

CEA Northern Ireland

A Level 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.

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A Level Chemistry and Careers in Chemistry 1 of 12

AS 1 – Basic concepts in physical and inorganic chemistry

1.1 Formulae, equations and amounts of substance

- › School science technician

1.2 Atomic structure

- › Research assistant, healthcare

1.3 Bonding

- › Analytical technician, plastics
- › Associate principal scientist, food
- › Computational toxicologist
- › Postdoctoral research associate
- › Research fellow
- › Research innovations manager
- › Science communicator
- › Toxicologist, chemical company

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AS 1 – Basic concepts in physical and inorganic chemistry

1.4 Intermolecular forces

- › [Analytical technician, plastics](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Development chemist, printing and inks](#)
- › [Nanotoxicologist](#)
- › [Science communicator](#)
- › [Associate principal scientist, food](#)
- › [Computational toxicologist](#)
- › [Forensic toxicologist](#)
- › [Research innovations manager](#)
- › [Toxicologist, chemical company](#)

1.5 Structure

- › [Analytical chemists, Thames Water](#)
- › [Associate principal scientist, food](#)
- › [Forensic toxicologist](#)
- › [Research fellow](#)
- › [Nanotoxicologist](#)
- › [Toxicologist, chemical company](#)
- › [Analytical technician, plastics](#)
- › [Computational toxicologist](#)
- › [Postdoctoral research associate](#)
- › [Research innovations manager](#)
- › [Science communicator](#)

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AS 1 – Basic concepts in physical and inorganic chemistry

1.6 Shapes of molecules and ions

- › [Postdoctoral research associate](#)
- › [Nanotoxicologist](#)

1.8 Halogens

- › [Analytical chemists, Thames Water](#)

1.9 Acid-base titrations

- › [Analytical chemists, Thames Water](#)
- › [Development chemist, printing and inks](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [School science technician](#)

1.10 Qualitative tests

- › [Analytical chemists, Thames Water](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [School science technician](#)

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AS 2 – Further physical and inorganic chemistry and an introduction to organic chemistry

2.1 Formulae and amounts of a substance

- › [School science technician](#)

2.2 Nomenclature and isomerism in organic compounds

- › [Associate principal scientist, food](#)
- › [Computational toxicologist](#)
- › [Nanotoxicologist](#)
- › [Research innovations manager](#)
- › [Toxicologist, chemical company](#)

2.3 Alkanes

- › [Project leader in enhanced experimentation](#)

2.4 Alkenes

- › [Analytical technician, plastics](#)
- › [Project leader in enhanced experimentation](#)
- › [Research innovations manager](#)

2.6 Alcohols

- › [Forensic scientist](#)

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AS 2 – Further physical and inorganic chemistry and an introduction to organic chemistry

2.7 Infrared spectroscopy

- › [Analytical chemists, Thames Water](#)
- › [Associate researcher](#)
- › [Atmospheric chemist](#)
- › [Chief technology officer](#)
- › [Chief chemist](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Research innovations manager](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Astrochemist](#)
- › [Bioanalytical scientist](#)
- › [Development chemist, printing and inks](#)
- › [Forensic toxicologist](#)
- › [Nanotoxicologist](#)
- › [Senior analytical systems technician](#)

2.8 Energetics

- › [Chief chemist](#)
- › [School science technician](#)
- › [Project leader in enhanced experimentation](#)

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A2 1 – Further physical and organic chemistry

4.2 Enthalpy, entropy and free energy

- › [Chief chemist](#)
- › [Project leader in enhanced experimentation](#)

4.5 Acid-base equilibria

- › [Analytical chemists, Thames Water](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [School science technician](#)

4.6 Isomerism

- › [Associate principal scientist, food](#)
- › [Nanotoxicologist](#)
- › [Research innovations manager](#)

4.7 Aldehydes and ketones

- › [Flavour chemist and innovation director](#)

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A2 1 – Further physical and organic chemistry

4.9 Derivatives of carboxylic acids

› [Flavour chemist and innovation director](#)

4.10 Aromatic chemistry

› [Household goods scientist](#)

› [Research fellow](#)

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A2 2 – Analytical, transition metals, electrochemistry and organic nitrogen chemistry

5.1 Mass spectrometry

- › [Assistant analyst, drug control centre](#)
- › [Analytical chemists, Thames Water](#)
- › [Bioanalytical scientist](#)
- › [Development chemist, printing and inks](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Research innovations manager](#)
- › [Analytical chemist, healthcare](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Chief technology officer](#)
- › [Forensic toxicologist](#)
- › [Research assistant, healthcare](#)
- › [Nanotoxicologist](#)

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A2 2 – Analytical, transition metals, electrochemistry and organic nitrogen chemistry

5.2 Nuclear magnetic resonance spectroscopy

- › [Analytical chemist, healthcare](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Chief technology officer](#)
- › [Forensic toxicologist](#)
- › [Nanotoxicologist](#)
- › [Scientific associate, NMR spectroscopy](#)
- › [Analytical chemists, Thames Water](#)
- › [Bioanalytical scientist](#)
- › [Development chemist, printing and inks](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Research innovations manager](#)

5.3 Volumetric analysis

- › [Analytical chemists, Thames Water](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Development chemist, printing and inks](#)
- › [School science technician](#)

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A2 2 – Analytical, transition metals, electrochemistry and organic nitrogen chemistry

5.4 Chromatography

- › [Analytical chemist, healthcare](#)
- › [Assistant analyst, drug control centre](#)
- › [Bioanalytical scientist](#)
- › [Development chemist, printing and inks](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Research assistant, healthcare](#)
- › [Scientific associate, NMR spectroscopy](#)
- › [Analytical chemists, Thames Water](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Chief technology officer](#)
- › [Forensic toxicologist](#)
- › [Nanotoxicologist](#)
- › [Research innovations manager](#)
- › [Senior analytical systems technician](#)

5.5 Transition metals

- › [Chief technology officer](#)
- › [Project manager](#)
- › [Development chemist, printing and inks](#)

5.6 Electrode potentials

- › [Patent attorney](#)

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A2 2 – Analytical, transition metals, electrochemistry and organic nitrogen chemistry

5.7 Amines

- › [Development chemist, printing and inks](#)

5.9 Amino acids

- › [Nanotoxicologist](#)
- › [Postdoctoral research associate](#)
- › [Research innovations manager](#)
- › [Sports scientist](#)

5.10 Polymer chemistry

- › [Analytical technician, plastics](#)
- › [Consumer products technician](#)
- › [Patent attorney](#)
- › [Research innovations manager](#)

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A2 2 – Analytical, transition metals, electrochemistry and organic nitrogen chemistry

5.11 Chemistry in medicine

- › Advanced apprentice – forensics
- › Assistant analyst, drug control centre
- › Associate scientist, pharmaceuticals
- › Chief technology officer
- › Director of medicinal chemistry
- › Forensic toxicologist
- › Patent attorney
- › Scientific associate, NMR spectroscopy
- › Analytical chemist, healthcare
- › Associate researcher
- › Bioanalytical scientist
- › Director of IRC in biomedical materials
- › Forensic scientist
- › Nanotoxicologist
- › Postdoctoral research associate
- › Sports scientist

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