## Winter School in Germany – A Chinese View

Report by Dengyun Miao and Haiyuan Jia

This was our second journey to Germany and this winter school left an even larger impression on us than the summer school in Hofheim am Taunus last year.

The two main events of this winter school were the lecture program and the internal HCJRG meeting. The lectures were given by KIT professors and teachers and covered a wide range of topics relevant to energy catalysis, namely hydrogen production, Fischer-Tropsch synthesis, synchrotron characterization methods, kinetics and chemical engineering. These lectures really enlarged our scientific vision and provided some new insights into our own work. Most interesting among all presentations was the one by Dr. Dittmar from Linde Engineering on Pd membrane reactors for hydrogen generation. It offered information about markets, technologies, and challenges in hydrogen production which we knew little about. Such industrial lectures are seldom presented to PhD students in China. In the HCJRG internal meeting we presented our own results and future plans, and we received a lot of helpful advices and suggestions about our PhD work. This was a rare chance to practice our English presentation, listening and speaking skills in an international environment which we highly appreciated.

Besides all these interesting lectures and discussions, we also visited two companies during this winter school. On the day of our arrival we visited the R&D of Clariant Catalysis in Bruckmühl-Heufeld. There we saw how industrial catalysts are prepared for the first time. Another excursion took us to the Engineering Division of Linde AG in Pullach im Isartal at the end of the winter school. There they introduced their research activities on Pd membranes and industrial water pretreatment for heat exchangers. Although the visiting time was short it was very interesting to learn how research is carried out in industrial laboratories.

Besides these official activities, the beautiful scenery impressed us a lot. We arrived in Munich early in the morning and felt sleepy and exhausted from the long flight. But when we saw the fascinating scenery on the way to Bruckmühl we became excited immediately and even felt somewhat perplexed. Everything we could see was covered with snow as we drove in a beautiful white world. But this had not been the most astonishing scene we saw during winter school. That came in the high mountain Zugspitze skiing region where the winter school was held. After an adventurous outdoor snowshoeing activity we reached the top of a mountain peak where we could see a beautiful lake, white snow all around, and we even could see clouds rolling like an ocean below us. It really was like a trip to a fairyland.

What also intrigued us a lot was Bavarian culture and especially local food with its often unusual but exciting taste. All these impressions are quite different from our usual life in China. Ten days are not a long time, but undoubtedly this visit left us with a lot of lasting memories of joy, astonishment and even adventure.