

Internship at Paul Scherrer Institute (PSI), Villigen, Switzerland (09.2020-11.2020)

My IAESTE internship in Switzerland proves that even throughout the troublesome year 2020, it was possible to go abroad and gain practical experience in one of the top Swiss research institutions while traveling and discovering the astonishing beauty of the country's nature in great company. With appropriate safety measures, I could go to work in a relatively normal way, achieve excellent results in the project while also connecting to the group members, interns from the institute and countless members of IAESTE's network. I hope that this example story may encourage other interested students to take the step, apply for IAESTE internships, and benefit from this unforgettable experience that will certainly enrich your student life forever.

For many, 2020 will be associated with cancelled vacations, shopping carts loaded with toilet paper, the intensive use of Zoom, Skype & co and plenty of unexpected plan adjustments. While this is also true for me, I will also remember it as the year that I travelled to Switzerland for my incredible adventure with IAESTE. After a previously planned internship elsewhere was cancelled in short notice, I was positively surprised to find an IAESTE internship in the same research field in one of the most notable research institutions of Switzerland, the Paul-Scherrer-Institute (PSI). Preparing the necessary documents was time-consuming, but manageable with the extra time at home, and since the internship length was scheduled for no longer than three months, bureaucratic tasks like applying for the Meldebestätigung (confirmation of registration) were taken over by the IAESTE offices and the employer, once I was accepted for the internship. Note that one of the requirements for the internship at the time was a EU citizenship, as this facilitated the registration process and the associated administrative obstacles for the employer. While excellent grades certainly help to get accepted, I also recommend interested students to stress out their other qualities such as previous practical experiences, the attendance of external courses in the respective research field and academic writing achievements (publications etc.).



Wearing a medical mask provided by the institute, a young IAESTE intern is preparing the measurement program for recently assembled battery cells.

Around one month before the beginning of the internship, I was starting to look for accommodation as this is probably one of the best ways to save money during an internship in Switzerland. Websites like flatfox.ch, homegate.ch and immomapper.ch allow you to find suitable shared flats in your price range and in the vicinity of your institute/company, so it pays out to check these out regularly. Since I could not move into the shared student housing at the beginning of my internship in September, I first stayed at the guesthouse of the PSI for two weeks. This turned out to be a great decision as I quickly got in touch with other interns, PhD students and professors, and we spent many evenings together after work, with drinks, foosball and dart matches and planning trips around the country together.

At the institute, I joined the Battery Electrodes and Cells group to work on novel sodium ion cathode materials. Thanks to the excellent guidance provided by my supervisor, an experienced post-doc researcher from Poland, my project soon became a success story, and while I learned a lot about modern battery research, I was equally impressed by the friendly and respectful nature of my co-workers and the group head. Adapting to the safety precautions introduced by the institute, such as the obligatory use of masks in all laboratories and hand disinfection before entering public spaces was effortless, and while respecting safety distancing rules at all times, my team kept the tradition of having



Trip to the Chocolate factory of Caillers, close to Bulle. With IAESTE interns from all over Switzerland, we first started the day exploring the story of Switzerland's first industrial chocolate factory and then moved on to discover the production process of world famous Gruyères cheese, only a couple of train stops away. Fantastic people, beautiful sights and of course, amazingly delicious Swiss foods!

lunch and occasional drinks after work together, as long as the situation allowed it. Outside of the work environment, the other important aspects of an IAESTE internship never fell short, either: Meeting amazing new people through the vast IAESTE network, something I was very much looking forward to, was easier than expected and we would soon travel together to the countless breathtakingly beautiful, utterly fascinating corners of Switzerland, involving hiking, swimming, climbing and biking trips all over the country! This was also made possible by the amazing Swiss public transportation system. To save money on the tickets, I have another two suggestions for future interns: buy the Swiss Half Fare Card (Halbtax), it is worth it even if you stay for only one month, as you save 50% on ALL tickets. If you're lucky, you can even find a two months trial for a discounted price and save even more. Additionally, if you're under 25 years old, the seven25 card allows you to travel for free all over Switzerland after 7 pm. If you're combining this with couchsurfing or staying at friends' places, this means that you can get around completely free. One more advice that I would like to give is that you should go shopping in Germany or in France, especially if you're living so close to the border that you can just go after work, e.g. by train, which is perfectly possible for interns at the PSI.

In the last month of the internship, the development of the infection numbers forced the institute to take stricter measures, and a shift system was subsequently introduced to avoid contact between co-workers. This meant that I could only go to the laboratory 4 times a week, with 6 hours of working time. Additionally, one of my co-workers was tested positive for COVID-19 virus, so everyone who had contact with him had to go into quarantine for a minimum of one week. Luckily, all of us were tested negative, meaning that the safety measures had proven to be effective, and we could all resume work in the following week. These moments when you are slowed down by the pandemic are the reality of scientists in 2020. It's fundamental to stay positive and optimistic so you don't lose your momentum. Of course, it's not always easy to keep the motivation up, but in the end, there is nothing you can do to change the circumstances, other than using the time at your disposal as efficiently as possible. As I was already finishing up my final experiments, the events luckily did not have a large impact on the project.

For the outstanding support before and after the internship, I would like to give my sincere thanks to IAESTE Germany, IAESTE Switzerland and the Paul-Scherrer-Institute, in particular the Battery Electrodes and Cells group which I will forever associate with one of the best research internships of my life. I would like to encourage everyone who has been thinking about going on an IAESTE internship that it is well worth the time that you spend with the application. Despite smaller challenges that may rise up because of the pandemic, it can be an amazing experience that you will remember for many years to come.