GeoISAP (DAAD) University of Bonn - Exchange Program

It has been around 6 months of, probably, one of the greatest adventures I have had during my years as a geology student. The wide difference between the city of Lima, where the Pontifical Catholic University of Peru is located, and Bonn was noticeable since day one. The weather, the culture, the food, and the lifestyle in the nice city of Bonn were part of the interesting and mind-blowing experiences I have had and I will cherish forever.

After long weeks of filling paperwork and the stress of a long big trip all the way across the Atlantic, Angela, Daniel, and I arrived to Bonn on August, just on time to enjoy the last sunny days. Our dearest friend Isabel took us to a tour around the city center and along the Rhine River. We had a nice lunch in Hofgarten while enjoying the view of the schloss. Definitely, the first days where full of good impressions about the beautiful city.





Figure 1. First days in Bonn.

The best way to know a city, in my opinion, is walking for hours and maybe getting lost some time. I spent my first weeks before the semester started in trying to get to know the city and in learning some useful words and expressions that might be helpful whenewer I am at a store or to ask for help. My favourite walking trips where around Poppelsdorf, where I stayed, and on the way to the Rhine river.

For this exchange semester I decided to take 4 lectures: Digitale Karten in der Geologische (BW 37), Geologische Kartierung (BP 08), Ore Petrology (MGP 10), and Isotope Geochemistry (MGP 12). I was particularly excited to do the fieldtrip of BP 08 because it was almost two years since we did not do any trips in Peru because of the pandemic and I wanted to know the geology of the area.

September arrived and we had a fieldtrip in Brohltal for the "Geologische Kartierung" course; it was the first time we met our classmates and little by little we started getting to know them. One general conclusion we got after talking to them is that they love fossils! This is an interesting path to follow in geology, specially for me, since in PUCP we are mostly focused in the mining exploration and extraction.

The Brohltal area, specially our mapping zone, was around a small town, Burgbrohl, and the Herchenberg mine. The fields close to the most far away houses from the main road, were full of vegetable crops, fruit trees such as apples and pears. A nice farmer even gave us a few apples when we where working around his crops. The mapping task was harder when we had to find outcrops in town. We walked around the streets and we can

barely found any. Another anecdote is that while in the town, a nice neighbour saw us with our hammers, compass, and instantly approached to us and said there was a nice outcrop in a small hill covered with trees. He knew about it because he grew up in the town so he always saw it in his way to the school. We would not have been able to find that outcrop if it had not been for this nice man who recognized we where geology students.

One aspect I really like about the fieldtrips in Uni Bonn is that you are more independent regarding to the mapping task. They gave us a certain area that we, as a group, must map and determine the litologies and its characteristics in a few days. The tutors and the main professor are willing to help if we have questions, but they will not be with us during the whole mapping activity. This experience has growth in me more independence and self confidence when it comes about being sure of my knowledge in geology, helped me in decision-making, and in reading more the literature given instead of just ask everything to the professor.



Figure 2. Fieldtrip to Brohltal Area.

The complementary course for this fieldtrip was "Digitale Karten in der Geologische", where I learned how to use the QGis software in order to digitalize the mapping area with the information of the Brohltal expedition. In this lectures, I managed to learn from the basics of how to add the field information, and the final task was to create a map with the litologies recognized and all the information found either on the field, in literature, and aerial photographs. This variety of information also helped to compare and contrast what we found or assumed with previous information from other researchers.

I had an introductory class of isotopes in a Geochemistry lecture in PUCP, and since then I was interested in the topic, so when I found out that Uni Bonn had an "Isotope Geochemistry" course I had no doubt about taking it. Every week we learned about a different isotopic system, from the geochemical behaviour of the elements, the stable and unstable isotopes, how to use the system and its applications. This lectures were really interesting, and with the laboratories, Dr. Luguet made sure we fully understand the topic.

My last course was "Ore Petrology", and although I had taken similar lectures in Peru, this course taught me other ore deposits worldwide that I will no see in Peru. Also, I learned some european examples of the classic ore deposits taught in Peru, such as the porphyry, epithermal, and others. We had laboratories where we saw rock samples and polished sections of the ore deposits in order to recognize the texture, the ore minerals either directly from the rock or with help of the microscope. This exercise was really helpful to remember my petrography knowledge, and with the final seminar we gave a small presentation of some ore deposits and an explanation of the descriptions of the samples.

It was really interesting the way the faculties where around the city and you can have lectures in different locations, as if the whole city is the university campus. Although our lectures where via zoom, I managed to visit the faculty a few times for the laboratories, using the microscope, learning about analytical geochemistry, and how to use this machines that we had only seen in pictures. Attending to this laboratories helped me consolidate the knowledge acquired during the lectures, and also meeting our master's courses classmates, who where such cooperative and nice people. In fact, our lunch time in Mensa during the days we had laboratories were the reason we came closer.

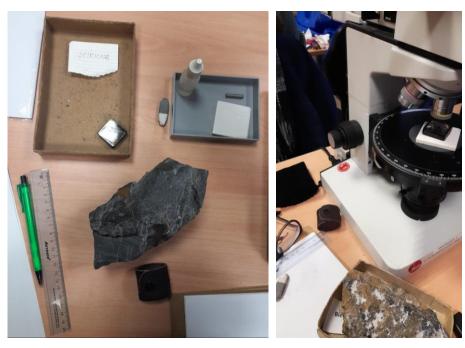


Figure 3. Sample description and use of the microscope in Ore Petrology.

The professors I had were really good in their topics, and very helpful when it comes about solving our enquires. Although one of my courses was a little harder to understand, I just had to put an extra effort and I managed to comprehend all my lectures and take with me new knowledge that I will put into practice in the future.

December in Bonn is a magical month. I had heard about the christmas markets in Germany, but I never imagined they were so beautiful. Walk around the stores, watch the christmas decorations and try the traditional german dishes this stores offer is part of the experience. Of course, it would not be a complete experience if you do not try the "glühwein", which is just what you need to withstand the cold of winter.



Figure 4. The Christmas market in the city center.

Even though I spent most of my months in Germany studying, I was able to do some travelling to the countries nearby. That is something I like about Europe, you can easily go to another country by travelling a couple hours by train or taking a bus. I visited a few cities in Belgium, Amsterdan in Holand, Paris and the North of France, and, of course, some cities in Germany. Despite it is still Europe, the customs of each country and city is different to the neighbour city. Also, the language changed drastically from one country to another so I had to put into use the handful expressions I have learned of each language.

It has been such a pleasure to visit the old continent and be able to walk around cities full of history, visit museums, and watch the remanents of the biggest events and cultures that have occured in the world. By being on the "crime scene", it gives you a new perspective of the history and the way you see things that you just learned from the books or school.





Figure 5. Some of my personal favourite trips to Brugge and Amsterdam.

Visiting all these countries made me realize the differences they have compared to Peru, a developing country, and made me reflect on what changes I can apply to my house and in my everyday life in order to be more environmentally friendly, healthy, and have better actions as a responsable citizen. Generally speaking, this countries are cleaner, more organized, and with a better system of transport than my country. Even though I enjoyed my trips, I was always happy when I went back to Bonn. I was so used to my room, the apartment I shared, and the city in general, that I consider it a second home.

This exchange program gave me the opportunity to embrace a whole new culture for several months and make me feel for an instant that living in Bonn was my new ideal life. In a general perspective, now I can see positive things about life abroad from this experience, such as more independence, feel secure everytime I go out, become a more open-minded person, expand my knowledge regarding to my career, and many other good things.

I am very thankful for this experience to the DAAD, Uni Bonn, PUCP, Dr. Manchego, who has been there for me since the day I got accepted for the program, and, of course, my family. I will cherish this experience forever, and I am already looking forward to returning to Bonn in order to visit friends, the faculty, and make new memories there.





Figure 6. Last morning walks in Bonn.

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