

# The Periodic Table of Videos website

By the University of Nottingham, UK

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There are a number of reasons why you might *not* want to read this review: perhaps you do not teach chemistry, you are resisting the use of video clips in your teaching, or you are looking for non-English teaching materials. These are not good reasons though, as you will see. I challenge you to visit The Periodic Table of Videos website, as it might just convert you.

You may feel that the website is primarily a resource for chemistry teachers. However, chemistry sits directly between physics on the one hand and biology on the other, so you can be reassured that there's something here for teachers and students of all the sciences. For example, the site has a link entitled 'sixty symbols' that leads to short video clips about the symbols used in physics and astronomy. There is also a link to the Foodskye website, about the science behind what we eat and drink. And the molecular videos feature a range of well-known drugs such as aspirin, morphine and salbutamol.

Importantly, all of the videos are short, engaging and interactive. My colleagues and I use them to trigger discussions on specific topics, but also just for general interest. The Periodic Table of Videos was a difficult website to review because I just kept going back to watch one more video. I defy you not to become entranced by these clips!

The home page features an interactive periodic table linked to short videos on each element. Caesium, for example, is presented in the context of its use in exact time measurement, and by showing its explosive reaction with water. Most videos are about 10 minutes long, and in the classroom you may decide to use all or just part of a clip. Some videos are available on Youtube in other languages, such as Spanish, Portuguese, Indonesian or Italian.

The Periodic Table of Videos is produced by a multidisciplinary team of scientists at the University of Nottingham, UK, all of whom feature in the videos. The team is led by Martin Poliakoff, who has a very distinctive, relaxed and engaging camera presence. Other members of the team include lecturers who present their own specialities, such as Pete Licence with his explosive practical demonstrations; technicians; a public awareness scientist; and Brady Haran, a video journalist with a passion for science communication, who is also the creator of the website. With this wealth of expertise, it is no surprise that the team has created such a marvellous resource for teachers and students. As well as via their website and on Youtube, you can follow the team on Facebook and Twitter and by RSS feed. Brady Haran also has a blog with links to his photos on the online photo repository, Flickr.

The Periodic Table of Videos links

to a sister site, Test Tube<sup>w1</sup>, which is another brainchild of Brady Haran, featuring a collection of videos. Test Tube started in 2007, when Brady was appointed filmmaker-in-residence for the Nottingham Science City website<sup>w2</sup>. Test Tube's purpose is to show what science is really like, from the highs of exciting breakthroughs to the lows of tedious experiments. The Periodic Table of Videos grew from this idea.

Although the elements of the periodic table are the main focus of The Periodic Table of Videos website, it offers so much more: there is a large assortment of miscellaneous chemistry-related videos. One of my favourites is 'Perfect perfume', in which the team try to create the ultimate Valentine's Day scent. Others cover topics ranging from the pesticide DDT to dynamite and Viagra® – and the 'elements song' is an excellent piece of comedy! There is even a set of videos on road trips that the team have taken to parts of the UK, Europe and beyond. For example, during a trip to Turin in Italy, they produced a video on the chemistry of the Turin shroud and radioactive carbon dating.

The Periodic Table of Videos is a work in progress; new videos are constantly being added, and the elements videos are updated as the team sees fit. One recent update was to the carbon video: to include more information on allotropes and the wonderful Nobel prize-winning material,

graphene. The website is an example of the way students should be engaging with science. No textbook could ever capture the imagination in the way these presenters do. They also have the facilities and experience to demonstrate experiments that would not be possible in a school laboratory.

The latest video I watched was filmed on Martin Poliakoff's birthday. He visited the Nottingham Nanotechnology and Nanoscience Centre, where one of the researchers there took a hair from Martin's head and beamed a stream of electrons onto it, creating a microscopic lithograph of the periodic table on the hair. Just one more wonder of modern science and technology, and just one more imaginative video on this marvellous, highly recommended website. Do visit it and experience it for yourself.

### Details

URL: [www.periodicvideos.com](http://www.periodicvideos.com)

### Web references

- w1 – The forerunner of the Periodic Table of Videos website, the Test Tube website, hosts a wide range of videos about the world of science. See: [www.test-tube.org.uk](http://www.test-tube.org.uk)
- w2 – Nottingham was designated a 'science city' by the UK government in 2005. See: [www.science-city.co.uk](http://www.science-city.co.uk)

### Resources

The Elements of the Periodic Table website, developed by the UK's Open University, enables visitors to explore the impact of chemical elements on our bodies and the world around us, and see how their discovery changed the course of history. See: [www.open.edu](http://www.open.edu) or use the direct link: <http://tinyurl.com/d4levwb>

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