

Report about research stay at Leibniz Universität Hannover (LUH), Institut für Elektroprozesstechnik (ETP)

Vanina Polina, postgraduate student of Peter the Great St.-Petersburg
Polytechnic University (SPbPU)



I was in Hannover for a research stay in November and December 2015, but I have to say, that it was really pleasant time. Working process, working atmosphere, accommodation, leisure activities – everything exceeded my expectations.

Initially I would like to say a few words about advantages of working process organization.

Firstly I had my own work place for my laptop, therefore no need to transfer all the necessary data on any other computer. Practice shows it saves a lot of working time. Secondly, afternoon the tea time is an excellent opportunity to discuss working issues with colleagues, as well as great support friendly atmosphere in the team.



The aim of my visit was testing methods and sample preparation technologies for induction melting of porous magnetic alkali-borosilicate glasses and multifunctional nanocomposites on their basis. The principle advantages of these glasses are the easily adapted geometry and form, controllable average pore diameter in a wide range, large square of interface between matrix skeleton and porous space. Usually nonporous magnetic alkali borosilicate glasses have been produced using two different ways:

- by melting of initial mixture in a platinum (or porcelain) crucible
- by a sol-gel method.

Unfortunately practically there were no attempts to prepare two-phase glasses suitable for production of porous glasses with controllable average pore diameters and with magnetic properties. So it was the main aim of my visit.

As for my cultural program during my staying in Hannover, I am absolutely delighted. Hannover made a great impression on me in spite of the rainy weather and a relatively low temperature. Stunning views, interesting architecture, lots of sightseeings, and most importantly, Christmas Fair, all this has left only pleasant memories about Hanover.

Finally, I have to say that joint research activity of LUH and SPbPU is a great opportunity for postgraduate students to improve their skills, make new useful contacts and developing further partnership between LUH and SPbPU.

