

Five-day short course, September 11th to 15th, 2017

Introduction to physical volcanology and volcanic textures

by Prof. Dr. Christoph
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[Registration deadline: May
31st, 2017](#)



Background and intention of the Short course

Based on experience in the investigation of fossil and (sub-)recent volcanic and volcanoclastic successions this short course puts emphasis on the recognition of volcanic textures in outcrop and thin section, and on the possibilities and limits of their genetic interpretation. The course neglects other important aspects of volcanology such as magmatic petrology, geochemistry, isotope geochemistry, geotectonic setting, and volcanic hazards.

Structure of the Short course

The CVT collection forms the working material for the Short course, in which rock slabs and thin sections will be examined with modern microscopes. Short course participants are invited to bring along thin sections and rock slabs of their own projects for discussion. A basic knowledge in mineral optics as well as fundamentals of petrography and sedimentology are a recommended prerequisite to follow the course. The course will be held in English. After introductory lectures, hand specimens and thin sections of silica-poor to silica-rich volcanic rocks will be examined that formed as pyroclastic and hydroclastic deposits, and as lava(-domes) and subvolcanic intrusions. Emphasis is on the subsequent discussion on textures, the salient descriptive features and several processes (magma and mineral composition, eruptive processes, fragmentation processes, transport and depositional processes and alteration). The course begins with simple systems and ends with more complex strongly altered volcanic rocks from various periods. The short course includes a one-day field trip to Late Paleozoic volcanic outcrops in the vicinity of Freiberg.