**Pegmatites of the Góry Sowie Block (GSB)** are an unique and very rare in nature rocks that are objects of mineralogical and petrological investigations. Their strong geochemical fractionation makes them carriers of rare elements such as Li, Be, B, Nb, Ta, Cs or rare earth elements (REE). This chemical diversity affects not only in their mineralogical uniqueness but also in their usefulness as a source of critical elements extremely desirable in the industry. The formation of pegmatites of Góry Sowie Block is directly connected with metamorphism in amphibolite facies and related to exhumation and decompression processes. These processes have lead to partial melting of metamorphic rocks and to formation of chemically highly-differentiated granitic pegmatites. In this project authors decide to characterize pegmatites occurring in three locations of Góry Sowie Block: (1) Michałkowa; (2) Lutomia and (3) Piława Górna. The project is based on analysis of the phase and chemical variability of accessory phosphate minerals occurring in different pegmatite bodies. Among commonly occurring in pegmatites phosphate minerals appear calcium apatite, monazite and xenotime which are carriers of rare earth elements. These minerals are not always the only phosphates useful in determining the geological history of metamorphic complexes. More typically, much greater significance have iron- and manganese-bearing phosphates which are often enriched in light elements such as Li, Ca, Mg, Zn, Na or K. These iron-manganese phosphate, due to their variable fractionation in systems Fe-Mn or Fe-Mn-Mg are treated as geochemical indicators of the overall fractionation of primary melt from which the pegmatite was formed. Due to this fact, these minerals are used to modeling physicochemical conditions prevailing in specific stages of pegmatite-forming processes. As it turns out, the chemical and phase variability of accessory phosphate minerals has its reflectance in the rock-forming conditions at an early magmatic stage as well as in later stages - hydrothermal and pneumatolytic. As the main objective authors of the project choose to compare the above chemical and phase variability of phosphates from different locations in the Góry Sowie Block and connect it to the changes in the metamorphism conditions. An important assumption is that the chemical and phase characteristics has reflectance in local metamorphism conditions of GSB unit. Additionally, taking into account the uniqueness of the material, authors expect to discover new mineral phases. As a further aspect of the investigation is the high temperature differentiation of the rare earth elements between phosphate and aluminosilicate parts of high temperature anatectic melt, from which the pegmatites were formed. The Differentiation is visible directly in the variability of chemical compositions of monazites forming crystals in both associations - silicate-bearing (such as mica or feldspar) and within a matrix built of iron - manganese phosphates. As these two parts of melt separate at high temperatures in magmatic conditions, very likely is the fact that the rare earth elements are divided between high-temperature aluminosilicate and phosphate melts. Research on high-temperature "preferences" of rare earth elements have a significant impact not only on the understanding of the behavior of this group of elements in anatectic melts but also can strongly affect the current knowledge in ore-forming processes or processes related to metallurgy. All the results obtained in the project are to affect also the understanding of the phosphorus role in high-temperature processes and its geochemical preferences.