

Field Report: Research stay of Helena Weingrill at the Department of Mechanical Engineering at the University of Minnesota from 4/30/2018 – 8/31/2018

General impression of your research stay abroad

I absolutely enjoyed my research stay in Minneapolis. For me it was interesting to see not only the differences but also the similarities between the daily routine of a PhD student in the USA and in Austria. First, I was simply impressed by the size of the campus: 40,000 students at the Minneapolis campus of the University of Minnesota vs. a total of 3,000 students at the University of Leoben. The campus was made up of huge sporting facilities (the rec center, volleyball building, two ice hockey arenas and the football stadium just to name a few), the different departments and also some student housing. I shared an office with three other PhD students and one master student. The daily routine of the PhD students seemed to be really similar to the one we have in Austria when the PhD students did not have to attend any classes. However, when they had to attend classes (until the middle of May), the classes seemed to take up a lot more of their time during the day when compared to the Austrian PhD life.

Quality of the host institution

The Department of Mechanical Engineering is a great department with a lot of interesting working groups. There are many working groups (solar, thermodynamics, composites, 3d printing and so on) that it seems that all kinds of topics are covered with their research. The machine shop was my favorite part of the Department of Mechanical Engineering as students were allowed to use all kinds of big machines such as a water jet cutter and a CNC-cutter. I just really liked the hands-on aspect of it. The administration was well organized as I received my email address and my keys during my first days at the university. The ISSS (international Student and Scholar Services) was also well organized.

Contacts within the host institution, inclusion in the organization

My supervisor Prof. Mantell took care of me very well and made sure I met a lot of people. She introduced me during the first week to the people I would work with for the following months. As most facilities within the department (such as the machine shop) are run by students, I got to know students of different fields of study. My supervisor provided a bike for me which was the simplest way of transportation in Minneapolis. This definitely helped me to meet new people. In general, people were really easy to talk to and very helpful. They always helped me find a solution for any issue I had.

Recommendations for future Marshall Plan students and fellows

The planning of your research is everything. Make sure the measurement devices you are planning to use and the according equipment is available. If possible, do some preliminary testing to make sure your measurement method is applicable. Always take extra samples with you as there can always happen anything unexpected and you might need additional ones. Write everything down and if possible, take pictures of all the used equipment.