

## A few words from our Careers Tutor, Dr John Snaith

**Preparing for your future career should be one of the first things you think about as you start university.**

Whether you have a clear idea of where your future aspirations lie or would rather consider the broad range of opportunities that are available once you have your degree, our Careers Network can help you achieve your goal.

The employability of our graduates is paramount, as employability support and skills training are embedded throughout our courses. The University has recently invested £5 million in its multi award-winning careers and employability services, Careers Network, which has allowed an expansion in specialist careers consultants, who are now based within each School, and are able to offer careers guidance that is tailored to each academic subject area.

A significant part of this investment has been in national and international internships, with Careers Network staff now dedicated to liaising with employers to identify internship opportunities and to help you to succeed in your application, along with funding to support you whilst on your internship.



Our students also have access to mentoring on a one-to-one basis by some of the University's most successful national and international alumni.

Your generic employability skills can be further enhanced through the Personal Skills Award, a module that you can take in addition to your main study modules, as well as certificated skills programmes led by major employers.

As a Birmingham Chemistry graduate you will possess excellent core skills in numeracy, IT and literacy, as well as highly-developed problem-solving, team-working, and communication skills, all of which are deemed crucial by employers. Combining these transferable skills with an in-depth knowledge of Chemistry, both theory and practice, you will enter the workplace, ready to interpret complex data and propose innovative solutions to challenging problems, whether that involves advising a multinational company on its latest business acquisition as an accountant, inspiring the next generation of Chemists as a school teacher or designing new molecules and materials to solve societal needs.

## Silvia Cooper, Chemistry MSci (Hons)

**KPMG auditor**

I graduated from the University of Birmingham with a MSci Chemistry degree, and now work at KPMG in their Audit Department. Day-to-day, my job involves visiting clients and performing tests on their financial records in order to verify the accuracy of their financial statements.

At first glance it would appear that my degree in chemistry is irrelevant to my current work, but actually I use the skills acquired during my studies at Birmingham every day. Studying chemistry taught me to have a questioning mind and developed my investigative skills, which as an auditor is invaluable as much of my work depends upon being able to identify, investigate and obtain explanations for discrepancies / inconsistencies in data.

During my degree I also developed my problem-solving skills through designing my own laboratory experiments, particularly as part of my final-year project. I learned the importance of patience and perseverance even when things don't go to according to plan! I learned how to be a more effective member of a team, and how to write reports. All of these skills are therefore not only useful to pursuing a scientific career, but can be transferred to other careers. When I graduated I wasn't sure what field I wanted to go into; studying chemistry can lead to a challenging career in many industries... not just science!



## James Steadman, Chemistry MSci (Hons)

**Organic Analyst,  
Severn Trent Water**

Studying chemistry at Birmingham has definitely

prepared me for working at Severn Trent. Had there not been a wide variety of practical sessions throughout my degree, I would have found starting a lot more daunting. My Masters project in particular provided me with a great opportunity to learn about different techniques within the laboratory, whilst the lectures prepared me for the more mathematical applications of the industry.



## Michaela Yates, Chemistry MSci (Hons)

**Materials Engineer, BAE Systems**

I am now working as a Materials Engineer within the Stealth Technology Group at BAE Systems, a global supplier of defence and security products. My role within the company involves working on a number of projects which are all very exciting and top secret! What I can say is that our group deals mainly with radar absorption materials which are primarily designed for use in aerospace applications. I work in a fast-paced environment where every day brings something different. I've had to learn a lot very quickly, but so far it's been an incredibly enjoyable and rewarding experience. I am lucky enough to have a job in which

I have a variety of roles. In the morning I might be in a meeting with a customer discussing the progress of one of my projects, and then in the afternoon I might be conducting research and ordering the materials that I will use to assemble a component which I will later test for a client. My job is extremely challenging and interesting, and I'm really looking forward to discovering where my career can take me.



# Where does a degree from Birmingham Chemistry take you?

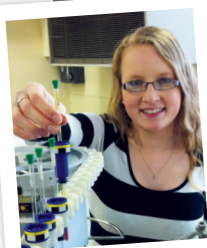


**Marcus Main,  
Chemistry  
MSci (Hons)  
and PhD**

## **Defence Science and Technology Laboratory (DSTL)**

I have great memories from my time at the School of Chemistry at Birmingham. The eight years I spent there studying for my MSci and then PhD (in Synthetic Chemistry with Dr John Snaith) were fantastic and really set me up for working in the big wide world. When I left Birmingham I got a job at the Defence Science and Technology Laboratory (DSTL, Porton Down) as a Project Manager overseeing work relating to biological and chemical defence. I have since seen the light and transferred to the laboratories at Porton Down where I am back working as a bench synthetic chemist.

**Gemma Bullen,  
Chemistry MSci (Hons)**



## **PhD in Chemistry**

After completing my undergraduate MSci Chemistry course at the University of Birmingham I decided that I wanted to pursue a career in research, largely due to the enjoyment I got out of my final-year

research project. I am now studying for a PhD in Chemistry researching into the use of anthracene as a single-nucleotide polymorphism (SNP) detector and exploiting its photodimerisation properties to control peptide-DNA binding.

I work as part of two research teams, managing my own time and planning my own experiments but meeting regularly with my peers and supervisors to discuss results and exchange ideas. My undergraduate course taught me all the skills and techniques I needed to progress into active research and the academic staff at Birmingham really inspired me with their passion and knowledge of their subject areas.



**Sarah Upton (née Elting),  
Chemistry MSci (Hons)**

## **Development Scientist, Croda** During the final year of my Masters degree in Chemistry, I started

applying for jobs and although I wasn't exactly sure what kind of company I wanted to work for, I knew that I wanted to continue working in a lab, preferably on a graduate scheme. I was therefore delighted to be offered a place on Croda's Technical Development Programme in the April of my final year, just after I had finished my dissertation. This Programme has allowed me to start off in a lab-based job; however due to the rotational nature of the scheme, I will also be sampling other job roles in the company, which will allow me to change to a more commercial role later should I wish.

Croda is a global leader in natural-based speciality chemicals which are sold to virtually every type of industry. Croda's products form vital ingredients in many 'household name' products and every day, each one of us will use a Croda product in some shape or form. Croda Leek, where I work, specialises in the production of speciality lipids, specifically Omega-3 concentrates, super-refined oils and speciality esters, which are sold mainly to the healthcare and personal care markets.

My job as a development scientist is very varied. I spend the majority of my time in the lab working on a number of projects, both long- and short-term. My role involves developing new products to meet specific customer requirements, developing new manufacturing routes for existing products and optimising current manufacturing processes. Having only been with Croda for a short time, I am feeling very much at home and already have been given a number of projects. Recently, I developed a new route for an existing product that was struggling to meet the required specification. My route has since been approved and the next step is to scale-up the process from the lab to the pilot plant and then on to the main plant for manufacture and distribution.

For every experiment I carry out in the lab I have to write reports, the style of which are very similar to the style of report that Birmingham encourages. My final-year project at Birmingham also gave me experience in presenting my work, which I now have to do regularly. In addition to this, skills, such as time-management and meeting deadlines, which I now use on a day-to-day basis, were built up during my time at Birmingham. Indeed, whilst I didn't realise it at the time, many aspects of my Birmingham Chemistry degree have really helped to prepare me for my working life.

**Joe Watkins,  
Chemistry MSci (Hons)**



## **Pricing and Marketing Analyst, John Lewis**

I graduated from the University of Birmingham with a 2:1 in Chemistry and joined John Lewis a few months later as a Pricing Analyst in their Head Office. In this role I worked with all of John Lewis' Buying Teams, John Lewis.com, our Branding Team, Retail Operations and, of course, our nationwide branches to ensure that the business complies with our promise to be 'Never Knowingly Undersold'. This involved analysing our competitors' pricing and availability, co-ordinating our 'Price Match' events and being responsible for the promotions that we run. I now focus

on analysing all of the marketing campaigns, publication and seasonal campaigns which John

Lewis runs. My work here influences decisions from the Senior Buying Team down to what happens on the shop floor.

John Lewis is a fantastic company to work for: everyone is a Partner, which means we are all co-owners of the business, and share in the profits we make through our yearly bonus. Being a Partner is at the heart of the John Lewis ethos and everyone is able to make contributions to improving the business and question the *status quo*.