Erasmus + meeting in Pforzheim

# February 2016

This Erasmus + meeting concerning the topic of sustainable and ecological energy production took part in February 2016 in Pforzheim, a small city in the Baden-Württemberg region in Germany.

For us, mentors (Kateřina Klimánková – oktáva A, Terezie Zichová – septima A and Helena Havelková – sexta B) and professor Kateřina Krumpholcová this meeting had started on February 18th by travelling from Brno to Pforzheim. We have travelled for nearly 12 hours by trains and a bus and with us had also been travelling our fermenter which had made this journey a bit stressful because it was made mainly out of glass. After this long, nerve-racking journey, we finally arrived to Pforzheim. On the main railway station our partner mentors were already waiting and they had taken us to the host families where we had stayed for next 3 days.

The following 3 days were foremost dedicated to the preparation of presentations by mentors from Czech Republic, Greece, France and Lithuania with their German partners, assembling fermenters which were already there, checking if everything works and preparing for the arrival of other participants. On the other hand those days hadn’t been just about learning and training. We have also had some fun, for example we had visited the Museum of media in Karlsruhe.

On Sunday February 21st the other participants from Austria, Hungary, Turkey, Germany (Hamburg), Slovakia, France and also the second half of the Czech team (Klára Enžlová – septima B, Veronika Bobová – 3.A and Michal Bubeník – 3.C accompanied by professor Věra Helceletová) arrived and everybody including mentors was accommodated in a youth hostel. In the evening, the project was officially inaugurated by a ceremonial dinner in presence of all participants.

On Monday, the laboratory work had started. But firstly, the opening ceremony had taken its part. After that, we had to make some photos and after a delicious lunch, the real work has started. We had made some theoretical overview of the experiment biochemistry and devices that were used and we also did some pipetting exercises, glucose determination test which was needed for the actual experiment and also assembling the newly brought fermenters.

Tuesday was the day on which we did the fermentation experiment. The main aim was to produce flammable biogas from corn silage. The experiment itself wasn’t really hard. It involved mostly watching the fermenter and taking samples of the inoculum (a mixture of the corn silage, medium and microorganisms) for the glucose determination and gas for the gas chromatography, so for the first few hours, everything, except for occasional electricity malfunction, was running smoothly. After lunch break, things started to be a bit wilder. Some fermenters were producing so much biogas and were foaming so much that they exploded. After several explosions we ended the experiment. In the evening we had the first part of presentations which were prepared by every nation to tell the others something about their culture and traditions.

The next day all of the working groups analysed their data and presented them in front of the other groups. From the results that we had seen that the biogas production was influenced by many factors such as the fermenter size or the concentration of glucose during the experiment and most of the groups had produced a flammable gas. After we finished with the data presentations, we quickly cleaned the gym where the lab was and then continued with the visit of Pforzheim Gasometer where we saw an amazing artwork of Yadegar Asisi – a 360° panorama of ancient Rome. When the time at the Gasometer was over, we had some time to go shopping and after dinner we went to bowling.

Thursday and Friday were entirely dedicated to the cultural part of the project. On Thursday we visited the Ludwigsburg castle – a beautiful baroque castle and after our tour we moved to the Mercedes-Benz museum in Stuttgart where we spent the rest of the afternoon. In the evening, we continued with the second part of the presentations about culture and traditions. The next day was our last day of the project. We visited a biogas plants in Pforzheim and Mühlacker and then we went to the Maulbronn monastery where we had a guided tour. After the tour we continued to the ice skating centre where we had a lunch and then we went skating. In the rest of the afternoon we had some spare time to go shopping or pack our things and in the evening the project was solemnly closed by a collective dinner and saying goodbye to everyone.

On Saturday it was time to leave. So we went again by various trains and busses, again with our fermenter, back to the Czech Republic.

Overall, I would say that this project had been a great and valuable contribution to everybody not just for its very actual topic and many experiences in the scientific field but also for its multiculturality and meeting new people.

Kateřina Klimánková, oktáva A