

DOCUMENTATION FOR THE MARSHALL PLAN SCHOLARSHIP

Field Report

Applicant: Dipl. Ing. Melanie Tomasch

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Supervisor 2 at guest university THE OHIO STATE UNIVERSITY: Prof. Dr. Rajiv Shivpuri

1.) Title of Research Project

Fundamentals and prevention of zinc induced embrittlement in steel sheets during the direct press hardening process

2.) Experience Report

I spent 6 months from the 8th of January 2018 to the 6th of July 2018 at The Ohio State University in particular at the Department of Integrated Systems Engineering in Columbus Ohio. My host and supervisor during that time was Prof. Rajiv Shivpuri. I also worked with Prof. Farhang Pourboghrat the chair of the institute and his team of university assistants and PhD students. All people I could work with were friendly and had a high knowledge of their research topic. It was very interesting for me, because they were always happy to share their knowledge with me and therefore I could learn a lot about my topic as well as many other topics related to metal forming and material characterization. They always made sure to make me feel welcome and supported during my stay.

I had my work space together with all the other PhD students in one large office room. I felt comfortable since I had enough space for me and it was quiet so that I could concentrate well on my work. If someone struggled with something related to their work, there was always someone to ask or discuss the problem. All students helped each other as good as they could. It was really great. The university campus itself was amazing. There were parks where everyone could spend the lunch break, meeting rooms for students to have lunch together, learn together or simply spend their break together. Another positive thing was the huge library with quiet, bright and comfortable places to read and learn. Several gyms were also part of the university campus where I could attend group classes and use all the exercising equipment available for a reasonable member fee. It was a good possibility to get into contact with other students and to exercise and relax after work. The opening hours were great, since the gyms were open also on weekends. There was a swimming pool and a climbing hall as well. One thing I will always remember was how enthusiastic Ohio state students and employees are when it comes to their college sport teams in particular football, hockey, basketball and baseball. Tickets for

all games were available for reduced price for students and employees which made it possible for me to watch a couple of games. It was very funny since I haven't seen most of those types of sports before, because they are not very popular in Austria. There were also a couple of bus routes available on campus which students could use for free. It was very convenient to use the public transportation system of the city of Columbus as well. I could use them to go to work every day since I lived off-campus as graduate students usually do. Furthermore I used them to go to the supermarket or in my free time. Columbus itself also had a lot to offer. There were sport, social and cultural events throughout spring and summer. Additionally a couple of really nice parks and a cycling trail reaching from the north end to the south end of the city were available. The only thing which was a bit complicated was to use the public transportation system outside of Columbus, since Columbus doesn't have a railway station which means that the only possibility to travel is by plane or bus.

In general I would really recommend future students to stay at The Ohio State University since it was an unforgettable good experience for me. I would suggest to start the semester abroad when the semester at The Ohio State University is almost over, because it is easier to find a flat since a lot of students are trying to sublease their apartment. I would not recommend to start in august or autumn since it must be very hard to find a short term flat available, because the regular semester starts again in September and a lot of freshmen students are trying to find a flat at the same time. The other thing to mention is that flats are not furnished and on-campus housing is usually for undergraduate students and it is also very expensive. I would recommend to live off-campus even though it takes some time to find an apartment. In retrospect I really enjoyed my stay in Columbus at the Ohio State University and a lot of nice memories will remain.

3.) Contacts within the host institution

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