

An unforgettable learning experience at Friedrich-Alexander University
Erlangen-Nürnberg

-- Bian Haidong February-March, 2017

As a PhD research student from Prof. Zhengtao Xu's group, I was given an opportunity to conduct my research in Germany. It was a great honor to be invited by Prof. Patrik Schmuki to join his research group for continuing my research study. Although it was only for two months, I have learned a lot about my research topic and the life in Germany.

Prof. Schmuki is a famous researcher in electrochemistry and his recent research mainly focuses on fabrication of inorganic materials and its applications in photocatalytic towards hydrogen generation. In this two months, my research was about anodization of a new kind of Ti alloy—TiAuPt. As a result, we found AuPt alloy nanoparticles were homogeneously decorated on the TiO₂ nanotubes. This kind of materials showed great potential application in H₂ generation. As a part of work, I also learned how to set up the whole experiment process and use the gas chromatograph to detect the H₂ evolution amount. Moreover, through the group discussion, I knew more about how to come up with a new idea and their attitudes towards their research work.

Besides scientific research, I wanted to share another important thing about the city of Erlangen-Nürnberg, the largest Franconia in Germany. The university where I studied is a public research university in the cities of Erlangen and Nuremberg in the south of Germany. Nuremberg is the second-largest city in Bavaria (after Munich), with its urban areas including Furth, Erlangen and Schwabach. These areas are also strong in the fields of automation, energy, medical technology and toy industry, which make it in a growing economic situation. One of the important things left me a great impression was the weather. The area has an oceanic climate with an average temperature of ~ -3 °C in winter, much colder than the weather in Hong Kong. When I arrived, it was still in winter and the temperature was usually below 0 °C. However, when I left in early April, spring came and the temperature reached to ~ 20 °C. What I liked the most was the buildings in the city, which showed the Gothic, Baroque and Romanesque architecture features in different periods. In addition, German food, such as bratwurst, pork knuckle and dumplings, also gave me a deep impression.

Overall, I really cherish this exchange experience in Germany. I thank my supervisors for giving me this opportunity and BCH and CityU for the financial support during this study. It offers me a valuable opportunity to broaden my horizons both for my research and life experience. At last, I would like to show some photos that I took during this study.



The sunset in Erlangen, taken from the central road in the city.



The forest near the Friedrich-Alexander University, taken on the way to the university.



Downtown in Erlangen.



Overview of Nürnberg, taken from the castle.



German famous food: beer, bratwurst.



An old market Erlangen.