

STEPS Students Report

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The STEPS program provided me with an excellent opportunity to travel to a new country and work on a very interesting and challenging research topic in one of the best universities of Russia, Saint Petersburg State University. I was hosted by the Prof. Yurri Tveryanovich, Head of the Dept. of Laser Physics who is very renowned for his research in chalcogenide glasses and was a very concerned and able supervisor. The one month that I spent at SPbU helped me to make lasting friendships with my colleagues in the lab and we will certainly continue to collaborate on research topics in the future as well.

It is important to read some papers on the mentioned topics in advance to get a grip of what is going to be taught.

While in Tokyo, I had applied for the SPbU's buddy program in which every international student is provided with a volunteer to help with the paperwork in the university. This volunteer turned out to be extremely important and useful, since there was a lot of paperwork and documents that needed to be filled in, in order to receive dorm room, student ID etc. On my first working day, the volunteer student helped with going from office to office and helping with the paperwork, which was all in Russian language. All the necessary requirements would have been impossible to attend to, had it not been for the student volunteer, as there were many offices and many documents that had to be filled up, and all communication was in Russian only.

The room in my dorm building was shared with another student while the bathroom was shared between 2 rooms. The room itself was clean however the lifts were a bit scary and were often found to be not working. There was a 24 hour shop in the dorm compound as well.



Figure 1 View of the Dorm City

I had spent the first day in paper work and had joined the lab from the next day where I started doing research on the effects of doping of rare earth ion (Erbium) on chalcogenide glasses (Germanium-Sulphide and Gallium-Sulphide matrix). I was given with different group of samples of varying concentrations of GaS and Er, which were fabricated in different



Figure 2 Group Photo with Prof. Yurri and Lab members

conditions and I started to measure the optical properties. I used various devices and equipment and remained extremely busy with the various measurements that I had to perform in my 20 working days. From morning till evening, the lab members facilitated and helped me in using the equipments and machines as they all knew that I was on a very tight schedule.

Prof. Yurri also took a very keen interest and used to take an update every 2 days, giving me the instructions on what to do next. This help from the supervisor and the very cooperative lab colleagues, became very instrumental in assisting me to get a lot of measurement results in a very short span of time. I will hopefully be publishing the results and the research that I did in SPbU and the collaboration and exchange of analysis on these results will continue between me and Prof. Yurii for the next few months. I also used to go to the Saint Petersburg City every day and had a great time visiting the

city center, which is considered as the cultural capital of Russia. The city has lots of museums and tourist attractions and is a great place to visit. I made lots of lasting friendships during my visit to different events in the city and I will always

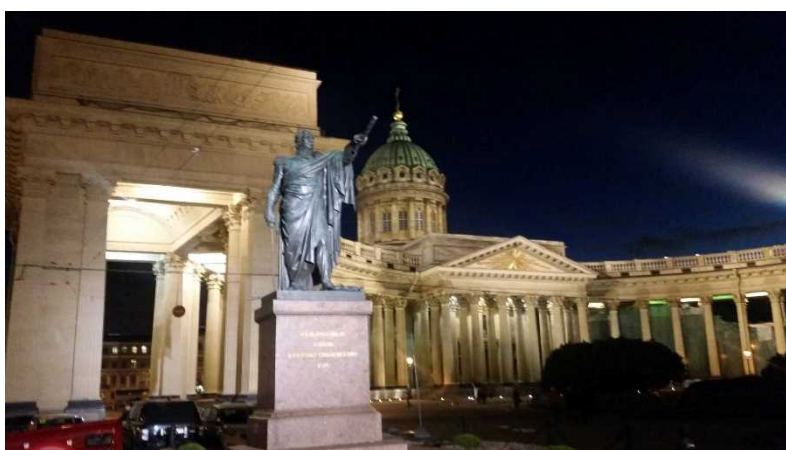


Figure 3 One of the landmark cathedrals of Saint Petersburg

cherish the experience that I have gained from this visit.

I am very thankful to the STEPS office that worked so hard and were so cooperative in facilitating this visit.

Overall I greatly enjoyed the challenging and exciting research environment that was made possible due to the help and supervision of Prof. Yuri Tveryanovich and other lab colleagues. All the people were very friendly and helpful and hopefully the connections that I have made on this trip would be long lasting.