



Student: Sylvain Wear
University of Portsmouth
Placement: UK Atomic Energy
Authority
Role: Camera Technician

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Describe a typical day

At 7:30 I would arrive at Culham Science Centre and usually deal with whichever task I was doing the day before until my supervisor arrived. My experiments revolved around the testing of 3 cameras, the old Hitachi analogue CCD camera, the Evolve 512 Delta EMCCD spectroscopy camera and the WiDY camera. The WiDY and Hitachi were tested with a black body hot source (to simulate radiation inside a fusion reactor) and filters that filtered out any light that wasn't Infrared. These experiments look at how the digital levels of the camera are affected by the temperature of the hot-source, the filters used and the exposure time of the camera. The objectives of these experiments were to find out what temperatures caused the CCD to reach saturation but also to find the transmittance of each filter.

Sometimes I'd have a cooked lunch in the canteen with my colleagues from K1 or with other students but normally I would prefer eating my packed lunch in my office so I could get some extra work done before I clocked out. The hot-source takes about 2 hours to cool down to a safe temperature so I would switch it off at around 14:00. My work day ended at 16:30.

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

I believe this placement has prepared me for a work environment in the field of professional scientific research and has taught me a lot in advance of the nuclear physics unit for my third year at university.

Living in Didcot was also my first time living away from my parents so I also learned to look after myself as an independent adult.

What are your next steps?

Working at Culham Science Centre has made me reconsider my goals for the future. I never even thought about what I wanted to do after I finished my BSc but now I may consider continuing my studies to PhD level. Hopefully UK Atomic Energy Authority may take me on a second time for me to do a research project for them.

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