

# CEA GCE 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.

# CEA GCE Northern Ireland

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

- › [Head of computational toxicology](#)
- › [Senior laboratory technician](#)
- › [School science technician](#)
- › [Technical services chemist, cosmetics](#)
- › [Scientist, food and pharmaceuticals](#)

### 1.2 Atomic structure

- › [Chemistry engineer, nuclear](#)
- › [Research assistant, healthcare](#)
- › [Executive editor, scientific publishing](#)
- › [Secondary school science teacher](#)
- › [Radioactive waste consultant](#)

### 1.3 Bonding

- › [Analytical technician, plastics](#)
- › [Postdoctoral research associate](#)
- › [Associate principal scientist, food](#)
- › [Research fellow](#)
- › [Bionanotechnology PhD student](#)
- › [Research innovations manager](#)
- › [Co-founder and machine learning lead of tech startup Ignota Labs](#)
- › [Science communicator](#)
- › [Computational toxicologist](#)
- › [Technical services chemist, cosmetics](#)
- › [Laboratory scientist apprentice](#)
- › [Toxicologist, chemical company](#)

# CEA GCE Northern Ireland

## A Level Chemistry and Careers in Chemistry

2 of 12

### 1.4 Intermolecular forces

- › [Analytical technician, plastics](#)
- › [Associate principal scientist, food](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Bionanotechnology PhD student](#)
- › [Co-founder and machine learning lead of tech startup Ignota Labs](#)
- › [Computational toxicologist](#)
- › [Development chemist, printing and inks](#)
- › [Forensic toxicologist](#)
- › [Nanotoxicologist](#)
- › [Research innovations manager](#)
- › [Science communicator](#)
- › [Toxicologist, chemical company](#)
- › [Technical services chemist, cosmetics](#)

### 1.5 Structure

- › [Analytical chemists, Thames Water](#)
- › [Analytical technician, plastics](#)
- › [Associate principal scientist, food](#)
- › [Bionanotechnology PhD student](#)
- › [Co-founder and machine learning lead of tech startup Ignota Labs](#)
- › [Computational toxicologist](#)
- › [Forensic toxicologist](#)
- › [Nanotoxicologist](#)
- › [PhD researcher](#)
- › [Postdoctoral research associate](#)
- › [Research fellow](#)
- › [Research innovations manager](#)
- › [Science communicator](#)
- › [Secondary school science teacher](#)
- › [Senior curator](#)
- › [Senior software developer](#)
- › [Technical services chemist, cosmetics](#)
- › [Toxicologist, chemical company](#)

### 1.6 Shapes of molecules and ions

- › [Bionanotechnology PhD student](#)
- › [Co-founder and machine learning lead of tech startup Ignota Labs](#)
- › [Laboratory scientist apprentice](#)
- › [Nanotoxicologist](#)
- › [Postdoctoral research associate](#)

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# CEA GCE Northern Ireland

## A Level Chemistry and Careers in Chemistry

3 of 12

### 1.7 Redox

- › [Laboratory scientist apprentice](#)
- › [PhD researcher](#)
- › [Product and process development manager](#)
- › [Secondary school science teacher](#)
- › [Scientist, food and pharmaceuticals](#)

### 1.8 Halogens

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

### 1.9 Acid-base titrations

- › [Analytical chemists, Thames Water](#)
- › [Chief technology officer and co-founder of a robotic chemists' company](#)
- › [Development chemist, printing and inks](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Pollution control officer](#)
- › [Professor of environmental chemistry](#)
- › [School science technician](#)
- › [Scientist, food and pharmaceuticals](#)
- › [Secondary school science teacher](#)
- › [Senior laboratory technician](#)

### 1.10 Qualitative tests

- › [Analytical chemists, Thames Water](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Museum scientist](#)
- › [Principal air quality consultant](#)
- › [School science technician](#)
- › [Scientist, food and pharmaceuticals](#)
- › [Scientist, Incident Management & Crisis Resolution](#)
- › [Secondary school science teacher](#)
- › [Senior laboratory technician](#)

# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

4 of 12

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

### 2.1 Formulae and amounts of a substance

- › [Analyst –higher apprentice, organic chemistry](#)
- › [Chief technology officer and co-founder of Lixea, a sustainable solutions company](#)
- › [Dermal toxicologist](#)
- › [Executive editor, scientific publishing](#)
- › [Head of research and sustainability](#)
- › [Medicinal chemist, drug discovery](#)
- › [Microplastics toxicologist](#)
- › [School science technician](#)
- › [Scientist, food and pharmaceuticals](#)
- › [Secondary school science teacher](#)
- › [Senior laboratory technician](#)
- › [Technical services chemist, cosmetics](#)

### 2.2 Nomenclature and isomerism in organic compounds

- › [Associate principal scientist, food](#)
- › [Co-founder and machine learning lead of tech startup Ignota Labs](#)
- › [Computational toxicologist](#)
- › [Executive editor, scientific publishing](#)
- › [Nanotoxicologist](#)
- › [Research innovations manager](#)
- › [Secondary school science teacher](#)
- › [Toxicologist, chemical company](#)

### 2.3 Alkanes

- › [Chief technology officer and co-founder of Lixea, a sustainable solutions company](#)
- › [Marine biogeochemist](#)
- › [Microplastics toxicologist](#)
- › [Pollution control officer](#)
- › [Professor of environmental chemistry](#)
- › [Project leader in enhanced experimentation](#)
- › [Principal air quality consultant](#)
- › [Secondary school science teacher](#)
- › [Senior principal scientist](#)

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# CEA GCE Northern Ireland

## A Level Chemistry and Careers in Chemistry

5 of 12

### 2.4 Alkenes

- › [Analytical technician, plastics](#)
- › [Marketing development manager](#)
- › [Microplastics toxicologist](#)
- › [Project leader in enhanced experimentation](#)
- › [R&D Chemist](#)
- › [Research innovations manager](#)
- › [Secondary school science teacher](#)

### 2.6 Alcohols

- › [Forensic scientist](#)
- › [Secondary school science teacher](#)
- › [Senior science manager](#)

### 2.7 Infrared spectroscopy

- › [Analyst –higher apprentice, organic chemistry](#)
- › [Analytical chemists, Thames Water](#)
- › [Associate researcher](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Astrochemist](#)
- › [Atmospheric chemist](#)
- › [Bioanalytical scientist](#)
- › [Chief chemist](#)
- › [Chief technology officer](#)
- › [Chief technology officer and co-founder of a robotic chemists' company](#)
- › [Development chemist, printing and inks](#)
- › [Museum scientist](#)
- › [Nanotoxicologist](#)
- › [Pollution control officer](#)
- › [Process chemist – higher apprentice, pharmaceuticals](#)
- › [Professor of environmental chemistry](#)
- › [Principal air quality consultant](#)
- › [Research innovations manager](#)
- › [Scientist, food and pharmaceuticals](#)
- › [Secondary school science teacher](#)
- › [Senior analytical systems technician](#)
- › [Senior laboratory technician](#)

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# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

6 of 12

## 2.7 Infrared spectroscopy continued

- › [Forensic toxicologist](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Museum scientist](#)
- › [Soil scientist](#)
- › [Teaching technical specialist](#)

## 2.8 Energetics

- › [Chemistry engineer, nuclear](#)
- › [Chief chemist](#)
- › [Director](#)
- › [Project leader in enhanced experimentation](#)
- › [School science technician](#)
- › [Secondary school science teacher](#)
- › [Senior principal scientist](#)

## 2.9 Kinetics

- › [Chemistry engineer, nuclear](#)
- › [Chief executive officer, ViridiCO2](#)
- › [Secondary school science teacher](#)
- › [Senior principal scientist](#)

## 2.11 Group II elements and their compounds

- › [Scientist, food and pharmaceuticals](#)

## A2 1 –Further physical and organic chemistry

### 4.2 Enthalpy, entropy and free energy

- › [Chemistry engineer, nuclear](#)
- › [Chief chemist](#)
- › [Project leader in enhanced experimentation](#)

### 4.3 Rates of reaction

- › [Chemistry engineer, nuclear](#)

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# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

7 of 12

## 4.5 Acid-base equilibria

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

## 4.6 Isomerism

- › [Associate principal scientist, food](#)
- › [Nanotoxicologist](#)
- › [Co-founder and machine learning lead of tech startup Ignota Labs](#)
- › [Research innovations manager](#)
- › [Medicinal chemist, drug discovery](#)
- › [Secondary school science teacher](#)

## 4.7 Aldehydes and ketones

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

## 4.9 Derivatives of carboxylic acids

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

## 4.10 Aromatic chemistry

- › [Household goods scientist](#)
- › [Research fellow](#)

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

### 5.1 Mass spectrometry

- › [Analyst –higher apprenticeship, organic chemistry](#)
- › [Assistant analyst, drug control centre](#)
- › [Analytical chemist, healthcare](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Analytical chemists, Thames Water](#)
- › [Bioanalytical scientist](#)

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# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

8 of 12

## 5.1 Mass spectrometry continued

- › [Chief technology officer](#)
- › [Chief technology officer and co-founder of a robotic chemists' company](#)
- › [Development chemist, printing and inks](#)
- › [Forensic toxicologist](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Museum scientist](#)
- › [Nanotoxicologist](#)
- › [Pollution control officer](#)
- › [Principal air quality consultant](#)
- › [Process chemist – higher apprentice, pharmaceuticals](#)
- › [Research assistant, healthcare](#)
- › [Research innovations manager](#)
- › [Secondary school science teacher](#)
- › [Teaching technical specialist](#)

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

### 5.2 Nuclear magnetic resonance spectroscopy

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

# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

9 of 12

## 5.3 Volumetric analysis

- › [Analytical chemists, Thames Water](#)
- › [Chief technology officer and co-founder of a robotic chemists' company](#)
- › [Development chemist, printing and inks](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Pollution control officer](#)
- › [Professor of environmental chemistry](#)
- › [Scientist, food and pharmaceuticals](#)
- › [School science technician](#)
- › [Secondary school science teacher](#)
- › [Senior laboratory technician](#)

## 5.4 Chromatography

- › [Analyst –higher apprentice, organic chemistry](#)
- › [Analytical chemist, healthcare](#)
- › [Analytical chemists, Thames Water](#)
- › [Assistant analyst, drug control centre](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Bioanalytical scientist](#)
- › [Chief technology officer](#)
- › [Nanotoxicologist](#)
- › [Process chemist – higher apprentice, pharmaceuticals](#)
- › [Professor of environmental chemistry](#)
- › [Research assistant, healthcare](#)
- › [Research innovations manager](#)
- › [Scientific associate, NMR spectroscopy](#)
- › [Scientist, food and pharmaceuticals](#)
- › [Scientist, Incident Management & Crisis Resolution](#)

# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

10 of 12

## 5.4 Chromatography continued

- › [Chief technology officer and co-founder of a robotic chemists' company](#)
- › [Dermal toxicologist](#)
- › [Development chemist, printing and inks](#)
- › [Forensic toxicologist](#)
- › [Laboratory analyst and higher degree apprentice, water](#)
- › [Museum scientist](#)
- › [Secondary school science teacher](#)
- › [Senior analytical systems technician](#)
- › [Senior laboratory technician](#)
- › [Senior science manager](#)
- › [Soil scientist](#)
- › [Teaching technical specialist](#)
- › [University laboratory technician apprentice](#)

## 5.5 Transition metals

- › [Bioleaching lab technician](#)
- › [Chief technology officer](#)
- › [Development chemist, printing and inks](#)
- › [Director](#)
- › [Environmental process specialist](#)
- › [Laboratory scientist apprentice](#)
- › [Museum scientist](#)
- › [Product and process development manager](#)
- › [Project manager](#)
- › [Scientist, food and pharmaceuticals](#)
- › [Secondary school science teacher](#)

# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

11 of 12

## 5.6 Electrode potentials

- › [Associate professor and enterprise, partnerships and innovation lead](#)
- › [Patent attorney](#)
- › [PhD researcher](#)
- › [Research fellow, battery recycling](#)
- › [Scientific Consultant](#)
- › [Secondary school science teacher](#)
- › [Solar technology engineer](#)

## 5.7 Amines

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

## 5.9 Amino acids

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

## 5.10 Polymer chemistry

- › [Analytical technician, plastics](#)
- › [Associate professor](#)
- › [Associate professor and enterprise, partnerships and innovation lead](#)
- › [Chief executive officer, ViridiCO2](#)
- › [Chief technology officer and co-founder of Lixea, a sustainable solutions company](#)
- › [Consumer products technician](#)
- › [Head of research and sustainability](#)
- › [Marketing development manager](#)
- › [Microplastics toxicologist](#)
- › [Patent attorney](#)
- › [Professor of biorefineries](#)
- › [R&D Chemist](#)
- › [Research innovations manager](#)
- › [Research scientist, microplastics](#)
- › [Science career coach and mentor](#)
- › [Secondary school science teacher](#)
- › [Section leader, wind](#)
- › [Senior research and development scientist](#)

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# CEA GCE Northern Ireland

A Level Chemistry and Careers in Chemistry

12 of 12

## 5.11 Chemistry in medicine

- › [Advanced apprentice, forensics](#)
- › [Analytical chemist, healthcare](#)
- › [Assistant analyst, drug control centre](#)
- › [Associate researcher](#)
- › [Associate scientist, pharmaceuticals](#)
- › [Bioanalytical scientist](#)
- › [Bionanotechnology PhD student](#)
- › [Chief technology officer](#)
- › [Co-founder and machine learning lead of tech startup Ignota Labs](#)
- › [Dermal toxicologist](#)
- › [Director of IRC in biomedical materials](#)
- › [Director of medicinal chemistry](#)
- › [Forensic scientist](#)
- › [Forensic toxicologist](#)
- › [Head of computational toxicology](#)
- › [Head of toxicology](#)
- › [Medicinal chemist, drug discovery](#)
- › [Nanotoxicologist](#)
- › [Patent attorney](#)
- › [Postdoctoral research associate](#)
- › [Process chemist – higher apprentice, pharmaceuticals](#)
- › [Qualified Person, pharmaceuticals](#)
- › [Quality officer, genomics research](#)
- › [Research & development team leader](#)
- › [Science career coach and mentor](#)
- › [Scientific associate, NMR spectroscopy](#)
- › [Secondary school science teacher](#)
- › [Senior director of chip research](#)
- › [Sports scientist](#)
- › [University laboratory technician apprentice](#)