

## Nikita Turko



Hometown: Zaporizhia, Ukraine

Education: 2013-2017 – Bachelor of Science in Mathematics and Physics, Moscow Institute of Physics and Technology, Aerophysics and Space Research Department, Russian Federation

Current Position: Master student of MIPT, Aerophysics and Space Research Department



*UNIS at night*

The first time I heard of the opportunity to study at UNIS from older students. They described the uniqueness of research-oriented studies, which included work on projects in international teams with field experiments under the guidance of experienced researchers. Their histories and my interest in the Arctic prompted me to move in this direction.

Prof. Aleksey Marchenko came to our university in 2017 and gave us more information about the course, and how to enrol in the program. I am really grateful to the SITRA project for the support and the opportunity, and to Nataly Marchenko for all the help she provided.



*Longyearbyen on the first day in Svalbard*



This is the first time in my life I have studied and lived in an English-speaking environment. It was also very interesting to learn about the education system in Norway and to communicate with students from all over the world.

I took the bachelor course of Arctic Technology department [AT-211 Ice Mechanics, Loads on Structures and Instrumentation \(15 ECTS\)](#).

The course was well organized and consisted of theoretical lectures containing topics such as thermodynamics of ice, ice mechanics, and so on. There were also 3 main activities: laboratory week, field work in Svea, and a scientific cruise in the Barents Sea. In addition to course responsible prof. Aleksey Marchenko, four other lecturers taught us the essentials: David M. Cole, Carl Renshaw, Torodd Nord and Aleksey Shestov. All of them were clearly passionate about science and research, the lectures were informative and interesting.

### *Lab Work*

During the course time, Aleksey Marchenko helped us go through all the stages of research work: theoretical training, computer simulation of the experiment, conducting an experiment in real conditions, and data processing. During the Lab, we studied ice responses to thermal loads and learned to work with equipment and measuring instruments in a comfortable university environment.

### *Field work in Svea*





*Scientific cruise in Barents Sea*

Further, we applied these skills in the harsh conditions of the Arctic during field work in Svea, where the main focus was the mechanics of ice and how its microstructure changes under external influences. The third activity was a scientific cruise in that we paid more attention to the interaction of ice with the marine water and scientific changes in water content under it. The final stage of the training was 3 reports on experimental work and a written examination.



*Sjøskrenten*

I decided to choose the dormitory called Sjøskrenten which is right across the road from the UNIS campus. The proximity to the university was very convenient making it possible to sleep for an hour longer than residents of Nybyen (located 3 kilometers from campus). It was also convenient to have lunch at home and access UNIS at any time. In Sjøskrenten, there is one kitchen on each floor that is equipped with modern and high-quality kitchen equipment. Cooking dinner is a great pleasure and I had warm memories of how to celebrate the birthdays. We were preparing delicious dishes.



In Sjøskrenten, you have the opportunity to share the bathroom with one neighbor or have the toilet to yourself. I chose the second option and was pleased with the choice. I liked living in Sjøskrenten and if the opportunity arose, I would live there again



*Home*



*UNIS at day*

The course gave me the most unconventional experience in my life, and the five months in Svalbard changed me for the better, gave me more confidence in myself, and helped me to realize what is really important to me in life and also made me more determined with further plans and desires!

I have already applied for the autumn course 'Physical Environmental Loads on Arctic Coastal and Offshore Structures', 'Arctic Offshore Engineering' receiving a positive response. I realized that I want to connect my career with the Arctic and become a highly qualified specialist in this field.

For me, the most exciting experience was the opportunity to work with experienced researchers. They gladly shared their experience, answered the emerging questions and helped with practical advice. I learned a lot from them.

Thanks to the SITRA project, UNIS, and Aleksey and Nataly Marchenko!