

Chemist

Analytical chemists identify and analyse materials to find their chemical composition and how they react. Industrial chemists research and produce chemicals. Chemists may also specialise in medicinal or process development areas.

The Work

You might:

- carry out tests on a wide range of materials – from foodstuffs, cosmetics, paints and dyes, to fertilisers, medicines and plastics – and analyse the results
- create new products, develop existing products and design systems for testing them
- design systems for manufacturing chemicals, often in very large quantities
- supervise production processes in industry making sure they are efficient and safe
- test products to make sure they do their job properly and are safe to use
- monitor waste materials, or air, water or soil pollution and recommend ways to make improvements
- using analytical techniques and instruments, such as chromatography
- investigate the use of organic and biological compounds in medicine
- keep records, complete forms and write reports.

Pay

The figures below are only a guide. Actual pay rates may vary, depending on:

- where you work
- the size of the company or organisation you work for
- the demand for the job.

Starting salaries for chemistry graduates in industry is around £28,000 a year. Senior chemists in industry can earn up to £45,000 a year or more.

Registered clinical scientists in the NHS are generally on Agenda for Change Band 7, £50,861 to £59,159 a year. Principal clinical chemists are on Band 8a, £60,681 to £67,665 a year and Band 8b, £74,003 to £79,164 a year. Pre-registration trainees are on Band 6, £41,608 to £50,702 a year.

The current pay scales are from April 2025.

Starting salaries for scientific officers in government departments will depend on skills, experience and qualifications. Check individual departments for details of current vacancies.

Conditions

- You usually work in a laboratory but perhaps also in a factory or office.
- You may travel to meetings or conferences – a driving licence is useful.

- You will probably work regular hours but in some industries you might have to work shifts including weekends and evenings.
- You have to wear a lab coat and sometimes other protective clothing such as a face mask or gloves.
- You may have contact with dangerous or unpleasant substances.

Getting In

- You usually need a degree in chemistry. This may be a BSc Hons (SCQF Level 10), MChem (SCQF Level 11) or MSci (SCQF Level 11). For entry you need 4 or 5 Highers, normally including Chemistry and another science subject and usually English, Maths and Chemistry at National 5. Some courses may require certain other subjects.
- Some entrants have a specialist postgraduate qualification in chemistry. Those with a PhD (SCQF Level 12) are likely to enter at a more senior level.

You could work in a wide variety of jobs, including:

- pharmaceuticals, cosmetics or foodstuffs
- manufacturing textiles, dyestuffs, paints, cleaning materials, fertilisers, plastics, nuclear or oil industries, or for water boards
- hospitals (NHS or private)
- teaching.

What Does It Take

You should be:

- practical, logical and methodical
- confident to research and solve complex problems
- accurate and careful in recording results
- observant and analytical
- able to work alone or as part of a team
- able to prioritise and manage your work.

You should have:

- strong communication skills
- an enquiring mind
- IT and maths skills to analyse data
- a good eye for detail.

Training

- To become fully qualified and able to register with the Health and Care Professions Council (HCPC), you complete three years of training.
- This is either the three-year Scientist Training Programme (STP), overseen by the [National School of Healthcare Science \(NSHCS\)](#), or an STP equivalent.

- All training methods combine various clinical placements with academic study in a specialist area and usually leads to an MSc or specialist postgraduate diploma and registration with the HCPC.
- Vacancies are usually advertised on the [NHS Scotland Recruitment](#) and [NHS Education for Scotland](#) websites.
- Training may be on the job with short training courses throughout your career.
- You will need to keep up to date with new laboratory methods and with developments in your specialist subject.
- You may also study for a postgraduate qualification or take exams to become a member of a professional body. Some larger companies may support further study.

Getting On

- With experience and ability, you may move on to senior scientific or management positions.
- Some employers, such as the NHS and Scientific Civil Service, have a fixed promotion structure.
- It helps if you are willing to move and you may be able to work abroad.
- Taking a postgraduate course or joining the Royal Society of Chemistry and becoming a Chartered chemist may help your progress.

Contacts

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Royal Society of Chemistry Education

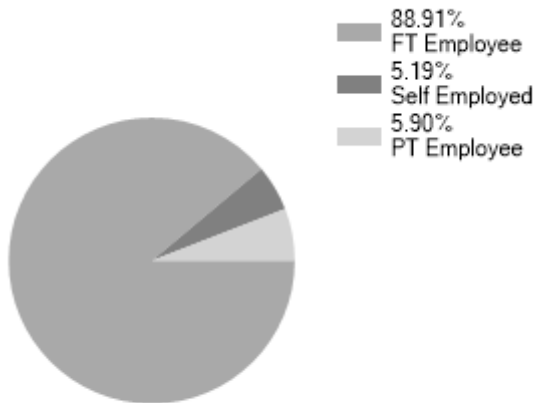
Tel: 01223 420066

Website: edu.rsc.org

Facebook: www.facebook.com/RoyalSocietyofChemistry

Statistics

Employment Status UK %

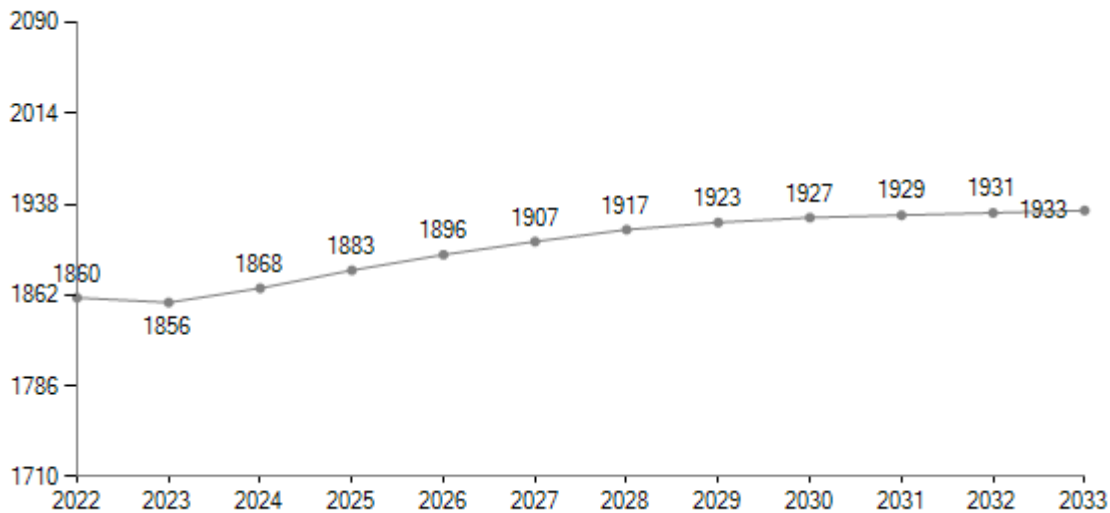


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

LMI data powered by [LMI for All](#)

Predicted Employment in Scotland



LMI data powered by [Lightcast](#)