



CHEMISTRY

Read

- 'A Short History of Nearly Everything' (Bryson, B. 2003)
- 'The Double Helix' (Watson, J. 1968)
- 'Moles: A Survival Guide for Science' (Brown, K. 1991)
- 'Why Chemical Reactions Happen?' (Keeler, J. & Wothers, P. 2003)
- 'Periodic tales: The curious lives of the elements' (Aldersey-Williams, H. 2012)
- 'Bad Science' (Goldacre, B. 2008)
- 'The Disappearing Spoon' (Kean, S. 2010)

Watch

- 'The Imitation Game' (2014) During the Second World War, mathematician Alan Turing and his team of cryptographers set out to decipher the German Enigma code
- [The periodic table of Nottingham](#)
- 'The Human Experiment' (2013) - A documentary that explores chemicals found in everyday household products.
- [Play with Smart Materials- TED talk](#)
- [Just how small is an atom?- TED talk](#)
- [How Spectroscopy Could Reveal Alien Life- TED talk](#)
- [Open lectures - News and events, University of York](#)

Websites

- [The Royal Society of Chemistry \(rsc.org\)](#)
- Nuffield Foundation
- [Compound Interest – Explorations of everyday chemical compounds \(compoundchem.com\)](#)
- <https://www.iop.org/> The Institute of Physics website has some interesting articles on atoms and molecules: not just for physicists!

Subscriptions

Remember that if you have been accepted onto the 16-19 Bursary, Thirsk Sixth Form College can support you with academic subscriptions

- [Student member \(rsc.org\)](#) As a student working towards a qualification in the chemical sciences, Royal Society of Chemistry membership is there to help you make confident decisions about your future and give you the tools to stand out amongst your peers.
- [New Scientist | Science news and science articles from New Scientist](#) New Scientist Magazine
- [Educational Magazines: Chemistry Review Magazine \(hoddereducation.co.uk\)](#)

Listen

- [Chemistry world podcasts](#)
- [RSC-new perspectives podcast](#)
- [The Naked Scientist podcast](#)

Visit

- Science Museum- London
- Think-tank Birmingham
- Centre for Life- Newcastle upon Tyne
- Colour experience- Bradford
- Glasgow Science Centre
- Catalyst Discovery Centre- Widnes
- Cambridge Science Centre- Cambridge

Courses

- MOOCs (Massive Open Online Courses) – learn about your interests and bolster your CV. Three main providers are:
 - ✓ [FutureLearn: Online Courses and Degrees from Top Universities](#)
 - ✓ [edX | Free Online Courses by Harvard, MIT, & more | edX](#)
 - ✓ [Open Learning - OpenLearn - Open University](#)
- Just make sure you look for the free courses. You can complete some courses and only have to pay to receive the certificate.

Competitions

- **Quantum on the Clock**
The Institute of Physics' QQQ group's [Quantum on the Clock](#) competition is open to all A-level or equivalent students in the UK and Ireland. Students are tasked to create a three-minute video about any aspect of quantum science or technology. Entries can be individual or in teams of up to four students.

<p>If you are a Bursary student, remember that the Student Discretionary Bursary can pay for certification or courses.</p>	<ul style="list-style-type: none"> • Unsung Heroes of Science - Hertford College University of Oxford The Unsung Heroes of Science video competition from Hertford College, University of Oxford is open to all 16 –18 students around the world. Entrants are tasked with making a two-minute video sharing the story of a scientist whose contributions were overlooked. Entries can be submitted by individuals or in teams of up to three. • UK Chemistry Olympiad RSC Education Run by the RSC, the UK Chemistry Olympiad is designed to challenge and inspire older secondary school students, encouraging them to push themselves, boost their critical problem-solving skills and test their knowledge in real-world situations. Explore the past papers to get an idea of the types of questions involved. There are three rounds, culminating in the prestigious International Chemistry Olympiad.
<p><u>Apps</u></p> <ul style="list-style-type: none"> • iChemistry Pro • Learn organic chemistry 	<p><u>Work experience ideas</u></p> <ul style="list-style-type: none"> • Nuffield research placements – some excellent opportunities for STEM summer holiday placements. • Resimac Ltd- Thirsk