

University of Coimbra, Coimbra, Portugal, 01.09.2021 – 30.11.2021

During my IAESTE internship I went to Coimbra in Portugal. My official internship lasted three months, but I arrived a week earlier and eventually ended up staying in Portugal one month longer just to enjoy being there. The internship took place at the chemistry department of the university in a research group for molecular cryospectroscopy and biospectroscopy and fit well into my master program of biochemistry in Heidelberg.

There were no problems regarding Covid, since Portugal was one of the countries with the highest vaccination rates and least cases during that time. Except for a general mask rule outside in the beginning, Corona was not a topic as omnipresent as in Germany.



I didn't know the city Coimbra before this internship, but it is really worth it traveling there and especially nice for students. Coimbra is located at the river Mondego, 200 km northern of Lisbon and 130 km southern of Porto, and it is only about 45 km to the ocean.

It used to be capital of Portugal and has the oldest university of the country.

Still today, the atmosphere of the city is highly influenced by the students. There is a saying:

"Lisboa, goza – Coimbra, estuda – Porto, trabalha – Braga, reza".

It means, that Lisbon is the place to enjoy, Coimbra to study, Porto to work and Braga to pray. And at least for the Coimbra part I can confirm that. The center of the city is a hill and on top there is the old part of the university, which is so beautiful! There are

about 30.000 students and you can study various subjects on different campuses. The student life is filled with many traditions and the students seem to be really proud (in a good way) to be part of their university: Students go to lectures in their uniform which looks like the coats in the Harry Potter movies. Together with the old buildings it really gives you some Harry Potter vibes. There are many different clubs you can join as a student - for example orchestras and a newspaper. Every faculty celebrates the arrival of the freshmen with a week of games, challenges and little performances of music in the streets. I was lucky to be there during Queima das Fitas, a festival organized by the students, that goes on for about a week and offers concerts for every kind of music and in times of non-Covid a parade through the city with colorful wagons decorated by the different faculties.

Shortly before I arrived, I booked a single apartment for the first month via Uniplaces. But after a week I decided to move into a house with nine other international students from different countries who became like family to me, since we spent time together every day. We often cooked, played games or the guitar, watched movies, drew paintings, invited friends over or went out together. Of course, the house was always a bit loud and dirty, but for the few months, that was absolutely worth it and for me, personally, nicer than living alone. I can recommend upcoming students to book a hostel for the first week and then look for a permanent accommodation by walking through the streets and calling the phone numbers written on the signs on the houses. The landlords put them out each semester when they want to give their rooms to new students.

After a week in Coimbra my internship started. I was going to study human hair for molecular changes that come up during menopause when the estrogen levels decrease. This would be done by infrared and raman spectroscopy and subsequent chemometric analysis.

Mainly I was working together with a postdoctoral woman who just moved to Coimbra from Brazil. She introduced me to the lab members and the work and was very supportive.

Unfortunately, she didn't speak any English, but only Portuguese, which I couldn't speak. To be honest, that was challenging for me. We managed to communicate by learning to understand each other's languages and then responding in our own language and with the help of google translator. Sometimes it seemed like a big part of my brain capacity was used up just by learning Portuguese and communication, although I wanted to focus on the scientific topic. But I wanted to see this as an opportunity and challenge for myself. And eventually we ended up getting some good results, so that was worth it. Besides, it made me confident regarding challenging situations and taught me to understand Portuguese to a certain extend.



I liked about the project that it was clearly defined and that I could join it from the beginning to the end. The first part of the work was to find the perfect settings for the spectroscopy measurements. Then I went through the streets of Coimbra and asked strangers of all ages for a fiber of their white hair. The sample collection was fun and a great way to get to know the city and people, but took quite a while, since I also needed white hair of young people. Soon, I was known as the "girl who collects hair" in the group of Erasmus students. The second big step was the analysis of the samples via Raman and IR spectroscopy. On the days I couldn't use the equipment, I was reading literature and got introduced to the field of chemometric analysis. I got to know software and informed myself about certain algorithms and analysis methods that we wanted to apply on our data. The last part of the work was the actual analysis and interpretation of the data. I only accompanied a part of that, since it was time for me to say goodbye to the laboratory. On an average day I stayed at the laboratory from 9 am to 5.30 pm

with a lunch break in between. The people in my group were very welcoming and next to the work, I appreciated all the chats, coffees and sweet pastries we had together.

I especially enjoyed the time next to my working hours!

Although there were no other IAESTE students in Coimbra, I met a lot of international students by joining the Erasmus Whatsapp and Facebook groups, where different events were organized by a network called ESN.

Especially in my first month in Coimbra I joined these events and got to know people from different countries during barbecues, surf trips, pub crawls, concerts or dinners. Of course, due to my working schedule, I did not have the same amount of time as the Erasmus students, but I used the weekends to discover places around Coimbra with friends, for example Lisbon, Porto, Sintra and several surf, kayak and hikes spots. It was very easy and cheap to travel by bus and sometimes we rented a car with several people for a day.

In general, I think the Portuguese cities have a certain charm: old houses covered with beautiful tiles, big praças where people meet and have coffee or a beer, many free concerts everywhere. And everything consists of hills and valleys, there seems to be no flat city. While Coimbra was a beautiful place to study, you could go in 1,5 or 2,5 hours to Porto or Lisbon to see beautiful architecture, eat great food, drink port wine, visit museums or go out at night. The Portuguese people I met were always very friendly people! I recognized that life starts later there: People start working later, and they also go out later at night, which I liked a lot, since I am not a morning person.

Portugal is also a great destination for outdoor lovers that like to do sports or just enjoy nature: There are rocky mountain areas, but also green hills and forests, white beaches, or huge cliffs at the ocean.



I had a wonderful stay in Coimbra and learned a lot during the internship. Thinking back to all the people and places I got to know warms my heart every day!