

Cooperation with the USTC in China

Department of Physics, D1, Huang Hongrui

From Jun 1st, 2019 to Aug 31st, 2019, I stayed in the Lu Yalins Group, the University of Science and Technology (USTC), Hefei, China to have a co-operation work. Their group mainly focuses on the oxide system, and uses many ways to grow and characterize the oxide. For the growth of sample, they use pulsed laser deposition (PLD), chemical vapor deposition (CVT); for the characterization of the sample, they use XRD, PPMS and so on.

In the three months, I first learnt how to use the equipment in their group. Then based on their equipment, I designed my experiment plan and used their equipment to complete my experiment. Since in the Hasegawa group, I mainly do the surface measurement, it is the first time for me to try the bulk system. Of course, I made many mistakes in the beginning. With the help of their lab members, I gradually corrected the mistakes and finally found some new physical properties in my system.

I not only did the experiment, but also listened to many reports from famous scientists. They focus on different areas, such as ARPES, quantum optics and molecular dynamics. Their report broadened my view on physics and inspired some novel ideas on my research field.

Finally, I would like to thanks the ALPS and GRASP project, which support me to go to the USTC. Thanks to my supervisor, professor Shuji Hasegawa, who helped me a lot with finding the research topic and giving me advice while I was in the USTC. Thanks to the associated professor in the USTC, Jianlin Wang, who taught me of the usage of most equipment in the Lu group and making the concrete research plan with me.



Figure 1: A river near the school.