Career Resources for Chemistry Students

Think about your skills

Studying chemistry at Leeds will give you an excellent base for your future career. Each year, approximately half of the graduating class will progress to further study which will normally be PhD, but also Masters and PGCE (the qualification for the teaching profession). Many will take up science jobs, but a number of graduates will enter careers in non-related areas, such as accounting, law, retail and marketing.

A degree in chemistry develops all of the transferable skills that employers are seeking in today's employment market. Your course develops your skills in problem-solving, time management, handling a mass of diverse data, and drawing conclusions. It also strengthens your skills in numeracy and information technology. Written and oral communication underpin your degree work and should make you an effective, articulate communicator, thus putting you in a good position to either pursue a science-based career (research and development or management, science journalism, patent law, etc) or move into another area. These are some of the skills you will be able to demonstrate from your degree course.

Analytical skills – You will develop an analytical approach and be able to apply logical reasoning to problem solving. You will be highly adaptable, being able to address new problems in new contexts and transferring knowledge from one problem to another.

Communications skills – You will have become an effective and articulate communicator through your work and will be able to present complex ideas and reasoned arguments to your peers. Explaining your ideas, answering questions, communicating results and outlining the main details of reports is likely to be a key feature of the degree course.

IT skills - High-level IT skills will be developed through the use of computer applications which you will be able to apply in a range of contexts.

You will also have developed more general transferable skills including:

- numeracy
- problem solving
- planning and organising
- commercial awareness
- team working.

The sheet ‘Options with Chemistry’ which can be found at www.prospects.ac.uk/options_chemistry_your_skills.htm will give you further information. Also look at http://careerweb.leeds.ac.uk/info/4/make_yourself_employable/179/how_to_develop_your_skills and list the skills you have to offer with examples. The Graduates Yorkshire Virtual Career Coach www.graduatesyorkshire-vcc.info/ will also help you assess your career options.
What motivations and values influence your job choice?

The skills you can offer are part of the story, but you also need to consider factors like values, interests and motivation in deciding on a fulfilling career. You can use the Prospects Planner www.prospects.ac.uk/links/pplanner career planning tool to help you decide.

Careers Centre Resources for Chemistry Students

- Work experience, both paid and voluntary, is valuable when you start job hunting regardless of the career you wish to pursue. We have resources at the careers centre and on our website to help you: http://careerweb.leeds.ac.uk/info/6/work_experience
- Our exclusive online database has vacancies and events for University of Leeds students: https://stars.leeds.ac.uk
- It might be helpful to see what graduates from previous years have gone on to do. The Leeds graduate destinations are available at: http://careerweb.leeds.ac.uk/info/13/career_planning/226/graduate_destinations/8
- There could be Leeds graduates working in an area that interests you, so check out the Leeds Network database at: http://leedsnetwork.leeds.ac.uk
- If you are interested in running your own business, the Spark team here at Cromer Terrace can help you: http://careerweb.leeds.ac.uk/info/15/starting_a_business_spark
- Keep an eye on Careers Centre events – presentations, workshops and fairs – all are advertised on our website.

The advisory staff at the Careers Centre (5-7 Cromer Terrace) will be happy to discuss your career plans with you and Senior Careers Consultant, Caroline Ramage, holds regular surgeries in the department. The following resources in our Information Room may also help with your career planning:

Turn your degree into a career: a step-by-step guide to achieving your dream career / Michael Collins & Benjamin Scott
The Times A-Z of careers & jobs / edited by Susan Hodgson
Dude, where's my career? / Tanya de Grunwald
You want to do what?!: 100 alternative career options / Kathleen Houston
Get hired in a tough market: insider secrets to find and land the job you need now / Alan De Back
What employers want: the work skills handbook / Karen Holmes
Build your own rainbow: a workbook for career and life management / by Barrie Hopson and Mike Scally
How to get a job you'll love / John Lees
What's your type of career? Find your perfect career by using your personality type / Donna Dunning
Dare to be different: 101 unconventional careers / Polly Bird
Managing careers into the 21st century / John Arnold
After you graduate: finding and getting work you will enjoy / Leila Roberts
The graduate jobs formula: how to land your dream career / Paul Redmond
Employability skills / David W. G. Hind & Stuart Moss
Career detection: finding and managing your career / Brian McIvor
Career skills: opening doors into the job market / David Littleford et al
From new recruit to high flyer: no-nonsense advice on how to fast track your career / Hugh Karseras
Skills for success: the personal development planning handbook / Stella Cottrell
How to get the best graduate job: insider strategies for success in the graduate job market / David Williams et al
Career opportunities in the publishing industry / Fred Yager, Jan Yager
Journalism uncovered / Emma Caprez
The universal journalist / David Randall
The NCTJ essential guide to careers in journalism / Andy Bull
How to work as a freelance journalist / Marc Leverton
How to get a job in publishing: a really practical guide to careers in books and magazines / Alison Baverstock et al
Chartered patent attorneys
New Scientist careers guide
Targetjobs : engineering
Careerchoice. Engineering & technology
The secrets of selling : how to win in any sales situation / Geoff King
TARGETjobs. Retail, management & sales
Initial teacher training handbook
Teaching uncovered
Targetcourses. Teaching
Directory of teacher training courses 2009: the fully comprehensive guide to all the teacher training courses in the UK
The trainee secondary teacher's handbook / Gererd Dixie
Directory of publishing
The ethical careers guide
Becoming a successful scientist: strategic thinking for scientific discovery / Craig Loehle
Careers with a science degree: over 100 job ideas to inspire you
Targetjobs. Public service
Moving on in your career: a guide for academic researchers and postgraduates / Lynda Ali and Barbara Graham

Occupations files:
  Section A - Education
  Section H - Buying, Selling & Retailing
  Section T - Engineering & Manufacturing
  Section V - Scientific Research, Analysis & Support
  Section W - Information, Patents & Heritage Management
  Section Y - Publishing, Media & Performing Arts

We also have books, leaflets and DVDs to help with applications, CVs and interviews.
Further Sources of Information and Vacancies for Chemistry Students

General

University of Leeds Careers Centre vacancies website: https://stars.leeds.ac.uk
Prospects website: www.prospects.ac.uk
Prospects Jobs and Courses: www.prospects.ac.uk/links/graduate
TARGETjobs: http://targetjobs.co.uk/graduate-jobs/
Graduates Yorkshire: www.graduatesyorkshire.co.uk
New Scientist Jobs: www.newscientistjobs.com
NHS Careers: www.nhscareers.nhs.uk/
Royal Society of Chemistry: www.rsc.org/
Jobs in Food Manufacturing: www.jobsinfoodmanufacturing.co.uk/
The Guardian: www.guardian.co.uk
The Times: www.thetimes.co.uk
Local Government Jobs: www.lgjobs.com
Jobs.ac.uk: www.jobs.ac.uk
National Careers Service: https://nationalcareersservice.direct.gov.uk/advice/planning/jobfamily/Pages/default.aspx
ABPI Careers: http://careers.abpi.org.uk/working-in-the-industry/commercial/Pages/default.aspx
Science Recruitment Group: www.srg.co.uk/

Analytical Chemist

Analytical chemists typically use a diverse range of methods to investigate the chemical nature of substances. The aim of such work is to identify and understand the substance and how it behaves under different conditions. In the pharmaceutical industry, for example, analytical chemists are involved throughout the drug development process; they study the physical or chemical properties of drug substances and formulations, with a view to determining the quality and stability of drug products.

Analytical Science Network: www.asnetwork.org/

Clinical Biochemist

Clinical biochemists carry out complex analytical work. They analyse and interpret data relating to patients’ samples to assist with the investigation, diagnosis and treatment of diseases. They work with other health professionals, such as biomedical scientists, to detect changes in the complex biochemistry of body fluids. They develop and implement new techniques, interpret results, liaise with and advise clinical staff, are responsible for the evaluation and quality assessment of diagnostic tests and play a role in developing and managing hospital and community analytical services.

ACB News: www.acb.org.uk/site/newsindex.asp
Biochemical Society: www.biochemistry.org
Association of Clinical Biochemistry: www.acb.org.uk/site/clinscicareers.asp
The Association of Clinical Scientists: www.assclinsci.org/

Clinical Research Associate

A clinical research associate (CRA) sets up, monitors and completes clinical trials. A clinical trial is a scientific study of the effects, risks, efficacy and benefits of new and existing medicines, conducted by pharmaceutical companies or contract research organisations (CROs) on their behalf.

Association of the British Pharmaceutical Industry (ABPI): www.abpi.org.uk
Clinical Research Focus (CRfocus): www.icr-global.org/crfocus/
Forensic Scientist
Forensic scientists are primarily concerned with examining contact trace material associated with crimes. This follows the principle that 'every contact leaves a trace', which will offer potential evidence to link a suspect with the scene of the crime, the victim or the weapon. According to the Forensic Science Society, 'forensic science can be simply defined as the application of science to the law.' Scientists provide impartial scientific evidence for use in courts of law to support the prosecution or defence in criminal and civil investigations.

Forensic Science Service (FSS): www.forensic.gov.uk
Forensic Science Society: www.forensic-science-society.org.uk/
LGC Forensics: www.lgc.co.uk/divisions/lgc_forensics.aspx
British Academy of Forensic Sciences (BAFS): www.bafs.org.uk

Materials Engineer
Materials engineers are responsible for the research, specification, design and development of materials to advance technologies of many kinds. Their expertise lies in understanding the properties and behaviours of different materials from raw substances to finished products. The role is also referred to as 'materials technologist' or 'materials scientist'.

Institute of Materials, Minerals & Mining (IOM3): www.iom3.org/
Engineering Council: www.engc.org.uk/
Institute of Mechanical Engineers (IMechE): www.imeche.org/Home

Medical Sales Rep
Medical sales representatives are a key link between medical and pharmaceutical companies and healthcare professionals. They work strategically to increase the awareness and use of a company's pharmaceutical and medical products in settings such as general practices, primary care trusts and hospitals.

Pharmaceutical Field: www.pharmafield.co.uk/
Chase Medical and Healthcare: www.chasepharmajobs.com/
Chartered Institute of Marketing (CIM): www.cim.co.uk
Institute of Sales & Marketing Management (ISMM): www.ismm.co.uk

Patent Attorney
A patent attorney obtains and enforces intellectual property rights on behalf of either individual inventors or organisations. Patent attorneys (also known as patent agents) assess whether inventions are new and innovative and therefore eligible to be patented. They draft and carry through applications to secure patents and act to enforce inventors' rights if patents are infringed. To become a patent attorney, a degree (usually a 2:1) in a science, engineering or technical subject is required.

Patent Examiner
Patent examiners assess applications for patents, which are granted to inventors to give them the right to stop other people using, selling or making their inventions. Patent examiners develop specialist expertise within a particular area such as biotechnology or electrical engineering, but opportunities may arise to change subject specialisms. Relevant degree areas include physical, mathematical and applied sciences, life science, medical science and engineering.

Institute of Patentees and Inventors: www.invent.org.uk
Institute of Trade Mark Attorneys (ITMA): www.itma.org.uk/
Intellectual Property (IP) Institute: www.intellectualpropertyinstitute.org/
The Intellectual Property Office: www.ipo.gov.uk
World Intellectual Property Organization (WIPO): www.wipo.int/
**Product/Process Development Scientist**
Development scientists work across the manufacturing industry, on products as diverse as foods, medicines, cosmetics and paints. Process development scientists aim to optimise the performance of manufacturing systems. They are responsible for identifying and developing new processes for product manufacture and implementing process controls to ensure that quality products are manufactured in a reproducible manner.

Food and Drink Federation: [www.fdf.org.uk/](http://www.fdf.org.uk/)
FoodManJobs: [http://jobs.foodmanufacture.co.uk/](http://jobs.foodmanufacture.co.uk/)

**Quality Manager**
QA aims to ensure that the product or service an organisation provides is fit for purpose and meets both external and internal requirements, including legal compliance and customer expectations. Quality managers monitor and advise on the performance of the quality management system, produce data and report on performance, measuring against set standards.

British Quality Foundation: [www.bqf.org.uk/](http://www.bqf.org.uk/)
British Standards Institution (BSI): [www.bsi-global.com/](http://www.bsi-global.com/)

**Regulatory Affairs Officer**
Combining knowledge of scientific, legal and business issues, Regulatory Affairs Officers ensure products that are developed, manufactured or distributed by a wide range of companies to meet the required legislation. They advise on and coordinate the approval and registration of pharmaceuticals, veterinary medicines, complementary medicines, chemicals, pesticides, therapeutic devices and other products.

Clinical Discovery: [www.clinicaldiscovery.com/](http://www.clinicaldiscovery.com/)
National Institute for Health and Clinical Excellence: [www.nice.org.uk/](http://www.nice.org.uk/)
The Organisation for Professionals in Regulatory Affairs (TOPRA): [www.topra.org/](http://www.topra.org/)

**Research Scientist**
Physical research scientists study non-living systems to increase their understanding of how the physical world works. The exact nature of the work depends on whether you are employed in industry or in an academic research setting, but in either case, the work is usually laboratory-based.

National Institute for Health Research: [www.nihr.ac.uk/Pages/default.aspx](http://www.nihr.ac.uk/Pages/default.aspx)
Vitae: [www.vitae.ac.uk/1218/Postgraduate-researchers.html](http://www.vitae.ac.uk/1218/Postgraduate-researchers.html)

**Science Writer**
A science writer researches, writes and edits scientific news articles and features for business, trade and professional publications, specialist scientific and technical journals, and the general media. They need to be able to explain complex scientific information, theories and practices in clear, concise, jargon-free language that can be understood by people who are not experts in these fields.

Association of British Science Writers: [www.absw.org.uk/](http://www.absw.org.uk/)
Journalism.co.uk: [www.journalism.co.uk](http://www.journalism.co.uk)
Journalism UK: [www.journalismuk.co.uk](http://www.journalismuk.co.uk)
Newspaper Society (NS): [www.newspapersoc.org.uk](http://www.newspapersoc.org.uk) (lists groups with in-company training schemes);
Press Gazette: [www.pressgazette.co.uk](http://www.pressgazette.co.uk)
Benn's Media Directory
NUJ Training: [www.nujtraining.org.uk](http://www.nujtraining.org.uk)
Press Association Training: [www.pressassociation.com/training](http://www.pressassociation.com/training)
Toxicologist
Toxicologists plan and carry out laboratory and field studies to identify, monitor and evaluate the impact of toxic materials and radiation on human and animal health, the environment, and the impact of future technology.

British Toxicology Society (BTS): www.thebts.org

Teacher
Graduates are required to gain Qualified Teacher Status (QTS) before they can teach in a state school. The most common route to qualifying as a teacher is by doing a one-year a Postgraduate Certificate in Education (PGCE) course.

Department for Education: Teaching Agency www.education.gov.uk/get-into-teaching
AGCAS: Applying for a PGCE www.prospects.ac.uk/links/pgce
Graduate Teacher Training Registry www.gttr.ac.uk
National Curriculum http://curriculum.qcda.gov.uk/

Have you considered postgraduate study?
Each year approximately 50% of chemistry graduates stay on to do some form of postgraduate study. Some enhance their knowledge in the subject by embarking on a PhD or Masters. The following sources are available to help you choose a course:

University of Leeds Postgraduate Prospectus: http://tldynamic.leeds.ac.uk/pgprospectus/
Prospects PostGrad Database: www.prospects.ac.uk/links/pgdatabase
FindAPhD: www.findaphd.com/
FindAMasters: www.findamasters.com/
Hotcourses: www.hotcourses.com

Would you like help with your application?
We have lots of resources in our Information Room and on our website (http://careerweb.leeds.ac.uk/info/2/cvs_applications_and_interviews ) to help with applications and impress employers. Don’t forget that our advisory staff will also be happy to check over your application form or CV. It is best to bring along details of the job with your application so that we can check you have targeted it effectively. Check our website (http://careerweb.leeds.ac.uk/info/9/talk_to_us ) for times of our drop-in service.

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