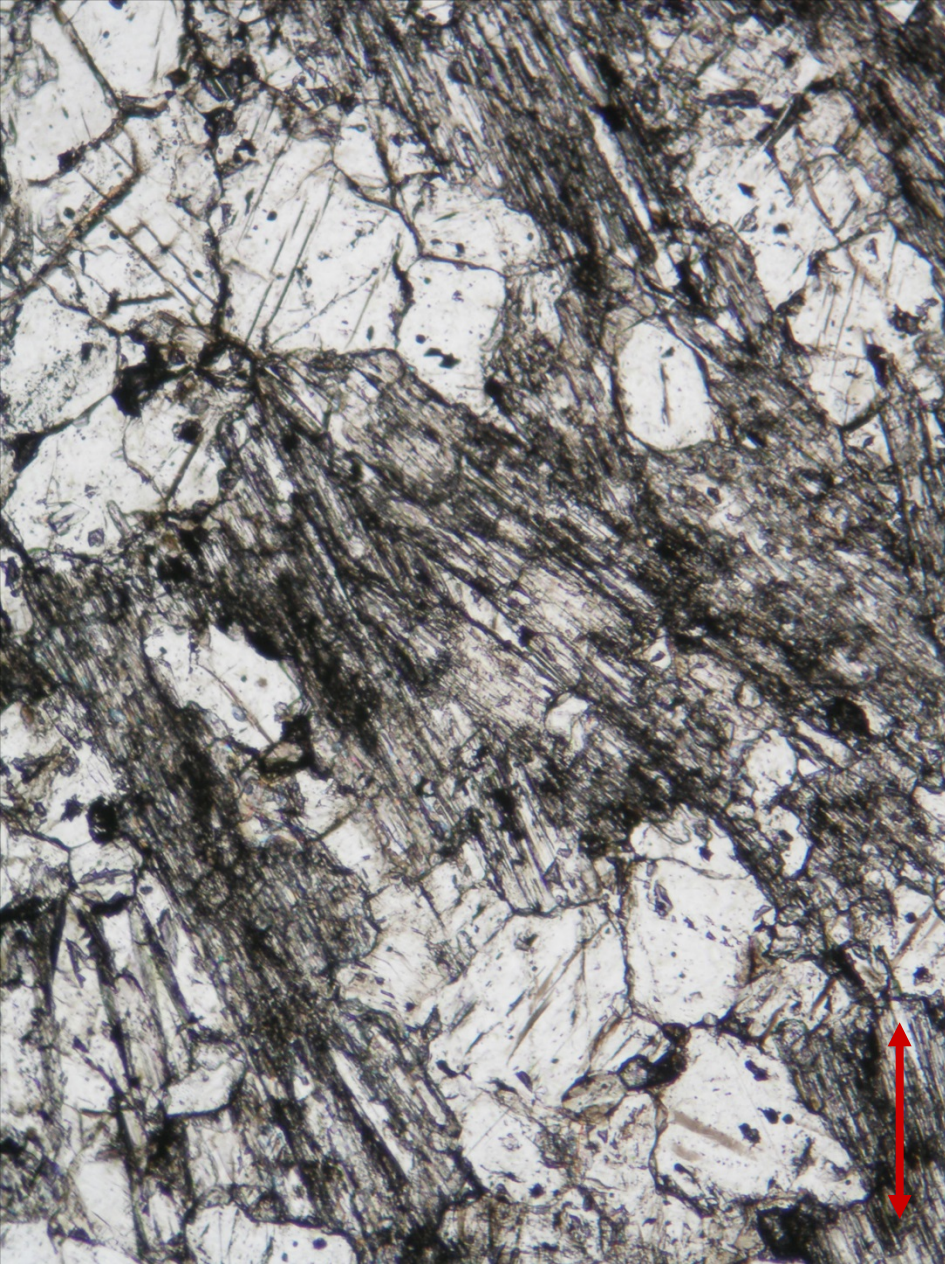
*Sign of elongation:* positive or negative

*Occurrence:* contact metamorphic marbles, calc-silicate hornfelses, and some skarns

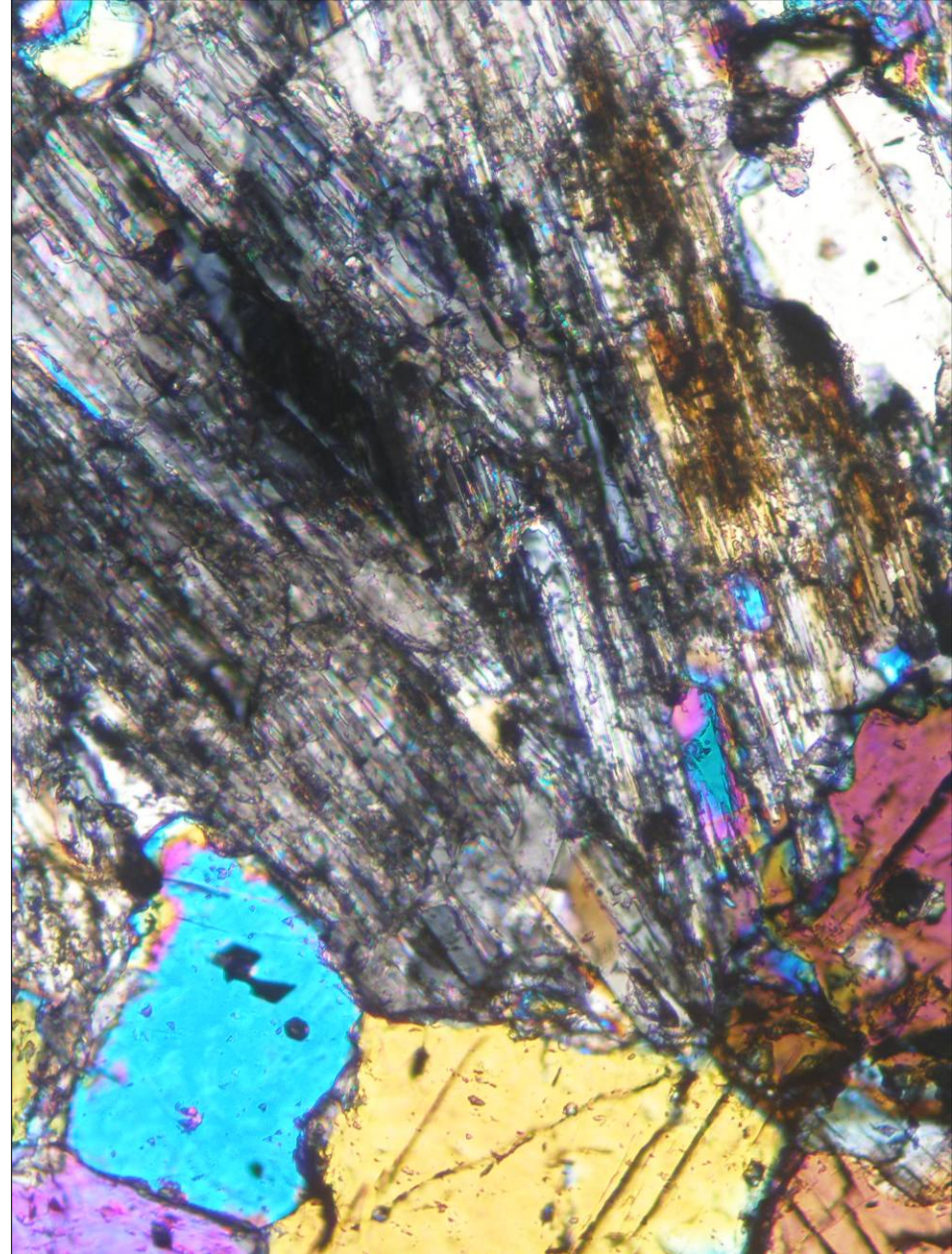
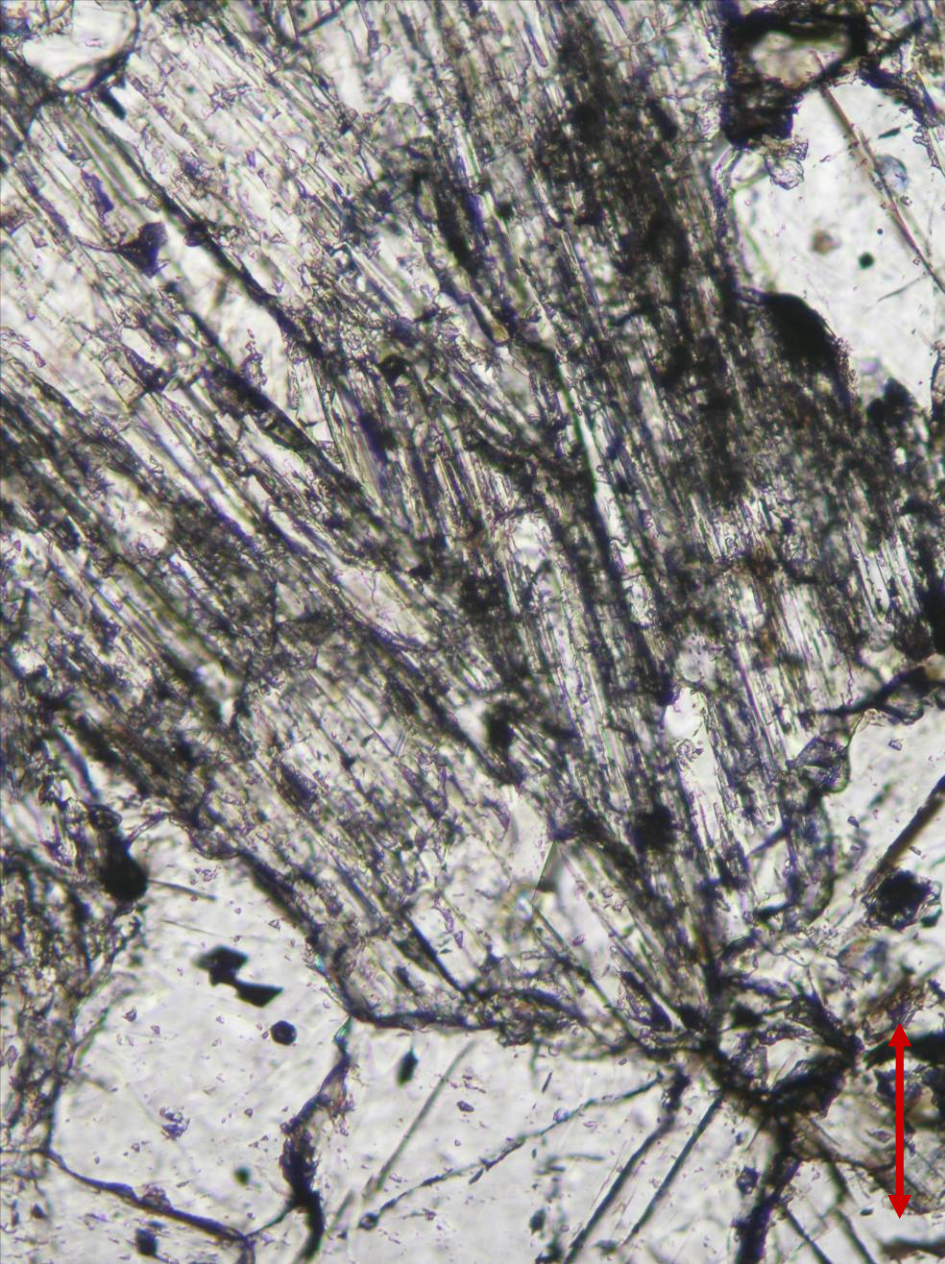
*Similar minerals in thin sections:* tremolite (higher birefringence), diopside (higher indices of refraction, typical pyroxene cleavage)



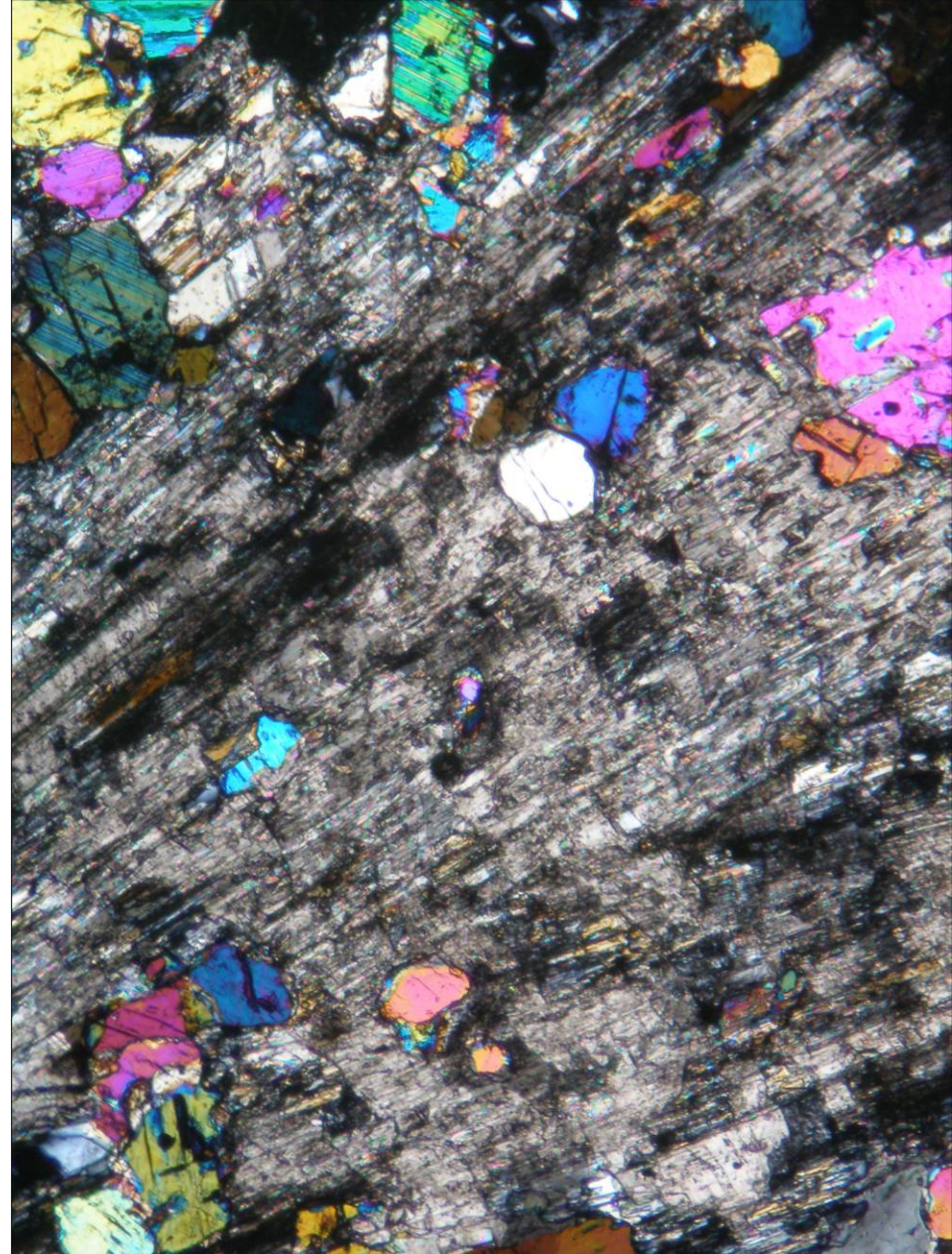
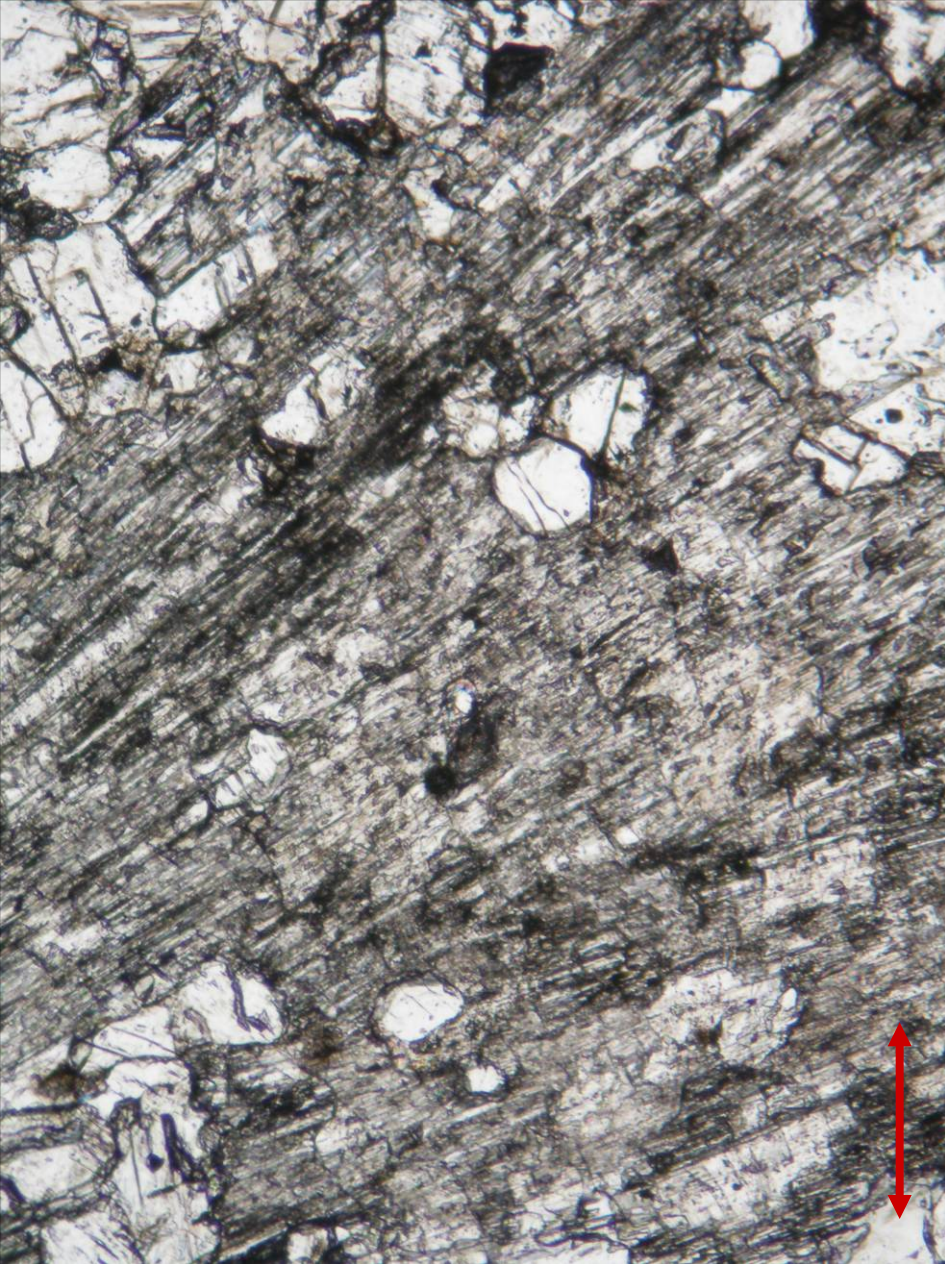
Wollastonite in contact skarn from Žulová, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 2.0 mm. Photo: JiZi.



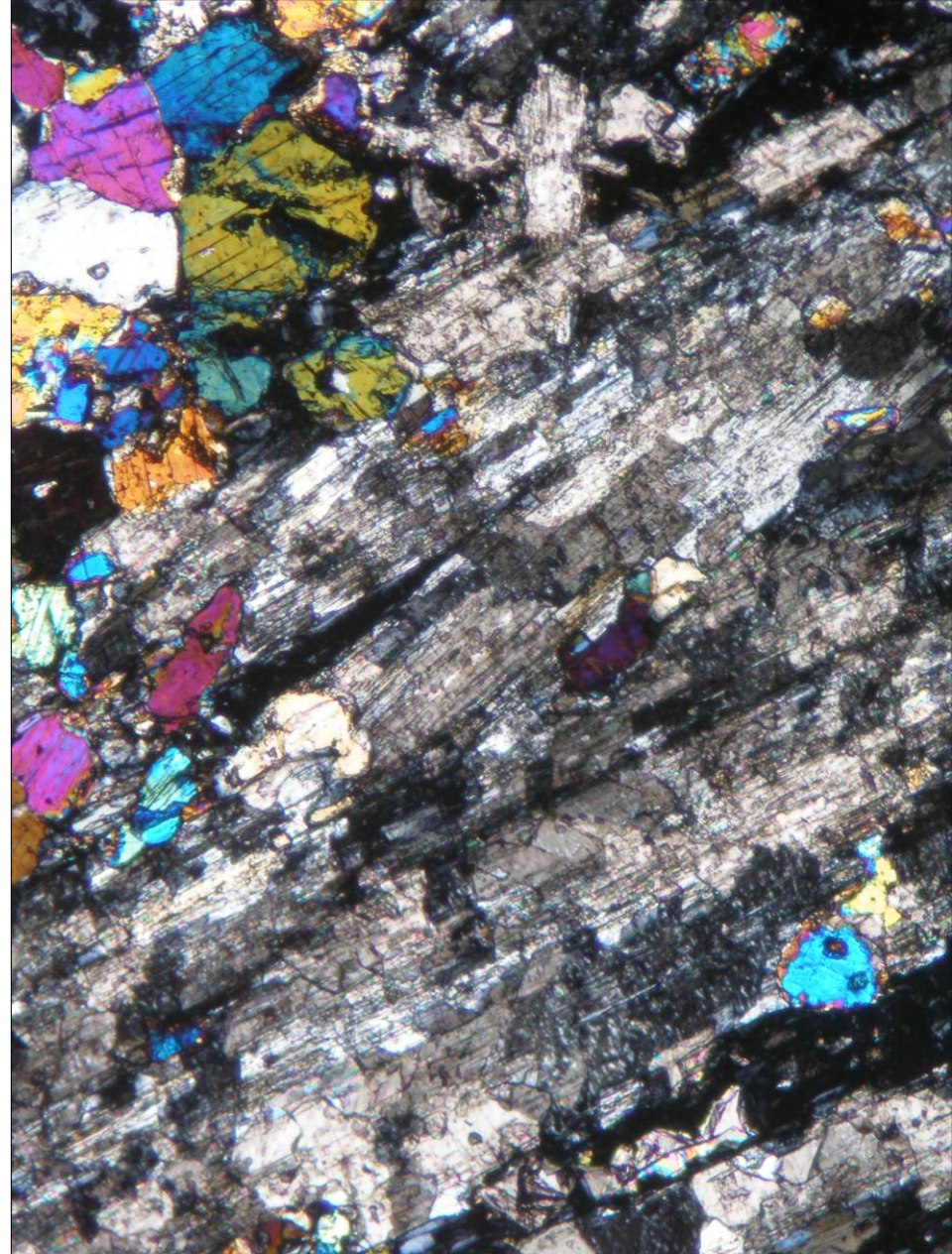
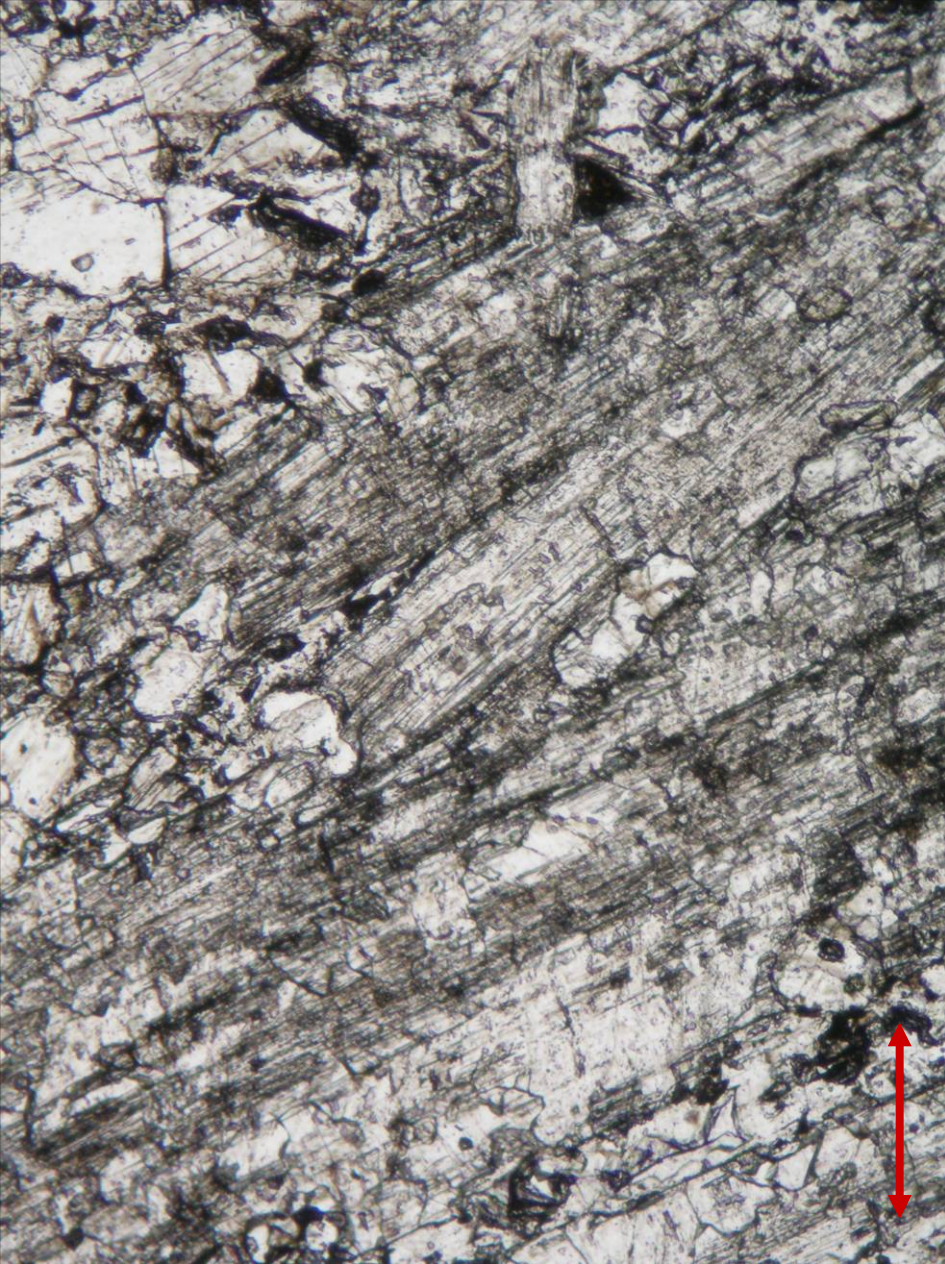
Wollastonite and diopside in contact skarn from Žulová, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 1.7 mm. Photo: JiZi.



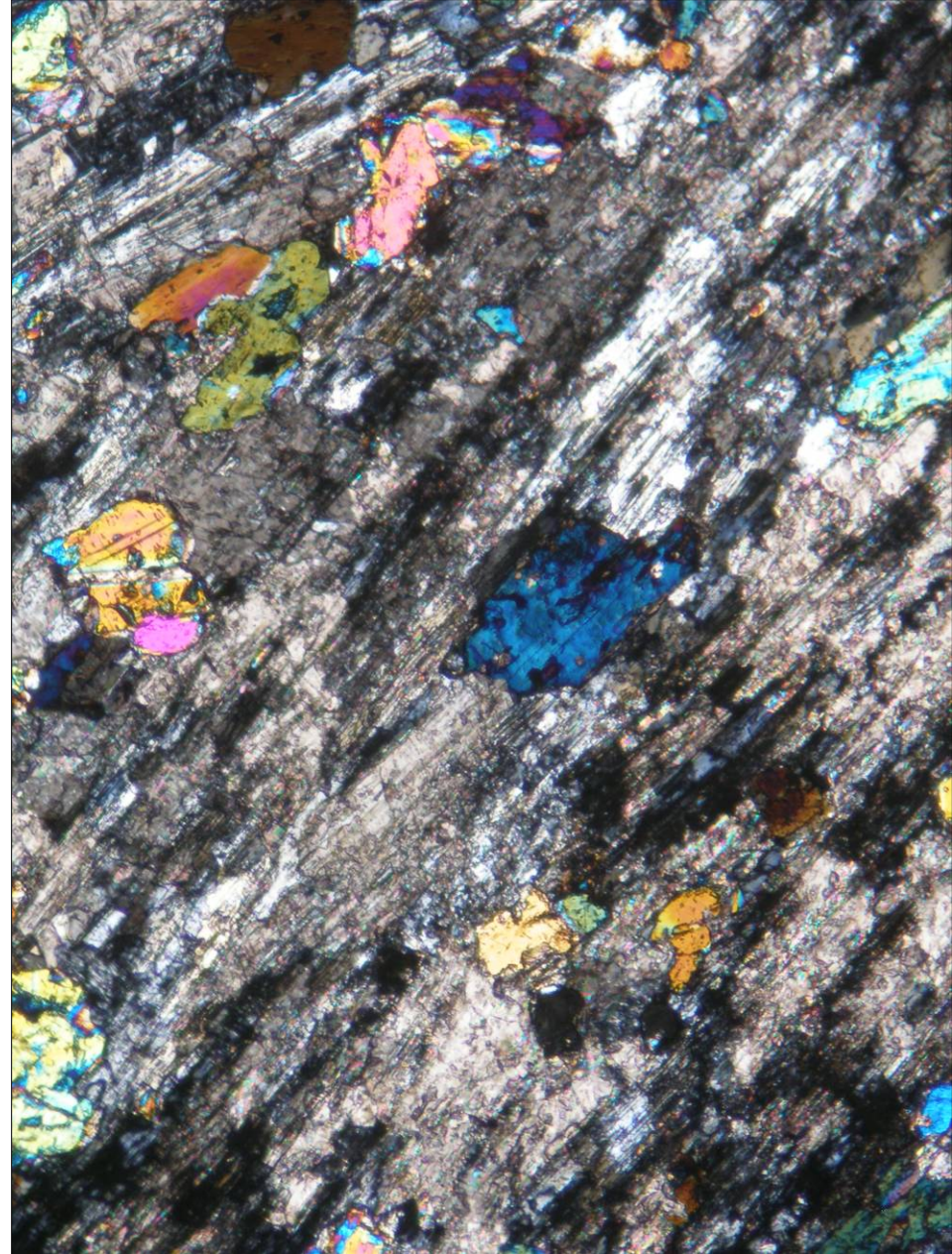
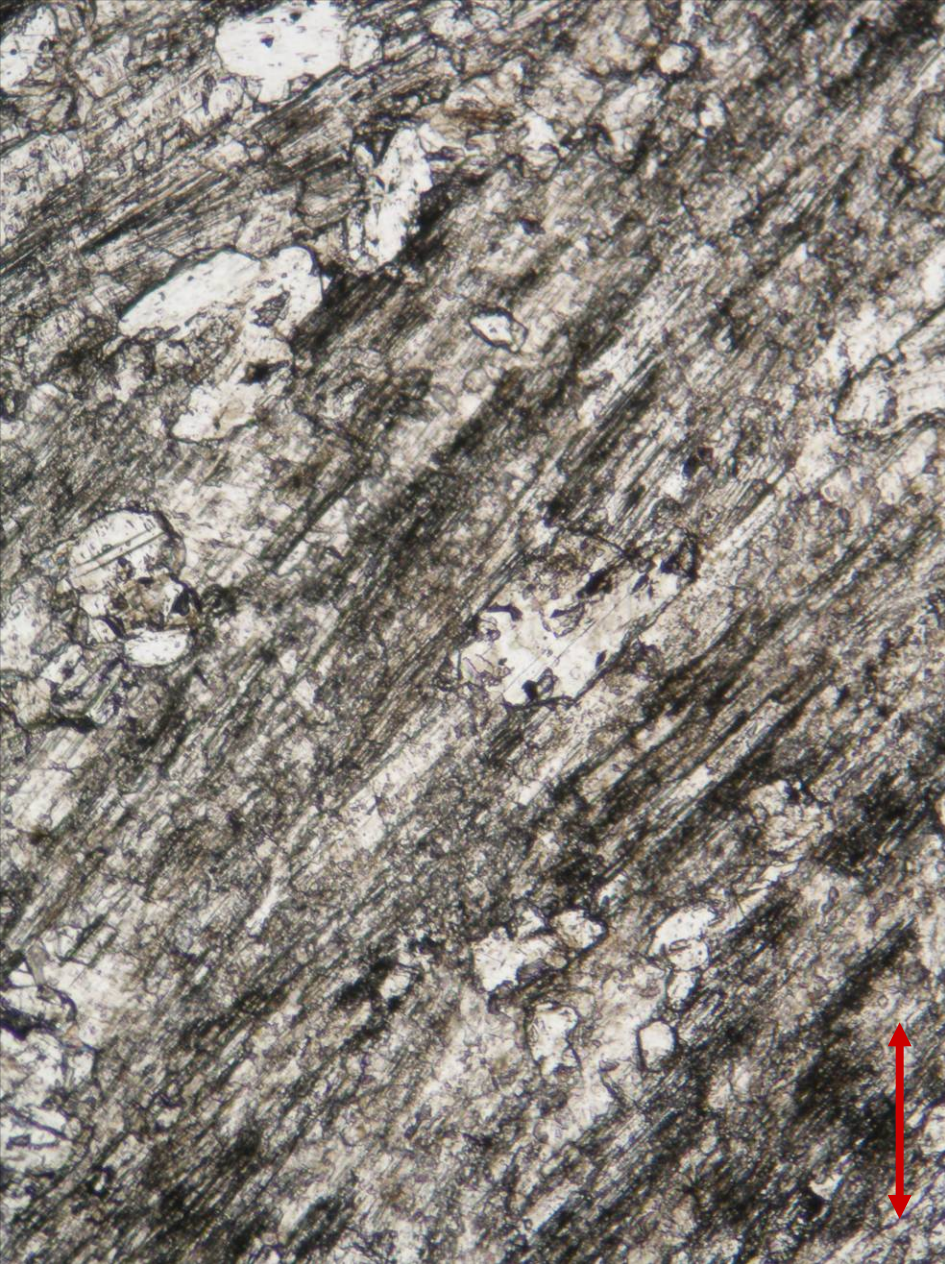
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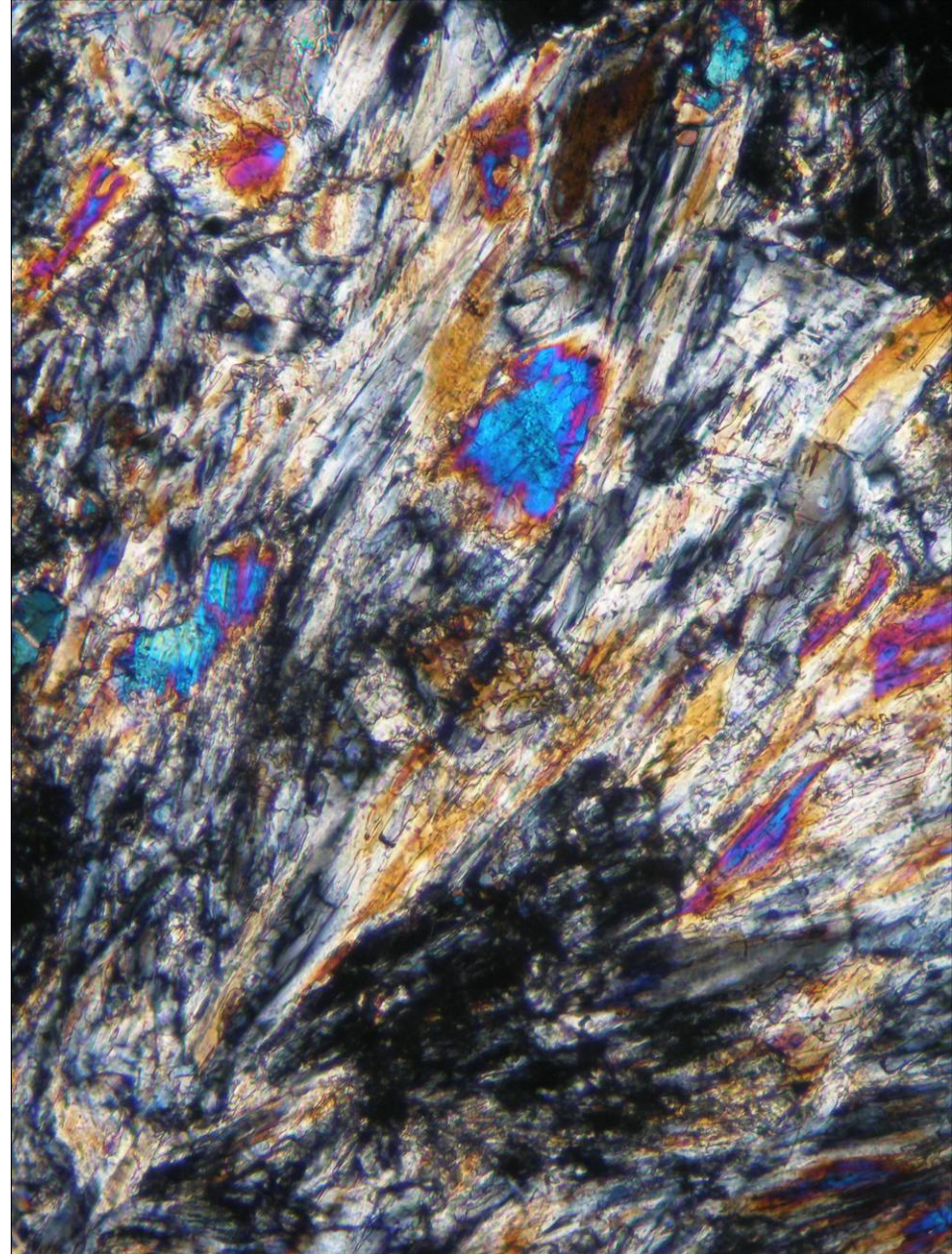
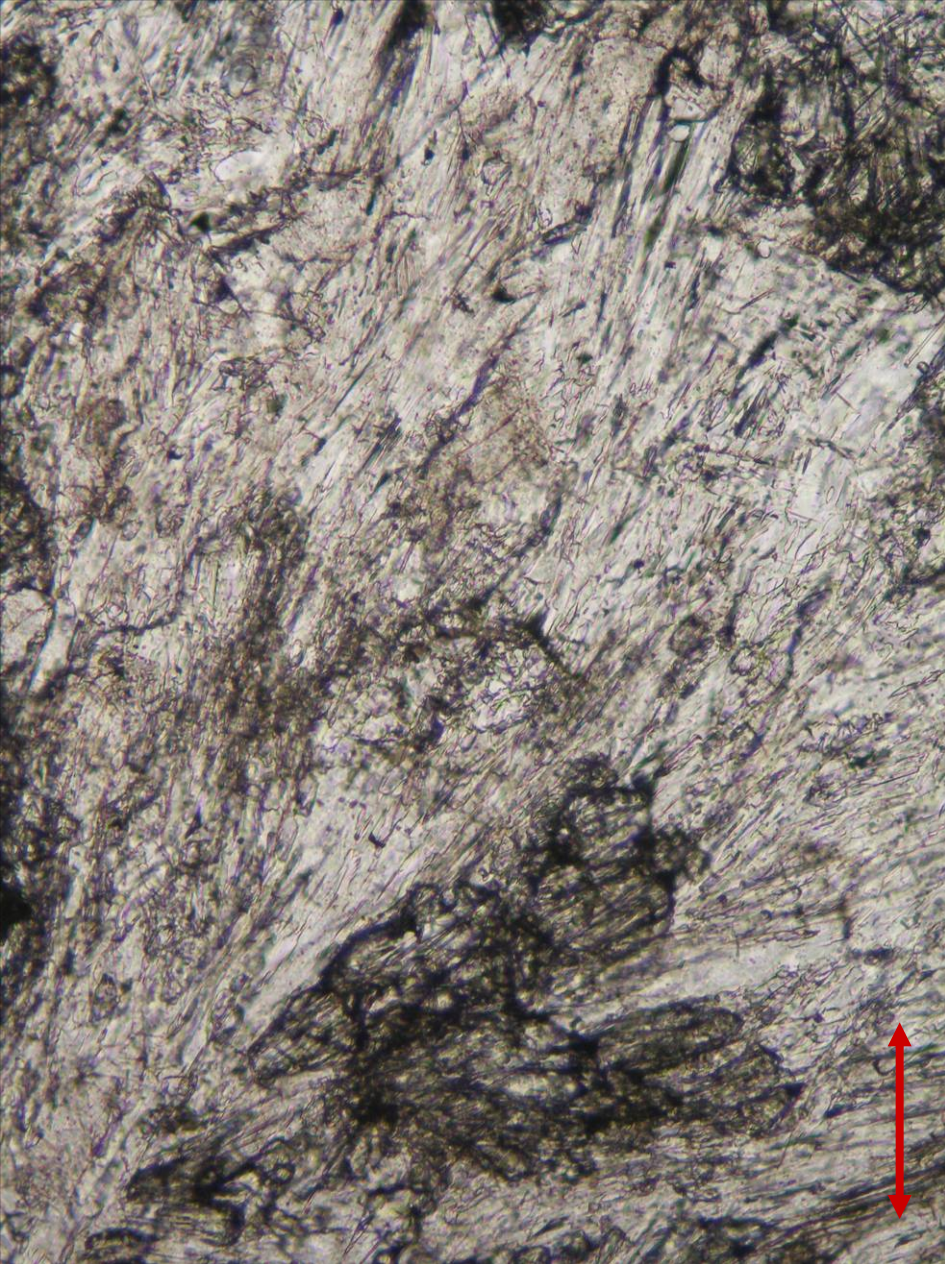
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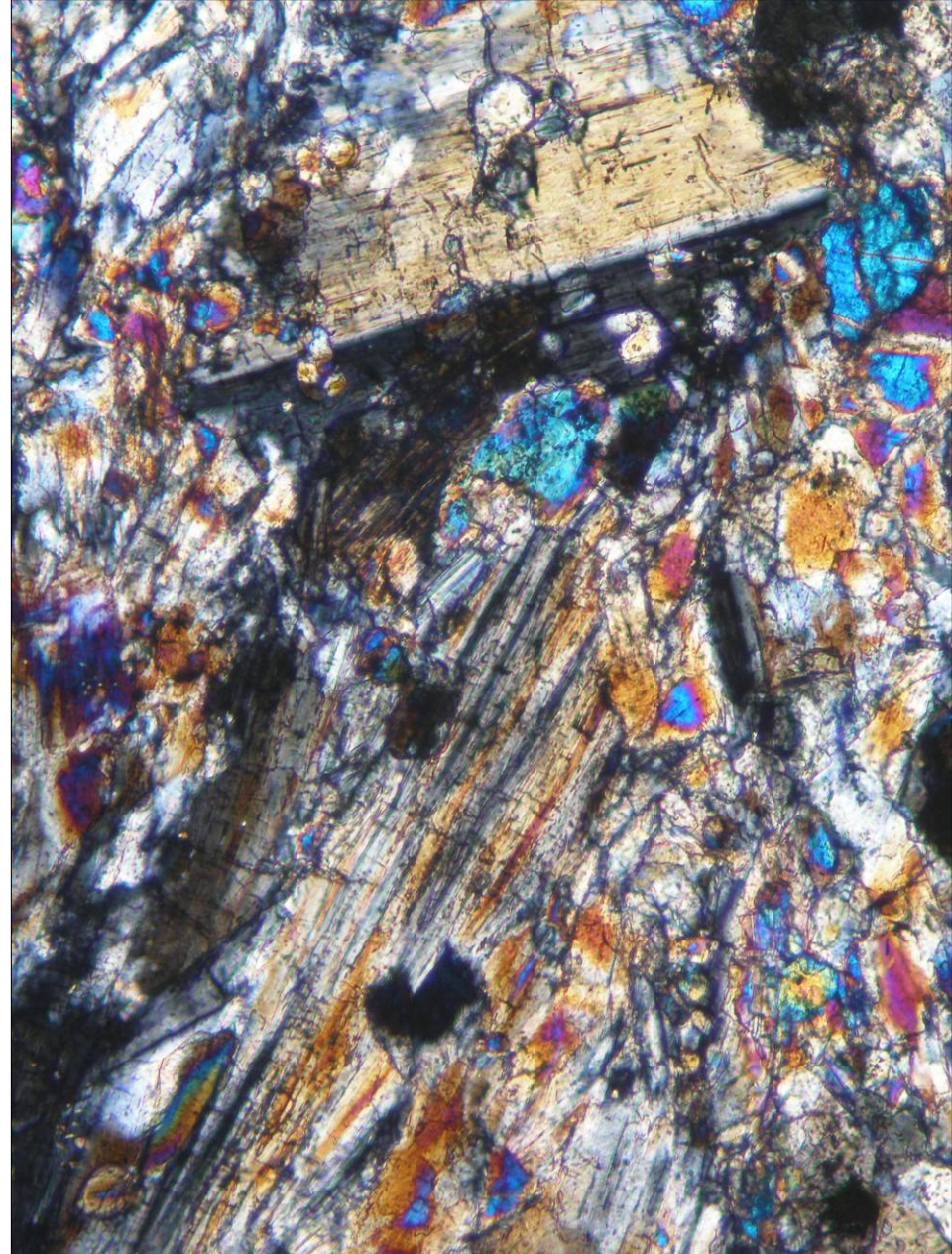
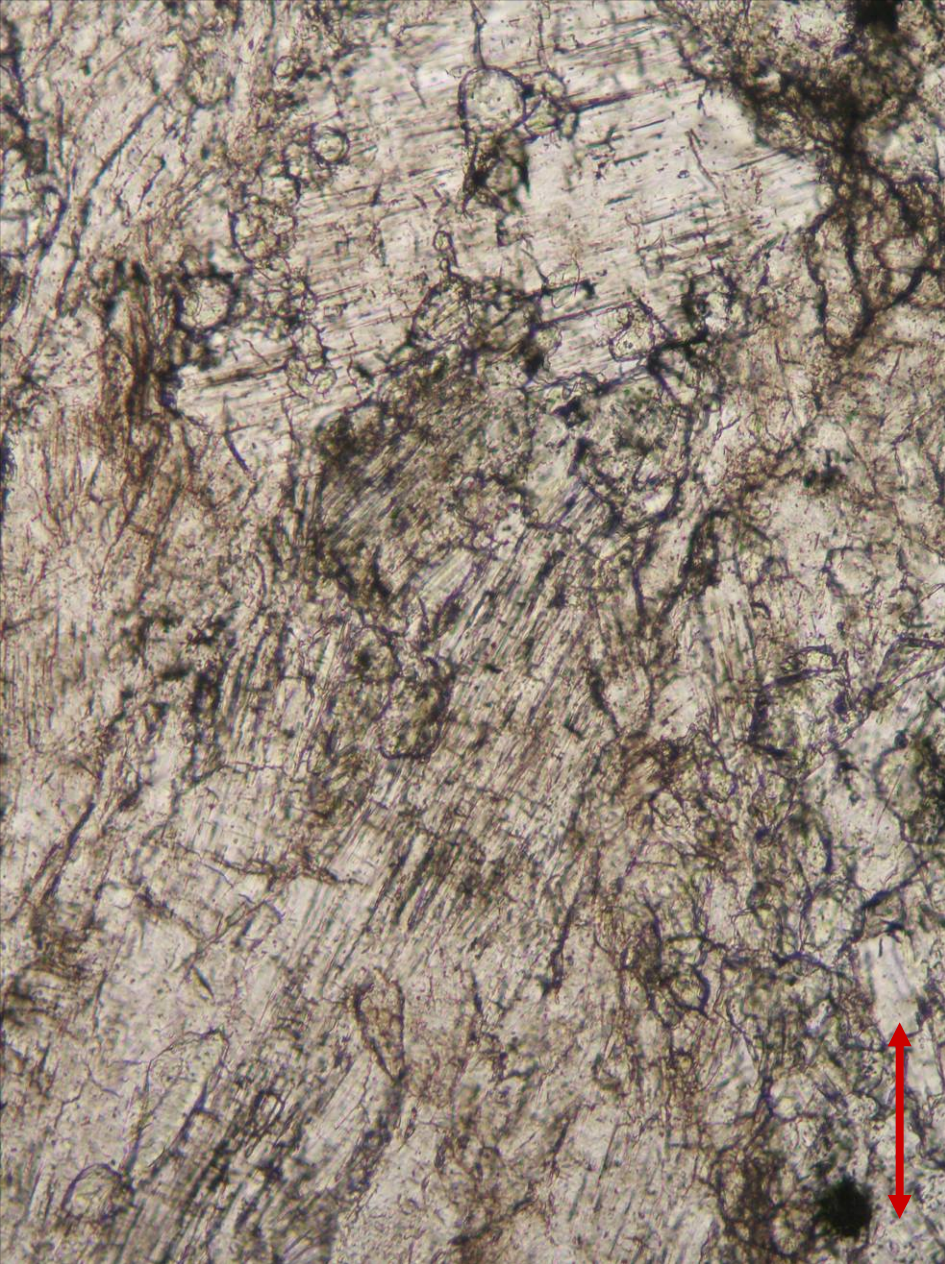


Wollastonite in contact skarn from Žulová, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 1.7 mm. Photo: JiZi.

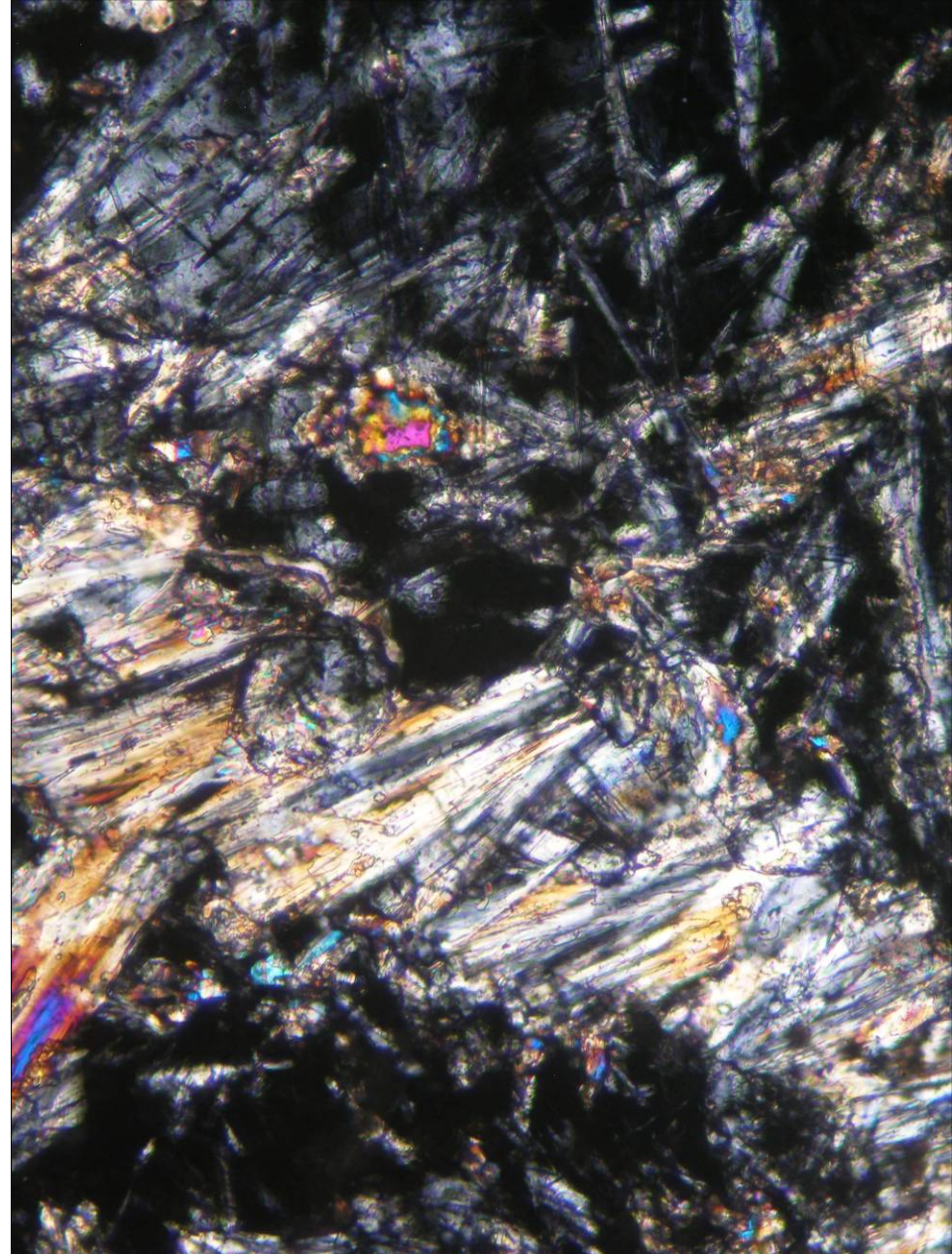
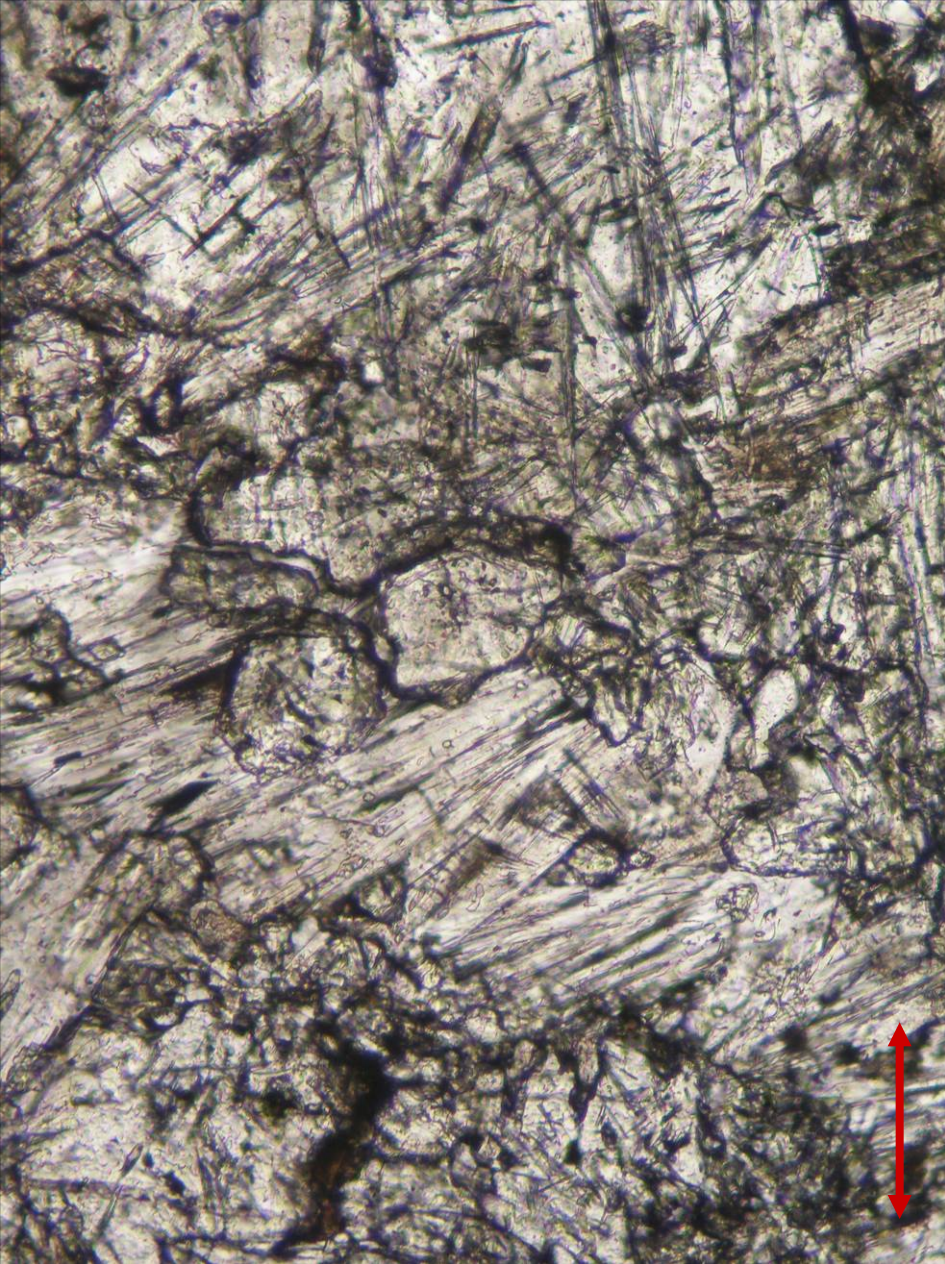


Wollastonite in calc-silicate rock from Bludov, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 0.7 mm. Photo: JiZi.

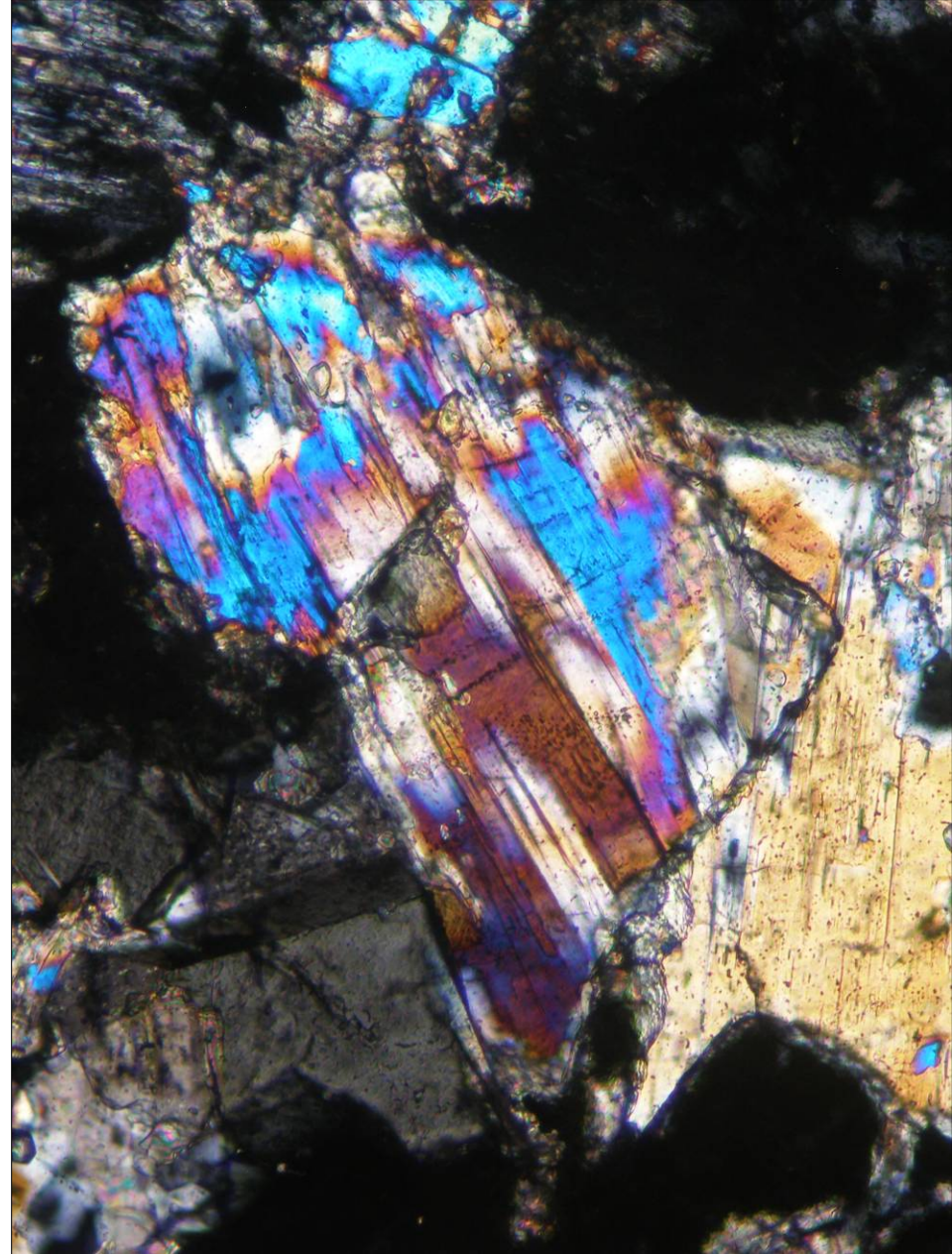
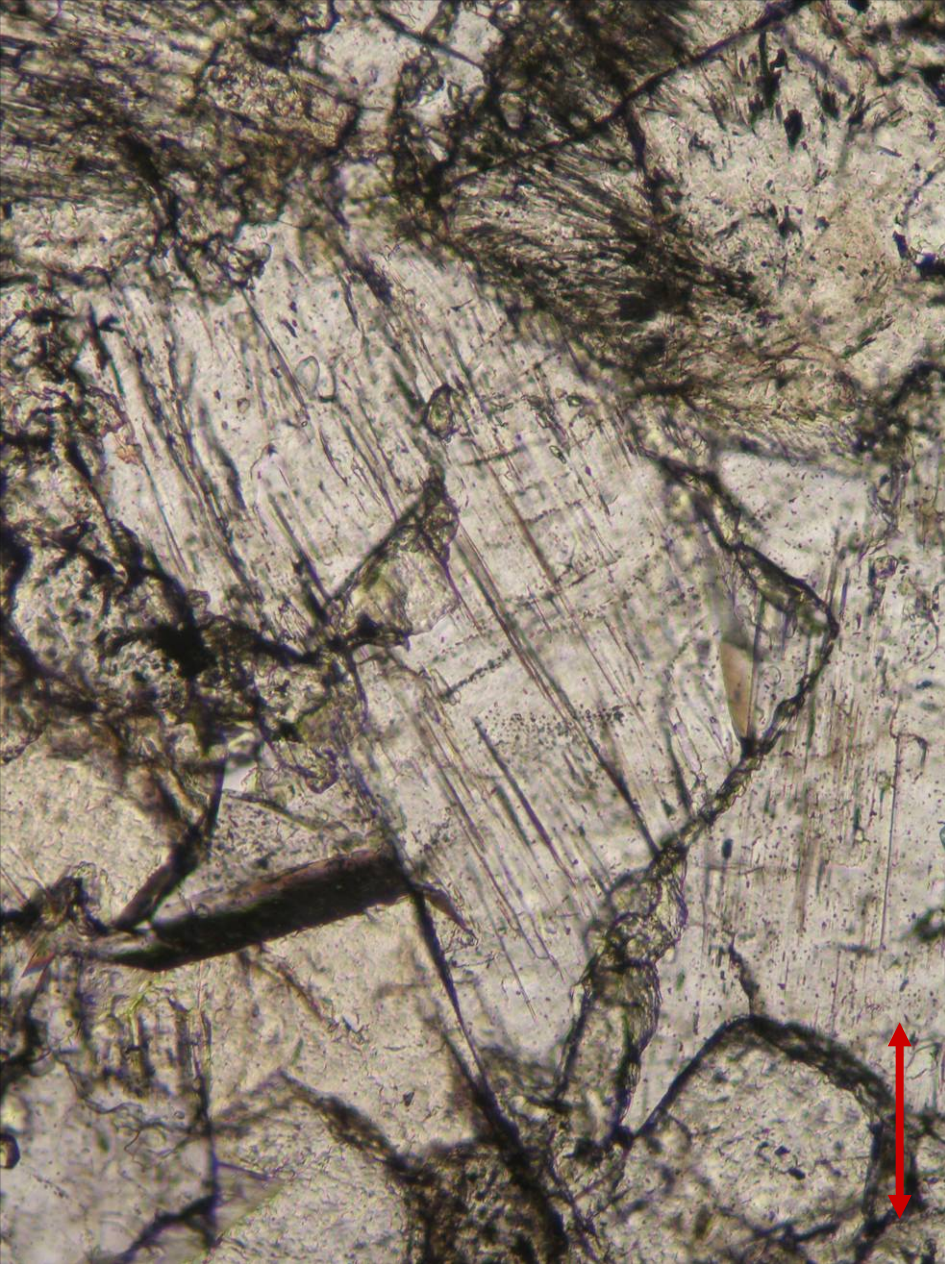




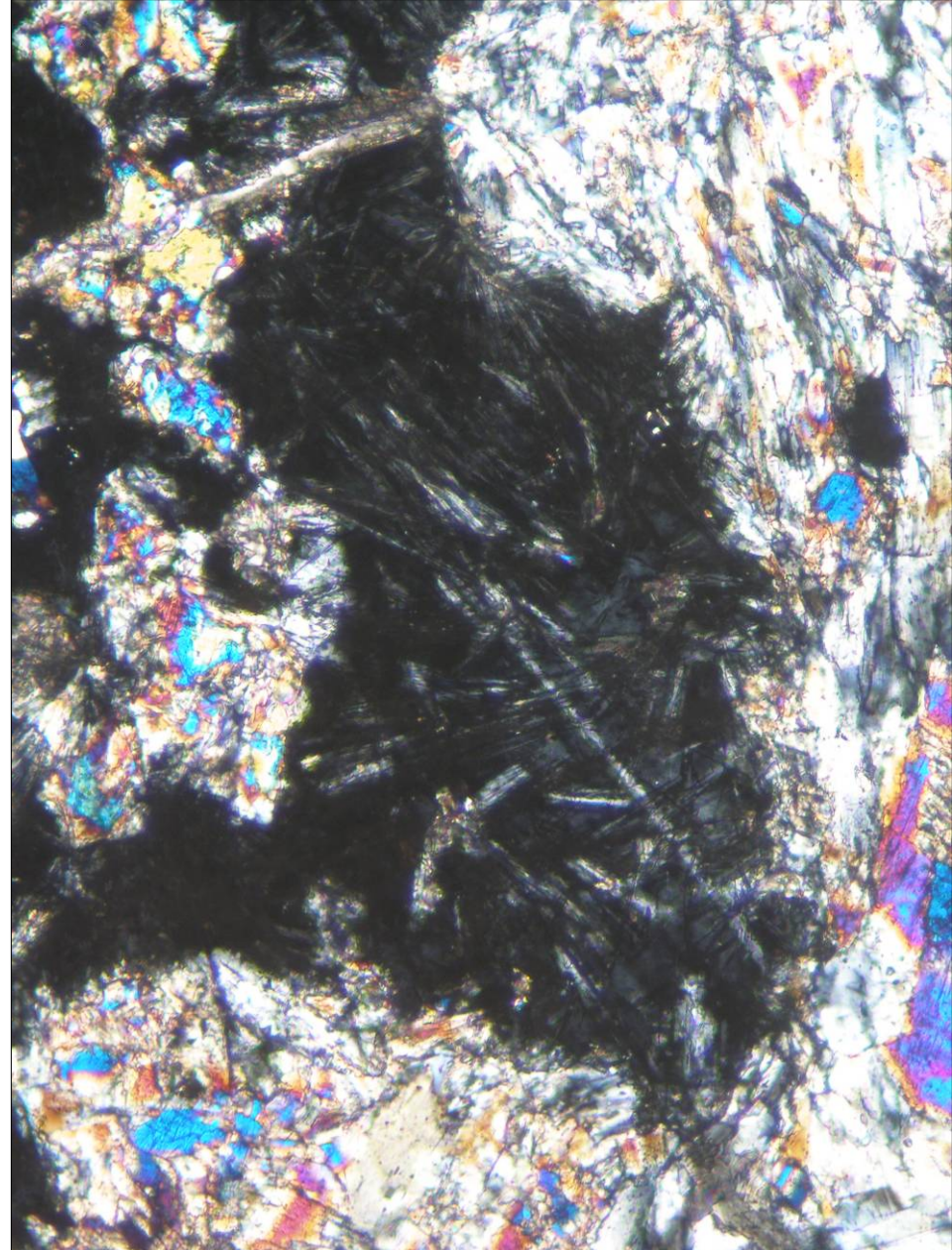
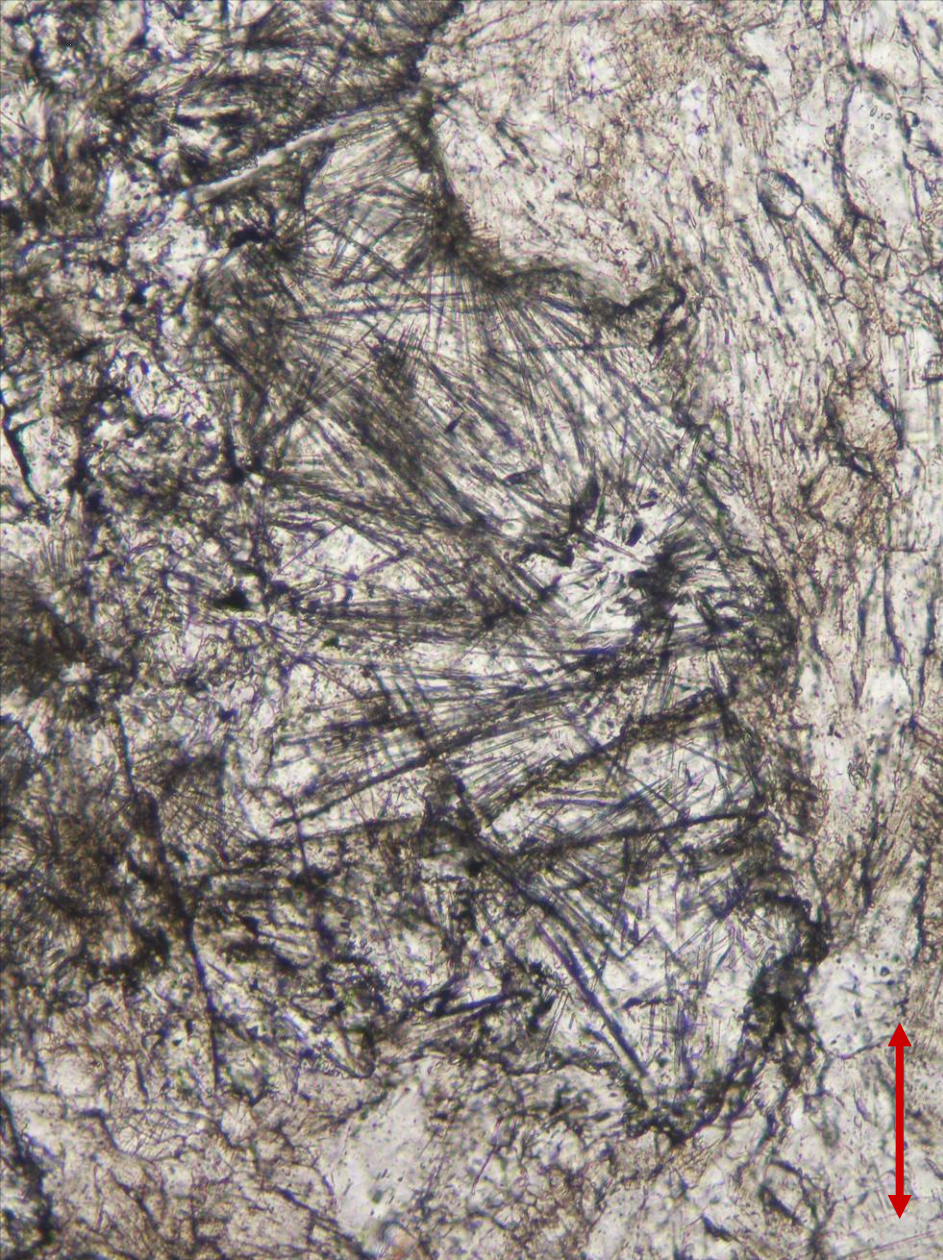
Wollastonite in calc-silicate rock from Bludov, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 0.7 mm. Photo: JiZi.



Wollastonite and garnet (rich in wollastonite needles) in calc-silicate rock from Bludov, the Czech Republic; PPL (left) and XPL (right). Width of fields of view is ca. 0.7 mm. Photo: JiZi.



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