

# WJEC GCSE Chemistry and Careers in Chemistry

Find examples of relevant careers for subsections of the curriculum and link through to 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.



# GCSE Chemistry and Careers in Chemistry 1 of 7

#### Unit 1 – Chemical substances, reactions and essential resources

#### 1.1 The nature of substances and chemical reactions

- Assistant analyst, drug control centre > Laboratory scientist apprentice
- Associate principal scientist, food
- Bionanotechnology PhD student
- Chemistry engineer, nuclear
- Chief technology officer
- Co-founder and machine learning lead of tech startup Ignota Labs
- Dermal toxicologist
- Executive editor, scientific publishing
- Finance and planning manager
- Freelance science publicist
- Head of chemistry and teacher
- Head of computational toxicology
- Head of toxicology
- Investor relations manager

- Medical research council board secretary
- Microplastics toxicologist
- > Policy researcher, cancer research UK
- Qualified Person, pharmaceuticals
- School science technician
- Science career coach and mentor
- Scientist, food and pharmaceuticals
- Secondary school science teacher
- Senior committee specialist, UK government
- Senior laboratory technician
- Senior science manager
- Soil scientist

#### 1.2 Atomic structure and the Periodic Table

- Chemistry engineer, nuclear
- Chief chemist

- Secondary school science teacher
- Radioactive waste consultant

#### 1.3 Water

- Analyst –higher apprentice, organic chemistry
- Analytical chemists, Thames Water
- Associate professor

- Chief technology officer and cofounder of a robotics company
- Director
- > Laboratory analyst and higher degree apprentice, water



# GCSE Chemistry and Careers in Chemistry 2 of 7

#### 1.3 Water continued

- > Pollution control officer
- Research scientist, microplastics
- Secondary school science teacher
- Soil scientist

# 1.4 The ever-changing Earth

- Associate professor and enterprise,
   partnerships and innovation lead
- > Astrochemist
- > Atmospheric chemist
- Chief executive officer, ViridiCO2
- Director
- > Environmental chemist
- > Environmental process specialist
- Head of research and sustainability
- Marine biogeochemist
- Marketing development manager
- > Pollution control officer

- > Principal air quality consultant
- Professor of biorefineries
- Professor of environmental chemistry
- > Research fellow, battery recycling
- Scientific Consultant
- Secondary school science teacher
- Section leader, wind
- Senior curator
- Senior principal scientist
- > Soil scientist
- Solar technology engineer
- Sustainability manager

## 1.5 Rate of chemical change

- Chief executive officer, ViridiCO2
- Secondary school science teacher
- Senior principal scientist

#### 1.6 Limestone

- > Environmental process specialist
- Senior curator

Secondary school science teacher



# GCSE Chemistry and Careers in Chemistry 3 of7

# Unit 2 – Chemical bonding, application of chemical reactions and organic chemistry

## 2.1 Bonding, structure and properties

- Analyst higher apprentice, organic chemistry
- Analytical technician, plastics
- Associate professor
- Associate professor and enterprise, partnerships and innovation lead
- Bionanotechnology PhD student
- Chief technology officer and cofounder of Lixea, a sustainable solutions company
- Co-founder and machine learning lead of tech startup Ignota Labs
- Director
- Head of computational toxicology
- Head of research and sustainability
- Laboratory scientist apprentice
- Marketing development manager
- Museum scientist
- Nanotoxicologist
- > Postdoctoral research associate

- Process chemist higher apprentice, pharmaceuticals
- Product and process development manager
- > Professor of biorefineries
- Research fellow
- Science communicator
- Secondary school science teacher
- Section leader, wind
- Senior curator
- Senior principal scientist
- Senior research and development scientist
- Senior scientist, household goods
- Senior software developer
- Solar technology engineer
- > <u>Technical services chemist</u>, cosmetics

# 2.2 Acids, bases and salts

- > Chemistry engineer, nuclear
- Chief chemist

- Scientist, food and pharmaceuticals
- Senior laboratory technician



# GCSE Chemistry and Careers in Chemistry 4 of 7

#### 2.3 Metals and their extraction

- Bioleaching lab technician
- Environmental process specialist
- Laboratory scientist apprentice
- Museum scientist
- > PhD researcher

- > Pollution control officer
- Product and process development manager
- Project manager, World Gold Council
- Research fellow, battery recycling
- Secondary school science teacher

# 2.4 Chemical reactions and energy

- > Chemistry engineer, nuclear
- Project leader in enhanced experimentation, oil & gas

Director

Secondary school science teacher

# 2.5 Crude oil, fuels and organic chemistry

- Analyst –higher apprentice, organic chemistry
- Analytical technician, plastics
- Associate researcher, pharmaceuticals
- Associate scientist, pharmaceuticals
- » Bioanalytical scientist
- Chief technology officer and co-founder of a robotic chemists' company
- Development chemist, printing and inks
- Director
- Director of IRC in biomedical materials
- Director of medicinal chemistry
- > Fine fragrance evaluator

- Flavourist and innovation director
- Head of research and sustainability
- Marketing development manager
- Medicinal chemist, drug discovery
- Microplastics toxicologist
- Patent attorney
- > Principal air quality consultant
- > Professor of biorefineries
- Professor of environmental chemistry
- Project leader in enhanced experimentation, oil and gas
- Research & development team leader



# GCSE Chemistry and Careers in Chemistry 5 of 7

# 2.5 Crude oil, fuels and organic chemistry continued

- > Research innovations manager
- Section leader, wind
- Scientific associate, NMR spectroscopy
- Senior director of chip research
- Secondary school science teacher Senior science manager

# 2.6 Reversible reactions, industrial processes and important chemicals

- > Pollution control officer
- Secondary school science teacher
- > Principal air quality consultant

#### Unit 3 – Practical assessment

## Section A – Obtaining results

- > Analyst -higher apprentice, organic > Dermal toxicologist chemistry
- Analytical chemists, Thames Water
- Associate professor
- Associate researcher, pharmaceuticals
- › Bioleaching lab technician
- Bionanotechnology PhD student
- Chief scientist at agritech company, Lambda Energy
- > Chief technology officer and cofounder of a robotic chemists' company
- > Chief technology officer and cofounder of Lixea, a sustainable solutions company

- > Environmental chemist
- > Environmental process specialist
- > Forensic scientist
- Forensic toxicologist
- Head of toxicology
- Laboratory analyst and higher degree apprentice, water
- Laboratory scientist apprentice
- Laboratory technician and higher apprentice, solar

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## Section A – Obtaining results continued

- Marine biogeochemist
- Marketing development manager
- Medicinal chemist, drug discovery
- Microplastics toxicologist
- Museum scientist
- > PhD researcher
- > Pollution control officer
- > Principal air quality consultant
- Process chemist higher apprentice,
   pharmaceuticals
- Professor of environmental chemistry
- Qualified Person, pharmaceuticals
- > Quality officer, genomics research
- > R&D Chemist
- Research & development team leader
- Research assistant, healthcare
- Research fellow, battery recycling
- Research scientist, microplastics

- School science technician
- Scientific Consultant
- Scientist, food and pharmaceuticals
- Scientist, Incident Management & Crisis
   Resolution
- Scientific Consultant
- Secondary school science teacher
- Section leader, wind
- Senior analytical systems technician
- Senior director of chip research
- Senior laboratory technician
- Senior science manager
- Soil scientist
- Solar technology engineer
- Sports scientist, British Olympic
   Association
- Teaching technical specialist
- Technical services chemist, cosmetics
- University laboratory technician apprentice

# Section B -Analysing and evaluating results

- Advanced apprentice at an occupation drug testing laboratory
- Analyst higher apprentice, organic chemistry
- Analytical chemist

- Analytical chemists, Thames Water
- Associate professor
- Associate researcher, pharmaceuticals

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## Section B -Analysing and evaluating results

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> Bioanalytical scientist

- Process chemist higher apprentice, pharmaceuticals
- » Bionanotechnology PhD student
- Professor of environmental chemistry
- > Chief scientist at agritech company, Lambda Energy
- › Qualified Person, pharmaceuticals
- > Chief technology officer and co-founder > Quality officer, genomics research of a robotic chemists' company
- > Chief technology officer and co-founder > R&D Chemist of Lixea, sustainable solutions company

- Computational toxicologist
- > Research & development team leader

Dermal toxicologist

- Research assistant, healthcare
- > Environmental process specialist
- Research fellow, battery recycling

> Forensic scientist

> Research scientist, microplastics

Forensic toxicologist

- Scientific Consultant
- Head of computational toxicology
- Scientist, food and pharmaceuticals

Head of toxicology

- Scientist, Incident Management & Crisis Resolution
- Laboratory analyst and higher degree apprentice, water
- Secondary school science teacher
- Laboratory scientist apprentice
- Senior director of chip research

Marine biogeochemist

- Senior laboratory technician
- Marketing development manager
- Senior science manager
- Medicinal chemist, drug discovery Microplastics toxicologist
- Soil scientist

Museum scientist

Solar technology engineer

> PhD researcher

Sports scientist, British Olympic

> Pollution control officer

- Association Technical services chemist, cosmetics
- > Principal air quality consultant
- Toxicologist, chemical company