## STEPS Students Report

Elizaveta Pankova (D2) Faculty of Geography, MSU

From 18th of October to 19th of November I had a chance to take part in students exchange program STEPS. I spent about a month in the laboratory of Pr. Yoshio Takahashi (Department of Earth and Planetary Science). During this time I took some experiments which are connected with the topic of my research in MSU. Here I study the distribution of heavy metals in brown algae *Cystoseira barbata*. I took samples of my algae in the Black sea in different points. The location of these points depends on the anthropogenic pressure on the environment. In the laboratory of Pr. Takahashi I studied how to use different methods to research the distribution of heavy metals in my samples. For example, I used ICP-MS analyses to study the approximate concentrations of contaminants in my algae. Also, I had a chance to visit The KEK (High Energy Accelerator Research Organization) which is situated in Tsukuba-city. There I got to know how to use the x-ray absorption spectroscopy. Due to this x-ray experiments I found out that my species of algae can concentrate big amounts of arsenic (As), that is why I can focus more on studying this element during my experiments in Moscow.



Samples preparation in the UTokyo



Results of samples preparations

I am very thankful to Pr. Takahashi and students from his laboratory for their help and kindness during my stay in the University of Tokyo. Pr. Takahashi organized very nice welcome party barbeque at his house, where I could get to know my colleagues from the laboratory better. Students from the laboratory of Pr. Takahashi always helped me during all my experiments in UTokyo and KEK. Pr. Takahashi is one of the kindness person I have ever known and I want to say «thank you» for all his help and the possibilities he gave me.

Also I am very grateful for the help of students of UTokyo - Yasushi Suko and his friends. Yasushi organized very interesting trip to the Kyoto, where I can investigate all about the cultural

features of one of the capitals of Japan. Likewise he always tried to help me with good advice during my stay in Tokyo.

I think that STEPS Program gave me lots of possibilities to do the progress in my scientific research and likewise helped me to study more about Japanese people and culture. This is very good experience for all the students who want to improve their scientific skills in the one of the best Universities of the world.



Trip to Sanzenin Temple with UTokyo students



During Kyoto trip with students of UTokyo