

OCR A A Level Chemistry and Careers in Chemistry

Find examples of the most relevant careers for subsections of the curriculum and link through to up to five job profiles for further information. The profiles will give your students real world examples of jobs in the aspects of chemistry they enjoy most. They are written by teachers for teachers.

Simply click on the job title to go to the job profile on A Future in Chemistry.

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Module 1 Development of practical skills in chemistry

- 1.2 Practical skills assessed in the practical endorsement
- 1.2.1 Practical skills
- Bioleaching lab technician >
- > Medicinal chemist
- > Pollution control officer
- 1.2.2 Use of apparatus and techniques
- Bioleaching lab technician >
- Medicinal chemist >
- Pollution control officer

Module 2 – Foundations in chemistry

- 2.1 Atoms and reactions
- 2.1.1 Atomic structure and isotopes
- > Chemistry engineer, nuclear
- Executive editor, scientific > publishing
- 2.1.2 Compounds, formulae and equations
- Scientist, food and pharmaceuticals
 Technical services chemist, cosmetics
- Senior laboratory technician

- > Research fellow, battery recycling
- pharmaceuticals
- Research fellow, battery recycling
- > Scientist, food and pharmaceuticals

Radioactive waste consultant

> Scientist, food and



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2.1.3 Acids

→ <u>Scientist, food and pharmaceuticals</u> → <u>Senior laboratory technician</u>

2.1.4 Redox

- > PhD researcher
- > <u>Scientist, food and pharmaceuticals</u>

2.2 Electrons, bonding and structure

- 2.2.2Bonding and structure
- > <u>Analytical technician, plastics</u>
- <u>Co-founder and machine learning</u>
 <u>lead of tech startup Ignota Labs</u>
- > <u>Computational toxicologist</u>

Module 3 Periodic table and energy

- 3.1 The periodic table
- 3.1.1 Periodicity
- > PhD researcher
- > <u>Secondary school science teacher</u>

3.1.4 Qualitative analysis

- > <u>Museum scientist</u>
- Scientist, food and pharmaceuticals
- Scientist, Incident Management
 & Crisis Resolution
 - Senior laboratory technician

> <u>Science communicator</u>

Senior curator

>

> <u>Senior software developer</u>

Secondary school science teacher



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3.2 Physical chemistry

- 3.2.1 Enthalpy changes
- Chemistry engineer, nuclear >
- Director
- 3.2.2 Reaction rates
- Chemistry engineer, nuclear >
- Chief executive officer
- Process chemist higher > apprentice, pharmaceuticals

Module 4 – Core organic chemistry

- 4.1 Basic concepts and hydrocarbons
- 4.1.1 Basic concepts of organic chemistry
- Microplastics toxicologist Principal air quality consultant >

4.1.2 Alkanes

> Principal air quality consultant

4.1.3 Alkenes

- Chief executive officer
- Head of research and > sustainability
- Market development manager >

- > Process chemist higher apprentice, pharmaceuticals
- > Secondary school science teacher
- Secondary school science teacher
- Senior principal scientist

- > R&D chemist
- Senior science manager >



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- 4.2 Alcohols, haloalkanes and analysis
- 4.2.1 Alcohols
- > <u>Secondary school science teacher</u>

4.2.3 Organic synthesis

- > Bioleaching lab technician
- > <u>Laboratory scientist apprentice</u>
- > Medicinal chemist

4.2.4 Analytical techniques

- Analyst higher apprentice, organic
 <u>chemistry</u>
- > Pollution control officer
- Process chemist higher apprentice, pharmaceuticals

- Senior science manager
- Process chemist higher apprentice, pharmaceuticals
- > <u>Technical services chemist, cosmetics</u>
- Scientist, food and pharmaceuticals
- > <u>Senior laboratory technician</u>

Module 5 – Physical chemistry and transition elements

- 5.1 Rates equilibria and pH
- 5.1.1. How fast?
- > <u>Chemistry engineer, nuclear</u>
- > <u>Chief executive officer</u>
- 5.1.3. Acids, bases and buffers
- > <u>Scientist, food and pharmaceuticals</u>
- > <u>Secondary school science teacher</u>
- > <u>Senior principal scientist</u>
- Senior laboratory technician



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5.2 Energy

5.2.2 Enthalpy and entropy

- > <u>Chemistry engineer, nuclear</u>
- > <u>Secondary school science teacher</u>

Director

5.2.3 Redox and electrode potentials

- > <u>PhD researcher</u>
- Professor and enterprise, partnerships and innovation lead
- > <u>Research fellow, battery recycling</u>

5.3 Transition elements

- 5.3.1 Transition elements
- Bioleaching lab technician
- > Environmental process specialist
- > Laboratory scientist apprentice

5.3.2 Qualitative analysis

- > <u>Museum scientist</u>
- Professor of environmental chemistry
- Scientist, food and pharmaceuticals

- > <u>Scientific consultant</u>
 - Solar technology engineer

- Product and process development manager
- > Project manager, world gold council
- > <u>Secondary school science teacher</u>
- > <u>Senior laboratory technician</u>



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Module 6 – Organic chemistry and analysis

6.1 Aromatic compounds, carbonyls and acids 6.1.1 Aromatic compounds			
))	Analytical technician, plastics	>	Flavourist and innovation director
>	Associate principal scientist, food	>	<u>Nanotoxicologist</u>
6.1	2 Carbonyl compounds		
>	Associate principal scientist, food	>	Flavourist and innovation director
6.1.3 Carboxylic acids and esters			
>	Associate principal scientist, food	>	Flavourist and innovation director
6.2 Nitrogen compounds, polymers and synthesis 6.2.2 Amino acids, amides and chirality			
))	Medicinal chemist	\ \	Senior laboratory technician
,	<u>Medicinal chemist</u>	<i>,</i>	
6.2.3 Polyesters and polyamides			
>	Chief technology officer and co-	>	Section leader, wind
	founder of Lixea, a sustainable		
	solutions company		
>	<u>R&D chemist</u>	>	Senior research and development scientist
>	Research scientist, microplastics		



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6.2.5 Organic synthesis

- > Chief executive officer
- > Medicinal chemist
- Process chemist higher apprentice, pharmaceuticals
- > Secondary school science teacher

apprentice

> <u>Technical services chemist, cosmetics</u>

6.3 Analysis

6.3.1 Chromatography and qualitative analysis

- Analyst higher apprentice, organic

 Soil scientist
 chemistry
- Scientist, food and pharmaceuticals
 University laboratory technician
- > Senior science manager

6.3.2 Spectroscopy

- Analyst higher apprentice, organic

 Soil scientist
 chemistry
- <u>Qualified Person, pharmaceuticals</u>
 <u>Teaching technical specialist</u>
- > Scientist, food and pharmaceuticals