

observed high content (23,5%) of graphite. The paragneisses are believed to have been formed from sediments of varying composition; from Al-rich pelitic materials (giving rise to garnet biotite sillimanite gneiss) to impure arenaceous sediments such as arkoses, feldspathic or argillaceous sandstones, and even of conglomeratic sandstones (the metamorphic products being the observed biotitic, sillimanitic, and garnetiferous quartz-feldspar paragneisses). The rocks in the Arzberg area are on the whole considered to be high grade regional metamorphics of the amphibolite facies. Their general structure is one of a typical S-tectonite.

The productive mining of limonitic Fe-ore which was worked, on and off, since 1600, came to an end in 1925. The deposit is now regarded as completely exhausted.

Geological Investigations for Petrographic Purposes

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Being one of the Candidates of the Unesco-Geology-Course for Post Graduate Training, which has been carried out under the direct supervision of the Geological survey of Austria — Vienna —, has enabled me to work in an area 400 meters NW of Dürnstein. The rock types which prevail in the area are: Gföhler gneiss, hornblende gneiss, amphibolite, and paragneiss. Then thin sections were made for further petrographic investigations. The main results which came out, after applying this petrographic technique are:

1. Gföhler gneiss has plagioclases 25% to 28% An content, so it falls in the oligoclase domain.
2. Amphibolite has plagioclases of 50% to 60% An content, so it falls in the labradorite domain.
3. Paragneiss has plagioclases of 25% to 35% An content, so it varies in composition from oligoclase to andesine.

Geology of Schlossberg Area, Spitz, Austria

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Petrographic descriptions and field observations for hard rocks covering an area of about 4 sq km within the Bohemian Massif in Spitz village, are represented in the present work. The different rock groups outcropping in the area include Spitz gneiss, paragneisses, marbles, calcsilicate gneisses, amphibolites, aplitic gneisses and pegmatites.

The preservation of basic plagioclase (labradorite) phenocrysts in the spotted amphibolites reflect their igneous origin. Trace element studies are preferable for confirming this fact and are essential for throwing some light on the origin of the non-spotted varieties of amphibolites. The occurrence of boudinages of amphibolites and aplitic gneisses in a cataclastic to mylonitic marhle country rock indicate the strong tectonism that affected the rocks of the area in general. The mylonitic nature of the pegmatites, on the other hand, could be explained either due to such tectonism or could have resulted during the intrusion of the pegmatite magma. The amphibolites and the aplitic gneisses are believed to have been intruded originally as doleritic, and aplitic (microgranitic) sills respectively, as they usually occur as boudinages lying parallel to the S-planes of the older rocks of the area. Intercalation of calcsilicate gneiss with paragneiss and marhle is significant in throwing some light on the conditions of sedimentation of the original sediments.