



**Student:** Tingting Zhang  
Queen Mary University of  
London

**Placement:** Keit  
Spectrometers

**Role:** Test engineer

*"I got a glimpse of how knowledge is transferred into a business idea and how much work needs to be done for a conceptual product to become a real one."*

**What is the subject of your PhD?**

Condensed Matter Physics. I make organic light emitting diodes (OLED) and investigate how external magnetic fields can affect their performance and charge transport.

**Why did you decide to do a placement?**

As it is approaching the end of my PhD, there is a question for me in terms of my future career path, to stay in academia or enter industry? Doing a placement in a company provides me with a good opportunity to find out answers to questions like how does it feel to work in a company, can I apply what I learnt at university to solve real problems and can I fit in and enjoy a working environment etc?

**Describe a typical day on placement:**

The first part was more about getting to know the purpose of the experiment and how to set up the experimental equipment. During this period, I would read documents provided by my supervisor, play with the experimental components and software and set up the experiment and test it to make sure that it was doing what we wanted it to do. The second part was more about data analysis and optimising the existing experiment or designing a new experiment. During this period, I would write codes for data analysis and batch processing, discuss the results with my supervisor, draw conclusions or find out new problems and try to solve these problems.

**What skills and knowledge do you feel you have learned during the placement?**

I have learnt about infrared spectroscopy and some hands-on skills in using optical components to set up experiments. I got a glimpse of how knowledge is transferred into a business idea and how much work needs to be done for a conceptual product to become a real one and what sort of tests need to be performed before it enters the market. Last but not least, I acquired some awareness about how people from different fields could function as a team and find innovative solutions for problems.

**How do you think doing a placement has benefited you for the future?**

I found myself quite enjoying working in a company environment. This experience has taught me about the transferability of knowledge which has opened my mind for future job hunting. I have also met a lot of nice people which has encouraged me to communicate more.

**What advice would you give to a PGR student who might be interested in seeking a placement?**

Try as many placements as you can. They will help you know yourself better and make better choices. Those you are interested in will enable you to strengthen and extend what you already know. For those that you are less interested in, give them a try anyway if you have the time. You can always learn new things which may be useful later and it allows you to explore your potential and opens up more choices for your future career.

**Employer perspective:** Having a placement student was a valuable addition to our product development team. The skills and experience that Tingting brought allowed us to kick-start some important product lifetime testing, and has left us with a robust experimental method that we continue to use.