



Chemistry Super Curriculum

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MOOCs

Discovering Science: Medicinal Chemistry

[Discovering Science: Medicinal Chemistry - Online Course \(futurelearn.com\)](#)

Discovering Science: Atmospheric Chemistry

[Discovering Atmospheric Chemistry - Online Course - FutureLearn](#)

Discovering Science: Chemical products

[Discovering Chemical Products - Online Course - FutureLearn](#)

University of York: Exploring everyday Chemistry

[Exploring Everyday Chemistry - Online Course - FutureLearn](#)

University of Leeds: Exploring Cancer medicines

[Exploring Cancer Medicines - Online Course - FutureLearn](#)

University of Leeds: Atmospheric Chemistry

[Atmospheric Chemistry: Beyond Earth - Online Course - FutureLearn](#)

University of Leeds: Chemical engineering

[Chemical Engineering: Shaping a Sustainable Future - FutureLearn](#)

King's college London: The Science behind forensic Science

[The Science Behind Forensic Science - Online Course - FutureLearn](#)

University of East Anglia: Identifying food fraud

[Identifying Food Fraud - Online Course \(futurelearn.com\)](#)

University of Exeter: Climate change

[Climate Change: The Science - Online Course - FutureLearn](#)

Books

Calculations in Chemistry—Jim Clark

Chemistry in Context—Graham Hill

Why Chemical Reactions Happen—James Keeler & Peter Wothers

The Periodic Table—Eric Scerri

The Pleasure of Finding Things Out—Richard Feynman Periodic Tales—Hugh Aldersey-Williams

The Disappearing Spoon—Sam Kean

Uncle Tungsten—Oliver Sacks

The Shocking History of Phosphorus—John Emsley Molecules of Murder—John Emsley

The Science of Chocolate—S T Beckett

A Short History of Nearly Everything—Bill Bryson

13 Things That Don't Make Sense—Michael Brooks

Bad Science— Ben Goldacre

Physical Chemistry— Peter Atkins

Inorganic Chemistry—Shriver and Atkins

What is Chemistry—Peter Atkins

Napoleon's Buttons: How 17 Molecules Changed History—Penny Le Couteur and Jay Burreson

H₂O: A Biography of Water—Philip Ball



Journals/Magazines

The Scientist – [The Scientist - Science News, Educational Articles, Expert Opinion \(the-scientist.com\)](http://the-scientist.com)

New Scientist – [New Scientist | Science news, articles, and features](http://www.newscientist.com)

Scientific American – [Scientific American: Science News, Expert Analysis, Health Research - Scientific American](http://www.scientificamerican.com)

The Royal Society – [Welcome to the Royal Society | Royal Society](http://www.rsc.org)

Websites

Chemguide – [chemguide: helping you to understand Chemistry - Main Menu](http://www.chemguide.co.uk) – Helping you to understand Chemistry.

Royal Society of Chemistry – [The Royal Society of Chemistry \(rsc.org\)](http://www.rsc.org)

IChemE – [Institution of Chemical Engineers - IChemE](http://www.icheme.org) – We are the leading professional qualifying body for chemical, biochemical and process engineers.

Chemistry world – [Chemistry news, research and opinions | Chemistry World](http://www.chemistryworld.com) – Chemistry, covered. Science news, research, reviews, features and opinions. Read Chemistry World to keep up with stories from across the chemical sciences.

Royal Society of Chemistry – [The Royal Society of Chemistry \(rsc.org\)](http://www.rsc.org)

Films

An Inconvenient Truth – is a 2006 American concert film/documentary film directed by Davis Guggenheim about former United States Vice President Al Gore's campaign to educate people about global warming. The film features a slide show that, by Gore's own estimate, he has presented over 1,000 times to audiences worldwide.

Lorenzos Oil – is a 1992 American drama film directed and co-written by George Miller. It is based on the true story of Augusto and Michaela Odone, parents who search for a cure for their son Lorenzo's adrenoleukodystrophy (ALD), leading to the development of Lorenzo's oil.

The Nutty Professor – Eddie Murphy portrays a university professor, Sherman Klump, a brainy and kind-hearted man who is morbidly obese. A research scientist, academic, and lecturer, Klump develops a miraculous, but experimental, weight-loss pharmaceutical, and hoping to win the affection of the girl of his dreams, tests it upon himself.

October Sky – is a 1999 American biographical drama film that tells the true story of Homer H. Hickam Jr., a coal miner's son who was inspired by the launch of *Sputnik 1* in 1957 to take up rocketry against his father's wishes and eventually became a NASA engineer.

Backdraft – is a 1991 American action thriller film directed by Ron Howard and written by Gregory Widen. The film stars Kurt Russell, William Baldwin, Scott Glenn, Jennifer Jason Leigh, Rebecca De Mornay, Donald Sutherland, Robert De Niro, Jason Gedrick, and J. T. Walsh, and follows Chicago firefighters on the trail of a serial arsonist.

Other

Science Museum – [Home | Science Museum](http://www.science.org.uk)



History of Science Museum, Oxford – [Home | History of Science Museum \(ox.ac.uk\)](#) – Here at the History of Science Museum we're home to an unrivalled collection of scientific inventions, devices, and instruments from different cultures, places, and times in human history.

National Geographic – [Homepage | National Geographic](#)

Podcasts

[The Science of Everything Podcast | a podcast by James Fodor](#) – discussing a variety of topics in both the natural and social sciences, exploring the many fascinating insights that the scientific method yields about the world around us.

[Organic Chemistry - Audio on Apple Podcasts](#)

[BBC Radio 4 - The Life Scientific - Downloads](#)

[Elemental | Podcast on Spotify](#)

[Science Weekly | Science | The Guardian](#) – Twice a week, the Guardian brings you the latest science and environment news.

[Brought to you by Chemistry - Hosted by Royal Society of Chemistry \(acast.com\)](#) – The Royal Society of Chemistry brings together experts from science, politics, industry and beyond, to explore some of the biggest challenges we all face today.

[Podcasts | New Scientist](#) – Podcasts for the insatiably curious by the world's most popular weekly science magazine. Everything from the latest science and technology news to the big-picture questions about life, the universe and what it means to be human.

- **New Scientist Weekly** is our flagship show where we discuss the week's biggest breakthroughs with our internationally recognised team of journalists. Hosted from our New York bureau by Timothy Revell and Christie Taylor. New episodes every Friday.
- **Dead Planets Society** Join Leah Crane, Chelsea Whyte, and some of the world's foremost experts as they discuss outlandish and mind-blowing what-ifs about the universe. What if Earth was actually cube shaped? Can we destroy the sun? Is it possible to make Pluto a planet again? New episodes every other Tuesday.
- **CultureLab** is an array of delights from pop culture. Sometimes we interview the world's most exciting authors about their fascinating books, other times we delve into the science behind a movie or TV show or just why we love it so much. New episodes every other Tuesday.

Documentaries

Chemistry: A volatile History – is a 2010 BBC documentary on the history of chemistry presented by Jim Al-Khalili. It was nominated for the 2010 British Academy Television Awards in the category Specialist Factual. Also watch **Chemistry: The power of the Elements**.

The Mystery of Matter: 'Unruly elements' – [The Mystery of Matter: "UNRULY ELEMENTS" \(Documentary\) - YouTube](#)

My Octopus Teacher – is a 2020 Netflix Original documentary film directed by Pippa Ehrlich and James Reed, which documents a year spent by filmmaker Craig Foster forging a relationship with a wild common octopus in a South African kelp forest. At the 93rd Academy Awards, it won the award for Best Documentary Feature.

In School Activities

- Research any topic you wish and create a PowerPoint to deliver to your peers. This can include practical work.



Guilsborough Academy Sixth Form

- Listen to podcasts/read journals and write a short article for the school newspaper.
- Participate in the RSc Schools' analytical competition in year 12 Chemistry lessons.
- Enter and prepare for the Chemistry Olympiad in year 13 [Chemistry Olympiad past papers | Resource | RSC Education](#)