

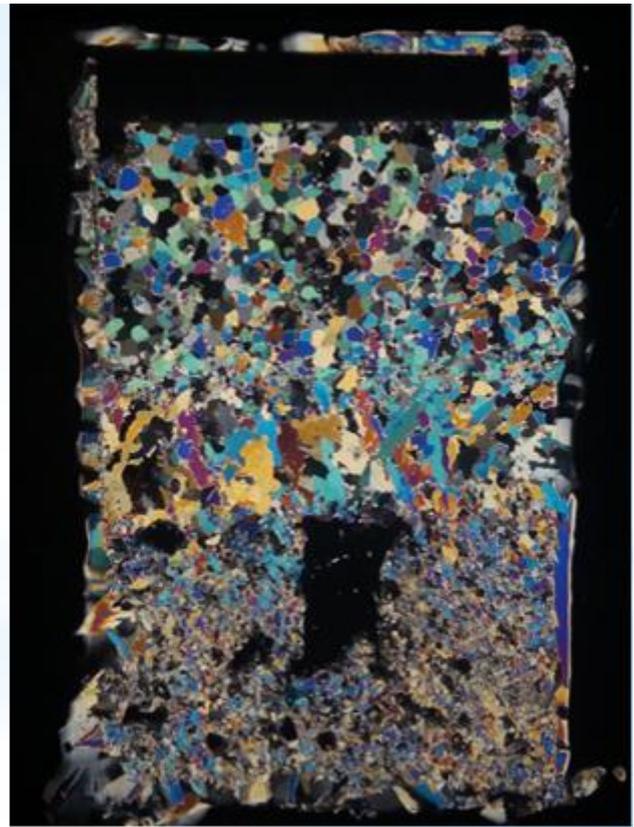
Aleksandra Visich



My name is Aleksandra Visich, and this year (2020) I am finishing my Master's at the Moscow Institute of Physics and Technology (Russia) with Professor Aleksey Marchenko as my supervisor.

My Svalbard story began in autumn 2018, when I first came to Svalbard as a curious and careless student for a short AT-332 course at UNIS. However, it took me less than two weeks to fall in love with UNIS, Svalbard and the way of life in the Arctic, so I decided to apply for working on my Master's within the AOCEC project. So I came back to Longyearbyen the following spring and began my thesis works.

The topic of my Master thesis is, roughly, the influence of water freezing in tidal cracks on ice loads on the shore and structures. It is broad enough to require knowledge and narrow enough to be explored within a Master's project. During the spring semester of 2019 we did several laboratory works with AT-211 course at UNIS to gain a better understanding of thermal expansion of both fresh and sea ice and also conducted some experiments on water freezing in artificial cracks. I also got a chance to take part in the Svea fieldworks, during which samples from the real tidal cracks were taken. Besides, we students combined having genuine fun and doing serious research when helping the fellow scientists from the researcher team with their experiments.



Ice structure in tidal cracks. Fieldworks in Svea, spring 2019.

During the summer and the autumn of 2019 I continued working on the data I got from the laboratory works and learned numerical modeling. I also got the Arctic Field Grant for my project. And for the final accord I came to Svalbard for the third time to perform additional experiments and participate in the fieldworks in Svea, this time as an almost grown-up researcher and not a student.

When I came back to Longyearbyen, it felt like coming home. The two weeks of preparations for the fieldworks passed swiftly by, and to Svea we went again. This time I had a whole experiment of my own and felt enormously important, walking to my experiment site with a field computer every day to download the collected data. This time we installed several pressure sensors into the ice cover around the tidal crack to monitor the stresses in the ice during the tidal cycle. A timelapse camera took pictures every 15 minutes, and the videos made out of these pictures were just amazing, with all that ice going up and down with quite a large amplitude. At the second week of our fieldworks the full moon occurred, bringing high tide, and the ice at the tidal crack was flooded twice a day. When I was not occupied with my work, I helped around, starting from pulling ice floes and jumping on ice beams (on command!) all the way to hammering down tent poles and sitting on the generator while its rope was pulled hard by several men.



My office view from under the cofferdam

In general, I daresay, our days in Svea were not only very productive in terms of science, but also very rewarding for us as people working hard on challenging and exciting tasks. I am very glad that such an experience happened in my life. Right now I am working on arranging all the data and observations into a neat and tidy Master thesis, hoping to make my humble contribution to the exploration of the Arctic.

I also have a whole bunch of thanks to say to many amazing people. Of course, to Aleksey and Nataly Marchenko – for making the whole project possible in general and letting us all take part in it in particular; to the UNIS Logistics department and the guys (Kåre Johansen, Martin Molde Eriksen, Bård Helge Strand and Charlotte Sandmo) – for keeping us safe and warm and cheerful in the harsh environment; to Thea Josefine Ellevold – for being a nicest ever roommate and lots of Norwegian language practice; to all the teammates – for sharing both the research enthusiasm and sweets during these full days; and last but not least to Svea kitchen – for best dinners in my life.



The Main Tidal Crack, Kapp Amsterdam and the Arctic sunset

In conclusion I want to say that Svalbard has changed me a lot and I am ever so glad it did! And when I leave it, I'm afraid it will never leave me, because you can take a person out of Svalbard, but you cannot take Svalbard out of the person.

Greetings from an Arctic-infected Master student

Aleksandra Visich