Industrial Placement Report

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From June 2016 to September 2016 I undertook a three month industrial placement at the Felling site of Akzo Nobel. Akzo Nobel is a large multinational company selling and developing decorative paints, performance coatings and speciality chemicals. I was based in research and development for protective coatings, a branch of the performance coatings side of the business, and specifically I was working in the anti-corrosion group. This placement, while organised with the cooperation of the CM-CDT and generously funded by the SUPA industrial placement scheme, was mostly organised by my supervisor and a graduated PhD student of his, now working for Akzo Nobel. This has taught me how important it is to stay in contact with the network of people you meet whilst researching your PhD.

My role as a research chemist at Akzo Nobel was fairly similar to that as a laboratory based PhD student with most days comprising of lab experiments and analysis of results. For this role, I had to navigate a knowledge gap, going back to chemistry I have not studied for at least three years. I enjoyed the opportunity to refresh my knowledge of these areas and it was a welcome break from my PhD topic. Although similar in many ways to academic research, the priorities of a company are different to academia in that they are more focussed on the final product. There is more emphasis on whether a new formulation is an improvement on a previous one in properties or regulation compliance. There are different types of projects run by the anti-corrosion group in order to achieve this; formulation testing, test method development and innovation projects. Formulation testing involves testing new and existing formulations for performance and comparing these results to the mechanical and physical properties of the coatings. Test method development is what it says on the tin and involves improving current ways and developing new ways of assessing coating performance. Innovation projects involve taking new ideas from academic research or from within the company and investigating whether these could be used to create new formulations. Whilst at Akzo Nobel, I was working on an innovation project and trying to establish whether it would be possible to use a new technology to improve the performance of anti-corrosion coatings. This type of project is probably the most similar to an academic research project but during the placement I was still able to attain an overview of the company and learn about the way research in industry is run. It has been an excellent opportunity for me to experience how large-scale industrial research is undertaken and not only at the initial research level my project covered. That I enjoyed my time here has, in part, been due to the friendly and welcoming team in protective coatings. I would like to thank them all for their help, guidance and knowledge sharing and I hope they also benefited from this placement.
Although initially a daunting prospect, particularly if entering an industry unrelated to your PhD, I would thoroughly recommend undertaking an industrial placement. It is a unique opportunity to experience science within a commercial setting whether research based or not. It can help you make a decision about your own career path after your PhD and also adds useful experience to your CV. Finally, it will expand your professional network which, as evidenced by the occurrence of my placement, can be incredibly important.