SCHOLARSHIP REPORT

Name: **Tadeáš Hájek**

Home institution: **Charles University**

Host institution: **Paris Lodron University of Salzburg**

Host institute/department: **Chemistry and Physics of Materials**

Period of stay: **summer term 2019 (3 months)**

The main goal of this research project in Salzburg University is to gather vital data from rock samples taken from numerous outcrops in the Upper Austria.
The area of interest extends between cities of Weitra, Zwettl, Karlstift and Rappottenstein. The obtained data gives us important information about magma petrogenesis, emplacement and whole post-collisional plutonic activity and late-variscan geodynamics settings.

The results of this project will be published in my master thesis (Petrogenesis and emplacement of post-collisional granitoids of the northwestern Moldanubian Batholith) and in the lnternational Journal of Earth Sciences, Journal of Geoscience. It will be also presented at the international conferences.

As a preparation for this scholarship and during this scholarship I visited the area of interest in the Upper Austria many times and documented about 30 outcrops. From this field work I obtained about 50 rock samples.
Since the first weeks of my scholarship period I have been working in the team of Univ.-Prof. Dr. Fritz Finger. Under his supervision I have learned new important laboratory methods. They include separation of zircon crystals from whole rock samples and preparation of thin sections, which can then be used in optical and electron microscopy and preparing rock samples for geochemical analyses done by X-ray fluorescence equipment. I use both methods and apply them to most of the samples to obtain crucial data which we can then discuss together.

For the last month of scholarship period there are many plans on a schedule. I will be finishing my laboratory and observation works on the last of my samples. We are planning joint field trip with scientists from both Salzburg and Charles University to the Upper Austria. Most important part of this field trip will be gathering AMS (Anisotropy

of Magnetic Susceptibility) data from most geologically interesting outcrops in the area of interest. From this AMS data the geological profile and a map will be constructed. This should give us lot of new structural information to work with. After all the field and laboratory data will be profoundly discussed the results will be published.

I would like to thank to OeAD, University of Salzburg and Charles University for this research opportunity.