

I am Andrei Diatlov, physics student from Germany from the University in Aachen (RWTH). On my journey to Diploma next year I had a stay in Switzerland at Paul Scherrer Institut (PSI) between June and August 2007. I was able to attend this traineeship thanks to IAESTE.

A course of lectures was held to introduce PSI and its departments and laboratories to trainees and summer students, it was very interesting, informative and well organised, I want to thank everyone involved.

I was working at the general energy department, compartment electrochemistry. This compartment is engaged in research about storage and conversion of electrochemical energy in all of its aspects: from batteries to capacitors to fuel cells, one important point being the creation of mobile devices and solutions for electric vehicles.

I was assigned to a PhD Student and helped him with his research: characterization and evaluation of different gas diffusion layer materials for fuel cells and development of a new theoretical simulation model for these materials. It involved conducting and analyzing of experiments using advanced and interesting methods, like impedance spectroscopy and computer tomography conducted with the Swiss Light Source (SLS), a third generation synchrotron with an energy of 2.4 GeV among other methods. I also learned a lot about Matlab programming.

I want to use the occasion to thank the wonderful people I was working with. They welcomed me warmly and I always felt as a part of the team. They put trust in me but at the same time I was not left alone and always could ask for advice when I needed it.

Roughly two thirds (a bit less) of the time was filled with experiments, one third was evaluation. I learned a lot in this time, not only about fuel cells, but how actual research is conducted, and it was an incredibly rewarding experience.

I lived at the guest house on PSI grounds, the accommodation was very comfortable and affordable, it took about an hour to reach Zurich, two small towns – Villigen and Würenlingen are each about 4 km away, in each of them are post, bank, shopping facilities and pubs, they are also very easy reachable by bike which can be lent at the reception, although it is possible to have to wait if none are available. Generally I would recommend getting a bike and traveling with it, there are a lot of beautiful sceneries to discover!

Since I received salary for my traineeship I also could travel quite a bit with the train: Zurich, Bern, Basel, Winterthur... – you should spend time traveling in Switzerland, there is a lot to see!

The IAESTE activities were many, interesting and well-organised, I just regret to not being able to participate in more of them but since I will be taking diploma exams soon after returning to Germany my time was pretty strained.

I want to thank people at IAESTE for their work and a really interesting summer!

Andrei Diatlov RWTH Aachen.

Trainee at Paul Scherrer Institut Switzerland