Making thin sections

A thin section starts with a geological problem. Here a granite magma body is in contact with its schist wall rock. Both rocks look different from the rocks farther from the contact several meters away. How are they different texturally and mineralogically? What processes went on here that caused the differences?

The chip is ground flat on one side and glued with epoxy to a glass slide.

Most of the excess rock is cut off.

A glass coverslip is glued on.

The remaining rock is ground to 30 μm thickness.

The minerals and textures seen through the microscope can be compared with surrounding rocks, to understand how the granite magma and schist host rocks were affected by one another.

A sample is carefully selected and collected and brought back to the lab.

The rock is marked and cut to give the best information.

Two cuts make a slab about 1 cm thick.

A chip is cut from the slab.