



Norwegian University of Science and Technology



Nordic Water Network Experience Report

By

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1. Introduction and Background

My name is Jan Göing and with this report I would like to illustrate and share my experience and live in Trondheim, Norway.

I studied engineering science at the *Technical University Berlin (TUB)* and wrote my master thesis at the *Norwegian University of Science and Technology (NTNU)*. This report includes some of my work experiences in Trondheim and my daily life in this beautiful city.

The first time that I travelled to Trondheim was in November 2015, thanks to a student project with some fellow students. We designed and built a model wind turbine and went to the *NTNU* to validate the turbine in the large wind tunnel of the university. Based on this project, I met the very friendly professor Lars Satraen and his really helpful PhD student Jan Bartl.

One year later, I was looking for a topic for my master thesis in the field of wind turbines and fluid dynamics and asked Markus Fischer about some information of the current topics at the *NTNU*. Thus I got in touch with Jan Bartl and the possibility arose to choose of a great variety of topics in the field of offshore wind turbines at the *NTNU*.

My modified topic of the master thesis was the simulation of the wake flow behind a wind turbine and the validation with a measurement to investigate the behaviour of the wake.

The application for the scholarship and the registration at the university of Trondheim was very simple and without a big effort or a lot of paperwork. Afterwards I could start my journey to Norway and organise my stay in Norway. I was looking for a private housing to live close to the city center. Jan Bartl helped me and told me to look at the homepage called www.hybel.no, where I found a flat in one of the main streets inside of the city centre and close to the university. I lived with an employee of the *NTNU* together for five months. My roommate was originally from Vietnam and really great, I found a good friend. I paid 4000 NOK each month, that is about 450 euros, for the rent including electricity.

I travelled by car form Berlin to Trondheim, to take my mountain bike with me and to travel around in Norway, which is an interesting experiment in the wintertime. It took around three days and a lot of toll.

After the first week I got my student licence, an office and a computer. Every week the master students at the department had a colloquium and got a good support from the supervisors. Thanks to the great support I could finish my master thesis on time and got the time to travel to the southwest of Norway afterwards and then headed back to Berlin. Furthermore, I even got an invitation for a conference in Trondheim after my master thesis.

2. Personal Experience

Trondheim became one of my favourite cities in the world. The city is situated between the amazing Trondheim - Fjord and some beautiful hills called Bimarker. For travelling around Trondheim I took a ferry to see the fjord and to reach the island Kristiansund. From this city I took a bus back to Trondheim and saw the very famous Atlantic road with extreme curve shapes and the beautiful nature of this part in Norway.

The mountains in this area are perfect for skiing, small hiking tours and camping tours for more than one day. As a member of the *NTNU*, the sport and activity club of the *NTNU*, it is possible to rent cabins on top of the mountains. Together with a few friends we did some hiking tours to the top of the mountains and slept in the cabins overnight. Many cabins are well isolated and warm but some cabins can be so cold that the water gets frozen. A good equipment is definitely necessary for this kind of hiking experience. On one day we even reached a temperature of under minus 16 degree.

In my opinion, one of the best areas for hiking is Oppdal, which is two hours away from Trondheim.

This was just a small overview of my trips around Trondheim. Furthermore, a lot of different sightseeing possibilities are in the city as well. There are great opportunities to go to a top of a building for an amazing view of the city. Trondheim has the typical art of Nouveau architecture, where beautiful wood houses are standing next to the river and the people are super friendly. In the winter time the daylight hours are shorter than in Germany but it is not that bad as it sounds like. Also the temperature is not that bad as expected, it is quite equal to Berlin and the possibility to see the northern light lets you forget the cold.

3. Conclusion

In a nutshell, I had a great time with many unforgettable experiences in Norway. Firstly, it was a great experience to travel and hike in Norway, with its unbelievable nature and people. Moreover, I got a very interesting topic for my master thesis and a good support to finish it. Through this I could increase my knowledge in this field and earn great working experiences for my future life. I found great friends with still lasting friendships and an insight on the way people live in Norway. The scholarship and the time at the *NTNU* was uncomplicated and very helpful to enable the amazing time in Norway.