



**Student:** Rhiann Canavan, University of Surrey

**Placement:** Crossfield Fusion

**Role:** Experimental Diagnostics Intern (now employed as an Scientific Project Manager)

*“The internship allowed me to discover a company which I had never heard of before, and whose ambition I am very motivated by.”*

### What is the subject of your PhD?

Experimental Nuclear Physics, gamma-ray spectroscopy, studied as a collaborative PhD with NPL and the University of Surrey.

### Describe a typical day on placement

The role focused on helping to build and test electric circuits. I ran a vacuum system, operating valves and reading gauges and making measurements of current and voltage to infer the behaviour of our system. As a result, I had many technical discussions with the chief technical officer, helping to decide the best approach for creating the equipment we needed.

### What skills and knowledge have you gained during the placement?

I learnt a lot about fusion technology and the different approaches to try and achieve nuclear fusion. I also learnt about electric circuits, high voltage supplies and how to operate vacuum systems. I have gained a better understanding of commercial work and the deadlines involved in trying to develop a product.

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

The internship allowed me to discover a company which I had never heard of before, and whose ambition I am very motivated by. I have been offered a permanent position with the company as an Experimental Project Manager and am very excited to continue working with them.

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

Apply for as many places as possible as the industrial experience and knowledge you will gain is priceless. Whether you can continue working with the host company or not, you will gain valuable skills to build up your CV and increase your employability. Ask as many questions as you can while you are on the placement, immerse yourself in the work and take advantage of the opportunity to develop your technical and transferable skills.

### Employer perspective

We wanted to offer placements because we needed some help and to build a team of people to develop the technology. As a small company we couldn't afford to make mistakes with future employees so the placement scheme gave us the opportunity to get to know the students and see if there was a good fit. Rhiann's placement went well and we've now offered her a job as a Scientific Project Manager.