UNIVERSITY OF BIRMINGHAM

College of Engineering and Physical Sciences

What do Birmingham postgraduates do?

School of Chemistry

First destinations of postgraduates

- Analysis of first employment destinations for the College of Engineering and Physical Sciences
- Employability data for Chemistry postgraduates, 2009–13
- Illustration of the range of occupations undertaken by our postgraduates

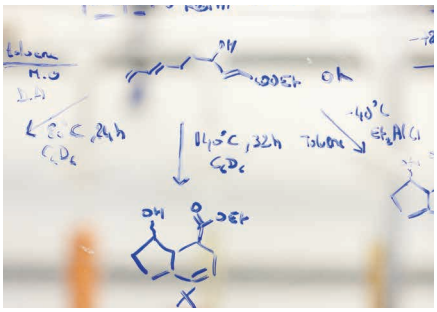
www.birmingham.ac.uk/chemistry

Foreword

I AM DELIGHTED TO INTRODUCE 'WHAT DO BIRMINGHAM POSTGRADUATES DO?' WHICH LOOKS IN DETAIL AT THE FIRST DESTINATIONS OF OUR CHEMISTRY POSTGRADUATES AND AT EMPLOYMENT PROSPECTS FOR ALL POSTGRADUATES WITHIN THE WIDER COLLEGE OF ENGINEERING AND PHYSICAL SCIENCES.

In addition to providing accessible information on employment destinations, this publication is also designed to give an insight into the kinds of employment sectors and jobs for which a postgraduate degree at Birmingham can prepare you.

Pursuing a postgraduate degree offers you the opportunity to explore your chosen area of interest in depth, as well as developing your knowledge and understanding in a subject area about which you are truly passionate. Beyond the transferable skills that you will take with you into the workplace, your postgraduate qualification will give you the chance to engage in critical enquiry, to grow as a scholar and even to become an expert in your field.



Here, we show you how your postgraduate qualification can help you make that knowledge and expertise work for you after graduation. For the school that is most relevant to you in the College (Chemical Engineering; Chemistry; Civil Engineering; Computer Science; Electrical, Electronic and Systems Engineering; Mathematics; Mechanical Engineering; Metallurgy and Materials; or Physics and Astronomy) you will see a snapshot of the achievements of our postgraduates six months after graduation. All data is taken from the results of a 'Destinations of Leavers' survey issued to our postgraduates after this time.

You will be able to see, by school, how many of the postgraduates who replied to this survey successfully entered employment and/or further study within just six months, along with a range of the diverse and exciting career opportunities that will be open to you after studying for a postgraduate degree in the College of Engineering and Physical Sciences.

Accompanying the data are case studies in which recent postgraduate alumni share their experiences of postgraduate study at Birmingham. Here, our alumni talk about the value inherent in postgraduate study, the knowledge and skills they developed during their degrees and where their qualifications have taken them since graduation.

I hope you find the information presented here useful and our alumni stories inspiring. We very much look forward to welcoming you to our campus soon.

Professor Mark Sterling
Director of Postgraduate Programmes
College of Engineering and Physical Sciences

'As a top employer of graduates, we recognise the important role postgraduate study can play in supporting high-calibre, motivated individuals, who are ready to enter the world of professional services.'

Lauren McCafferty,
Student Recruitment Manager, PwC.

College of Engineering and Physical Sciences

Employability

The College of Engineering and Physical Sciences is at the leading edge of modern science and engineering, transforming our understanding of the world to make life easier, healthier and more sustainable.

The College covers a broad range of world-leading research, from developing micro-engines to particle physics research at CERN. With a century of excellence in research and teaching, the College offers exciting initiatives in new fields of study and spearheads activities in strategically important STEM subjects – Science, Technology, Engineering and Mathematics.

The College of Engineering and Physical Sciences plays a significant role in creating new knowledge, training new generations of engineers and scientists, and interfacing with industry.

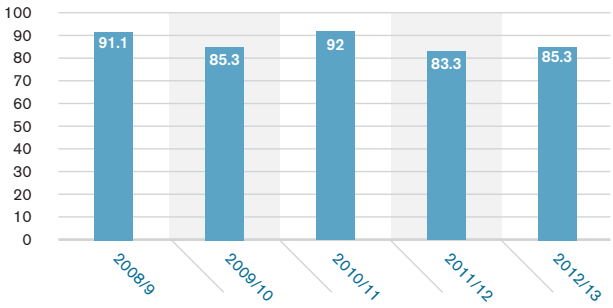
The College consists of the following nine schools:

- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science
- Electronic, Electrical and Systems Engineering
- Mathematics
- Mechanical Engineering
- Metallurgy and Materials
- Physics and Astronomy

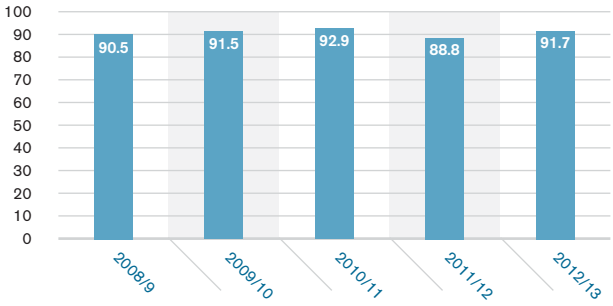
Over the last five years, 90.9% of taught postgraduates and 92.5% of research postgraduates from the College of Engineering and Physical Sciences have been in work and/or further study just six months after graduating.

The two charts to the right show the breakdown of these statistics for each year, for taught postgraduate and research postgraduate respondents.

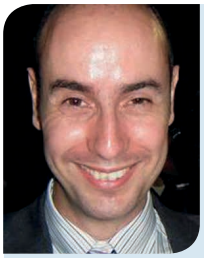
Percentage of Engineering and Physical Sciences taught postgraduate respondents in work and/or further study six months after graduation



Percentage of Engineering and Physical Sciences research postgraduate respondents in work and/or further study six months after graduation



SOURCE: *Destinations of Leavers from Higher Education Institutions*, Higher Education Statistics Agency, 2009–13



'I studied Chemistry and then went on to do a PhD in Chemistry at the University of Birmingham, followed by a short postdoc. I now live in Malta and work at Actavis, the third largest generic drugs company worldwide, in the research and development department.

'In retrospect, my time at Birmingham served me very well for life after university. The experience gained at Birmingham has encouraged me to approach any task with a positive outlook. The skills I gained from my undergraduate degree and doctorate were not only focused on the narrow confines of my degree subject: some of the most valuable lessons learned were not from the textbooks or lab work. The many transferable skills I gained from the courses and staff helped me become an effective part of the workforce; such skills make you an attractive applicant for any job – not just those in your chosen field. I gained confidence from interacting with people, learning to work with them and, sometimes, in competition with them. Effective presentation of ideas and conclusions – and arguing for or against those – along with analysis and presentation of data were also incredibly important skills I took away from Birmingham. Employers find these skills invaluable and they have helped me to excel and achieve international recognition within the company I work for, recently winning an award for work that was above and beyond that expected of me.'

James Prendergast, PhD Chemistry, graduated 2010
James now works in research and development for Actavis, a global, integrated specialty pharmaceutical company focused on developing, manufacturing and distributing generic, brand and biosimilar products.

LEARN MORE
www.birmingham.ac.uk/pgprofiles

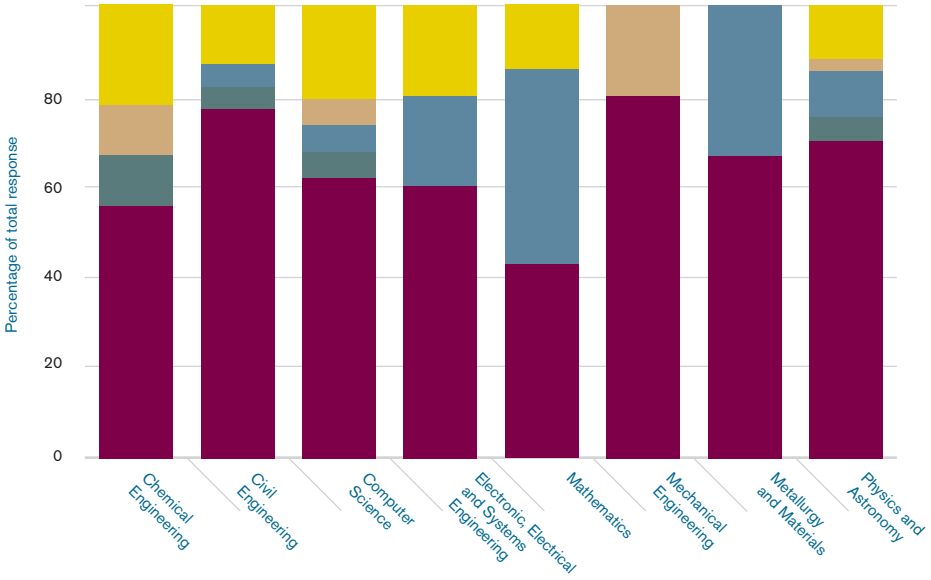
College of Engineering and Physical Sciences

Postgraduate destinations

Taught postgraduate destinations

The chart to the right summarises the destinations of Engineering and Physical Sciences taught postgraduates from the 2012/13 academic year, six months after graduation:

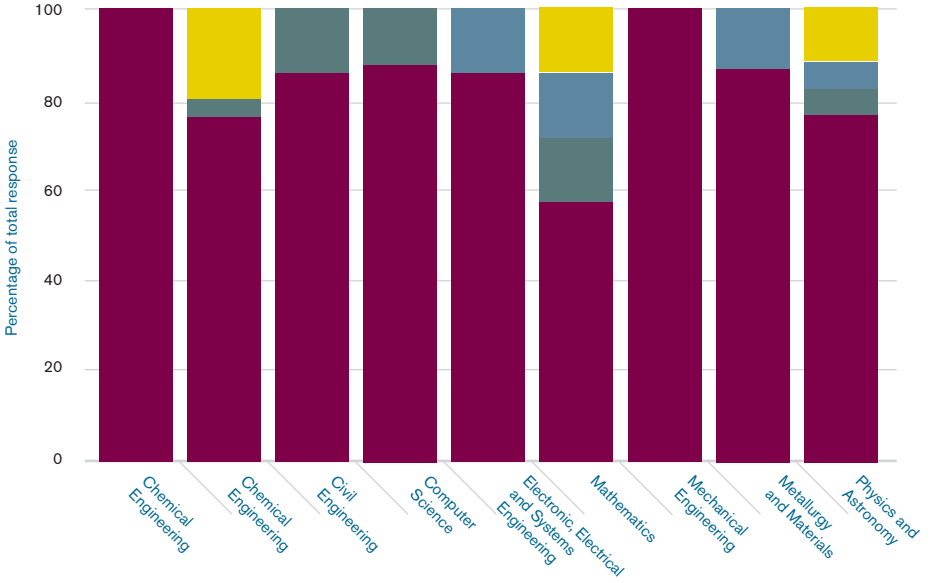
- Working
- Working and studying
- Studying
- Other
- Unemployed



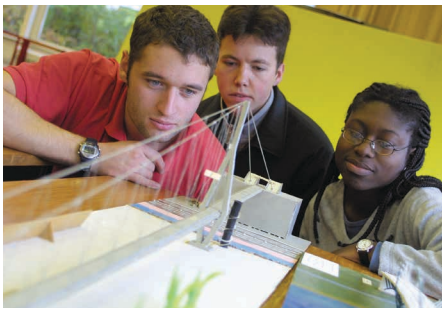
Research postgraduate destinations

The chart to the right summarises the destinations of Engineering and Physical Sciences research postgraduates from the 2012/13 academic year, six months after graduation:

- Working
- Working and studying
- Studying
- Unemployed



SOURCE: *Destinations of Leavers from Higher Education Institutions*, Higher Education Statistics Agency, 2009–13



'At Atkins, most of our roles have a minimum requirement of a Masters degree. We value technical knowledge and academic achievement, which we can then build on for the graduate programme. This is why we require most of our graduates to have a Masters.'

Kate Poade, Assistant Graduate Recruitment Advisor, Atkins.

School of Chemistry

EMPLOYABILITY

The School of Chemistry is one of the leading centres of chemistry research and teaching in the UK, supported by state-of-the-art facilities, with enthusiastic and dedicated staff and students.

Highlight:

Over the past five years:

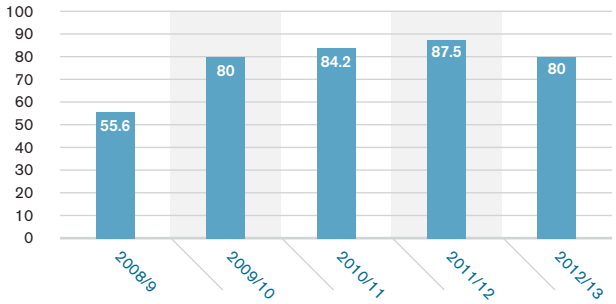
- 77.5% postgraduate respondents were in work or further study six months after graduation

With the technical skills and expert subject knowledge acquired during their studies with us, many of Birmingham's Chemistry postgraduates go on to successful careers in various sections of the chemical and engineering industry, including chemical, pharmaceutical and civil engineering; water and energy companies; consultancies; banks; and local government and government-supported scientific establishments.

Some others choose to stay in the area of education and research in chemistry, forging careers in teaching and in academia.

The two charts to the right show results from 'Destinations of Leavers' surveys for our Chemistry postgraduates over recent years.

Percentage of research postgraduate respondents in work and/or further study six months after graduation



SOURCE: *Destinations of Leavers from Higher Education Institutions*, Higher Education Statistics Agency, 2009–13

RANGE OF OCCUPATIONS

Below is an overview of the kinds of employment sectors, organisations and professions that recent Chemistry postgraduates have entered, based on responses to 'Destinations of Leavers' surveys conducted six months after graduation.

Range of employment sectors

- Accounting, auditing and tax consultancy
- Food manufacture
- Higher education and further research
- Information technology and computer services
- Manufacture of paints, varnishes and similar coatings, printing ink and mastics
- Manufacture of tobacco products
- Pharmaceutical engineering
- Research and development in natural sciences and engineering
- Telecommunications

Range of employers

- AkzoNobel
- Bostik
- British American Tobacco
- National Nuclear Laboratory
- Phyto Garda SRL (medical devices, food supplements and cosmetics)
- Reckitt Benckiser PLC
- Royal Society of Chemistry
- Rutgers University (New Jersey, USA)
- SAS Institute (business analytics)
- SelectScience
- University of Birmingham
- University of Liverpool

Range of occupations

- Accountant
- Analytical Chemist
- Campaign Coordinator
- Education Executive (Learn Chemistry)
- Graduate Scientist
- Laboratory Manager
- Lecturer
- Postdoctoral Researcher
- Research and Development Graduate
- Research Fellow
- SAS Installation Consultant
- Theoretical Chemist