

Foliations and Folds in Shear Zones

Shear zones: tabular zones of high strain. They are extension of faults to deep levels of the crust.

Foliations in shear zones:

S- foliation, C- foliation,

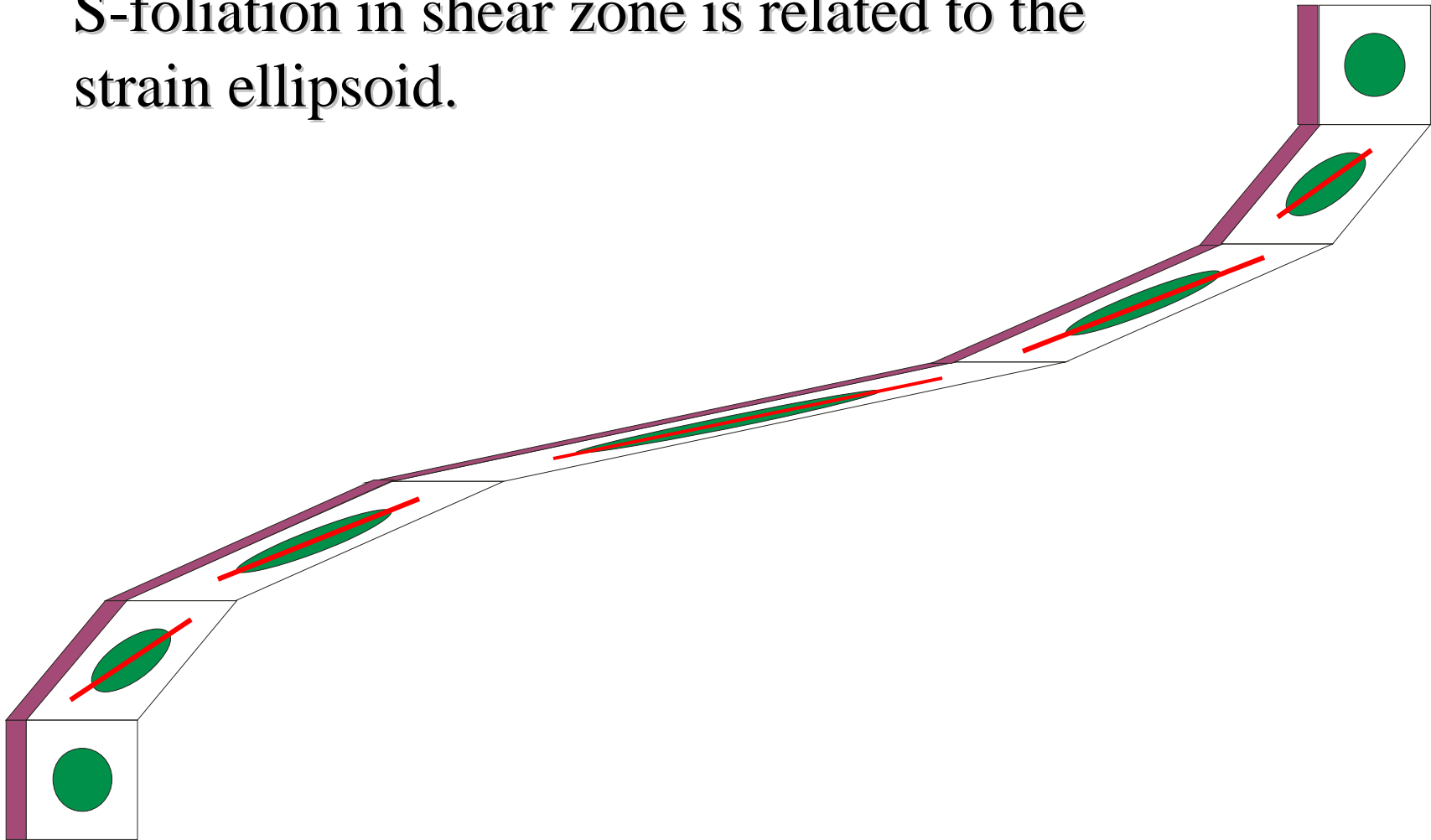
Folds

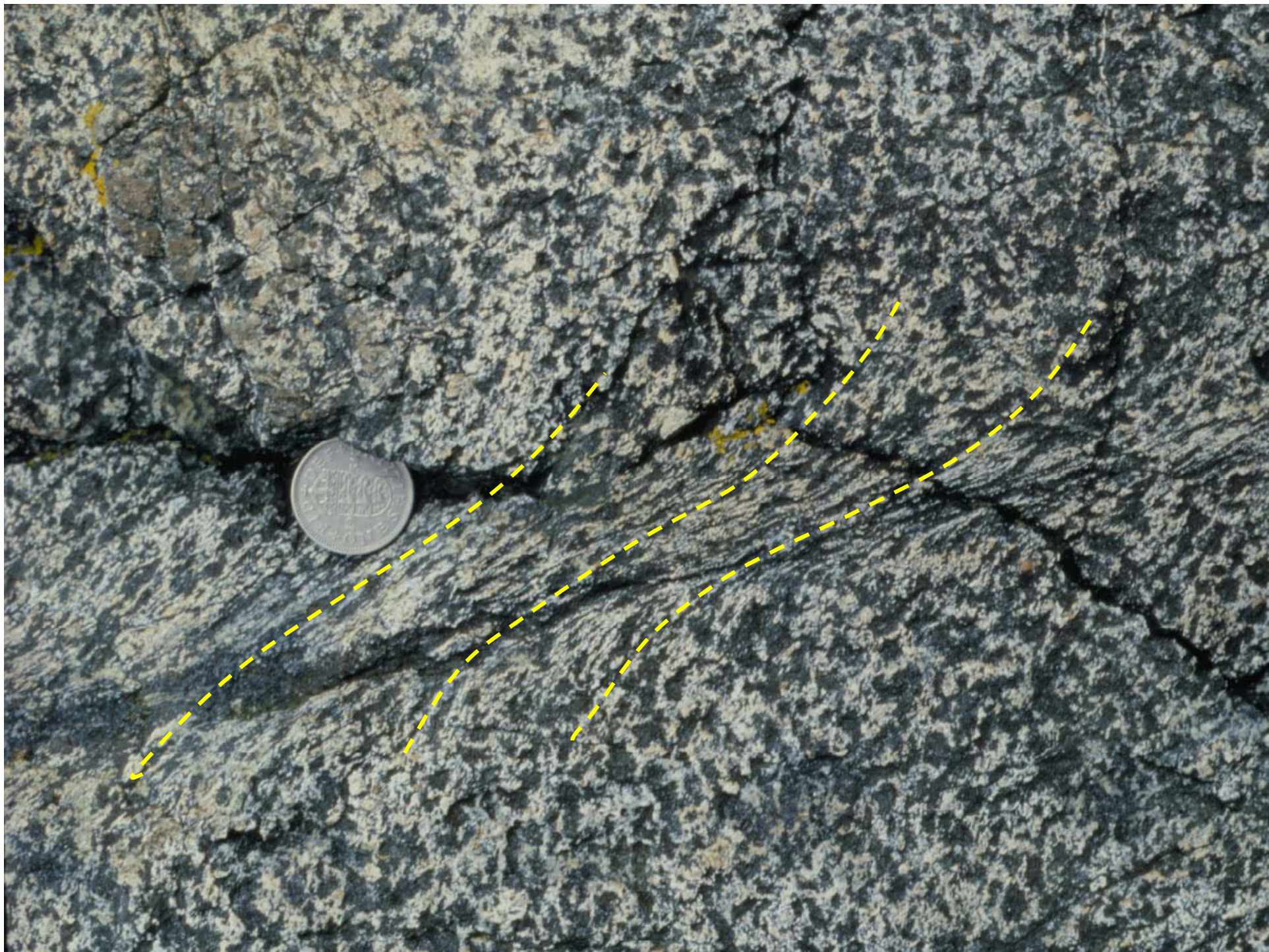
occur on all scales, usually highly non-cylindrical

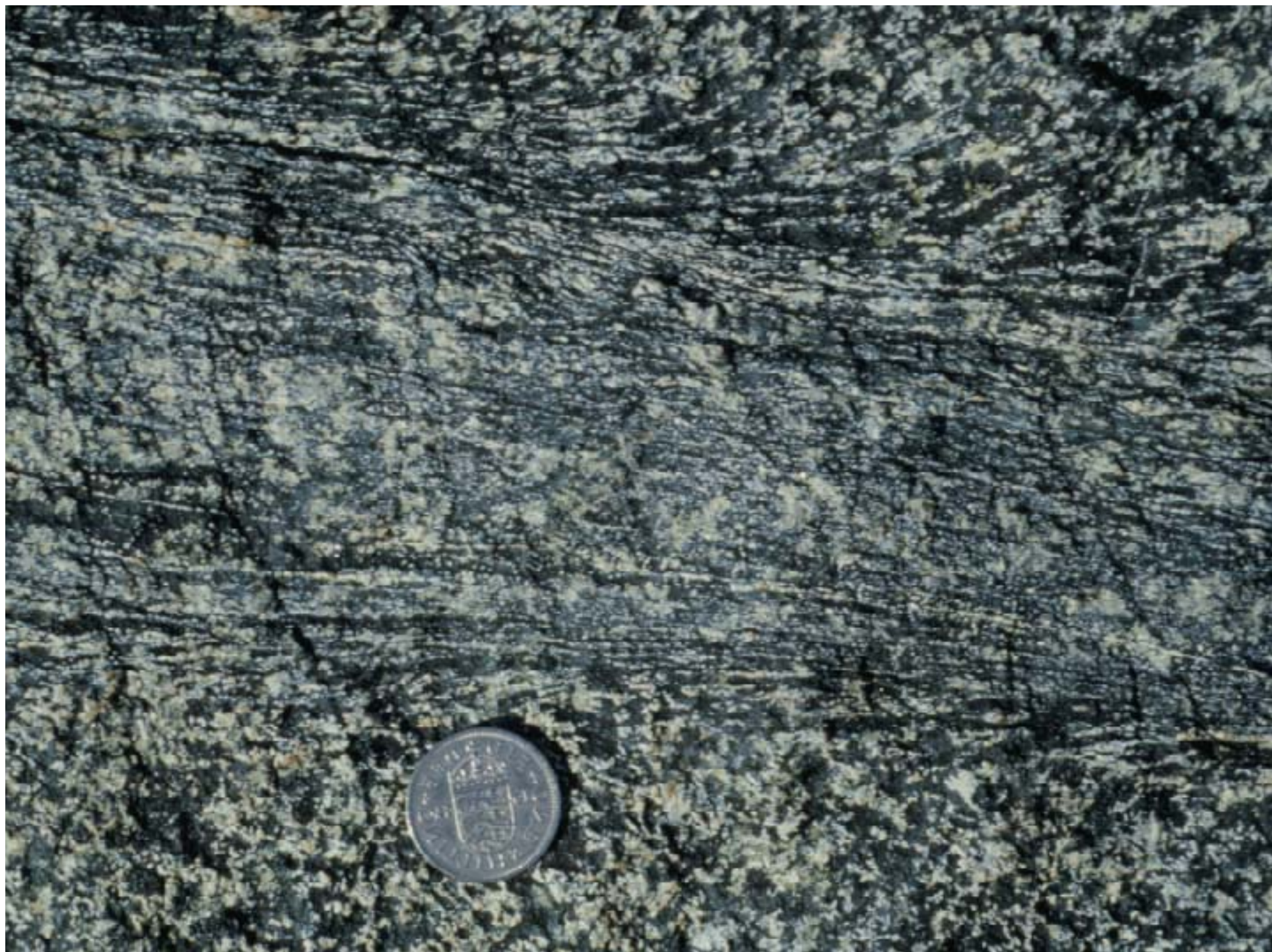
Sheath folds



S-foliation in shear zone is related to the strain ellipsoid.







Foliations in Shear Zones

S-Foliation:

Shape fabric

Orientation close to the XY plane of the strain ellipsoid

Oblique to the shear zone boundary and rotating towards parallelism to the shear zone boundary as strain increases



Foliations in Shear Zones

C-Foliation:

Commonly parallel to the shear zone boundary

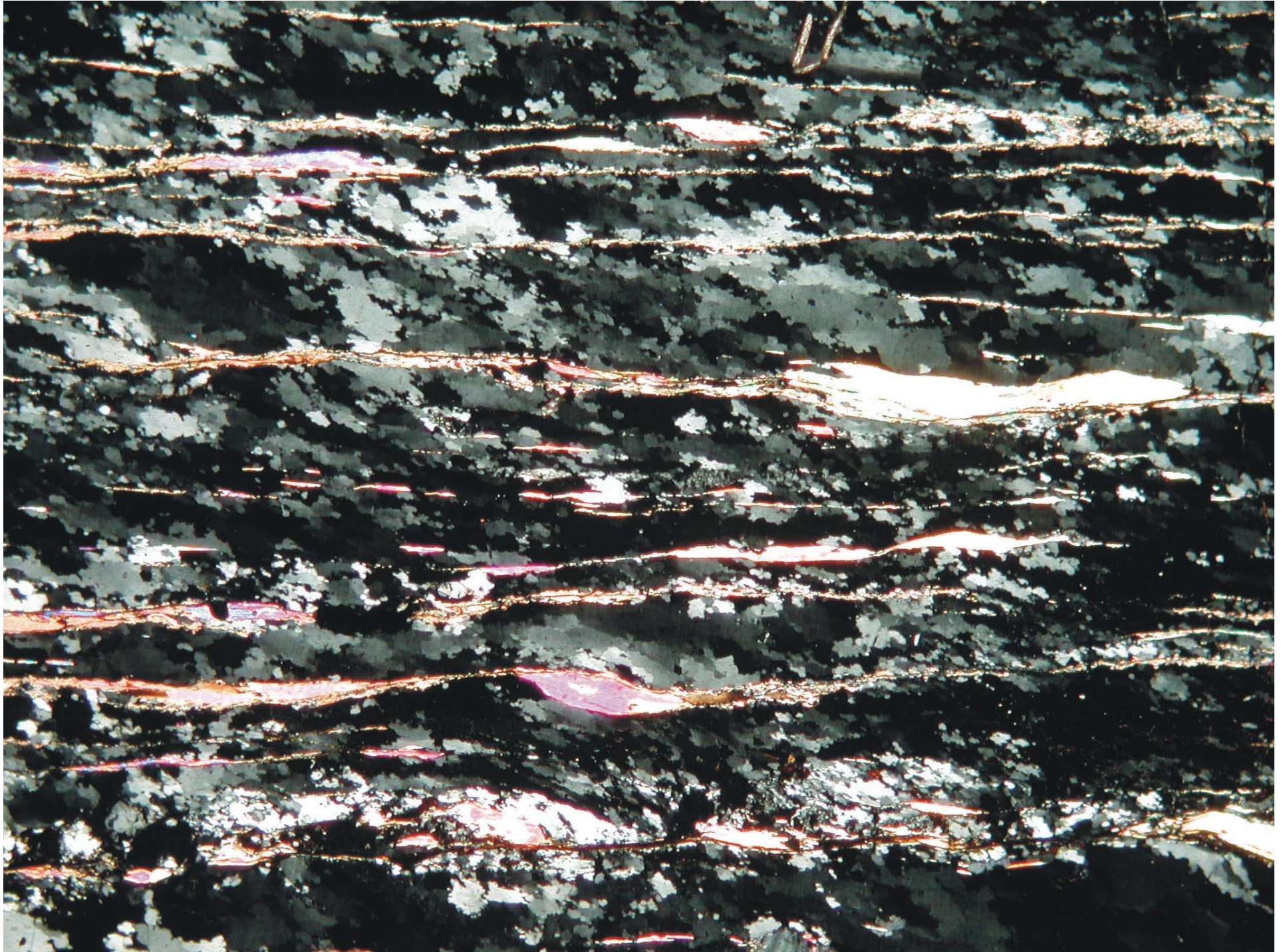
Defined by:

- compositional layering

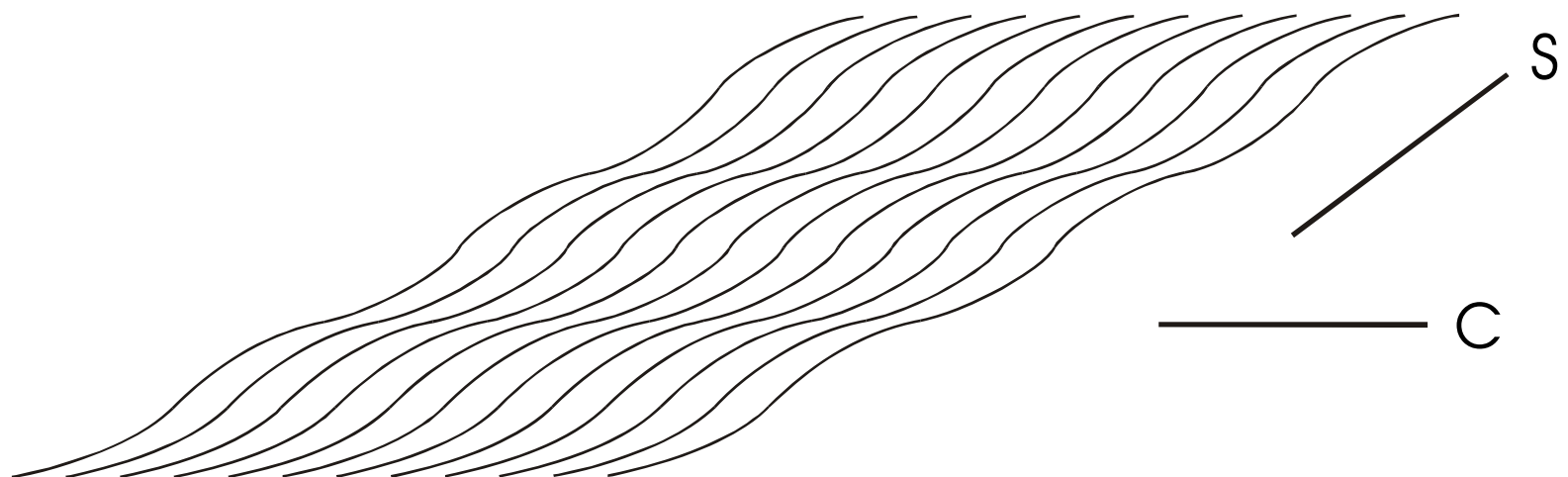
- transposition foliation

- micro-shear zones

- mica fish



S-C mylonite



Sheath folds

- Highly non-cylindrical folds

