Chemistry Reading List

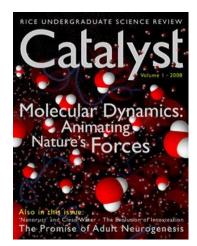


New scientist Magazine (website available)

New Scientist keeps readers up to date with the latest science and technology news from around the world with nearly 1 million worldwide readers every week.

New Scientist is widely read by both scientists and nonscientists as a way of keeping track of scientific and technological progress. Many science articles in the general press are based on its contents, as New Scientist covers the

social and cultural impacts and consequences of scientific and technological discovery, not just the underlying science.



Catalyst Magazine (website available)

Catalyst offers features on a wide range of themes from the science curriculum bringing them to life with insights into cutting-edge research and practical applications of science. Catalyst magazine is aimed mainly at science students aged 14-16. Articles cover advances in biology, chemistry, physics, astronomy, earth science and medicine.

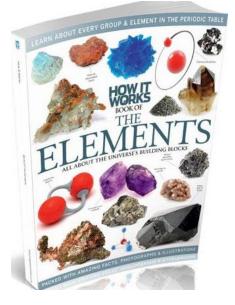
Each magazine issue consists of four major articles, of which three typically cover physics, chemistry and biology. These major

articles are usually linked to current developments in scientific research and are often written by the scientists or engineers involved. The fourth article is cross-disciplinary and shows how science research often calls upon experts across all disciplines. Shorter articles look at the broader issues in science, science-related careers and ideas for experiments that teachers can use in the classroom and students can try at home.



<u>Chemistry World magazine (website, podcasts and app also</u> <u>available)</u>

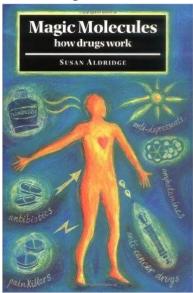
Chemistry world includes articles based on the latest discoveries and advances in chemistry. Worldwide affairs that chemistry features in and news involving chemistry and latest technology can be found in the magazine or on the website.



How It Works Book of the Elements

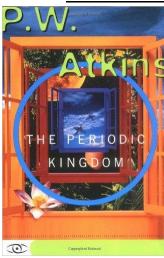
The How It Works Book Of The Elements covers all 118 of the known elements on the planet in the order in which they appear in the periodic table. From lanthanoids to actinoids, alkali metals to transition metals, halogens to noble gases - you can find all you need to know about the universe's building blocks with amazing facts, photos, and illustrations. Learn about key discoveries and people from the past 400 years and get to grips with atomic numbers, oxidation states and electron configurations.

Magic Molecules: How drugs work



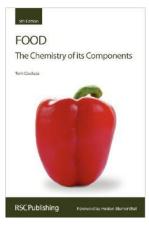
We have all been drug users at one time or another. Drugs can be used as medicines, as food additives, for pleasure, and to protect our long-term health. With so many new drugs on the market and an ever-widening definition of what exactly makes a drug a drug, we should all be well informed about the drugs we use--how they work, their benefits, and their risks. This book is a unique guide for the general reader to the drugs of everyday life--from commonly prescribed medicines to recreational drugs and food supplements. The author examines how drugs interact with their targets in the body, where drugs come from, how they are developed, and what new kinds of drugs are on the horizon. She reviews all the major pharmaceutical medicines--painkillers, antibiotics, anti-cancer drugs, antidepressants, heart drugs, tranquilizers, and hormones.

The Periodic Kingdom: A Journey into the Land of the Chemical Elements



Come on a journey into the heart of matter and enjoy the process as a brilliant scientist and entertaining tour guide takes you on a fascinating voyage through the Periodic Kingdom, the world of the elements. The periodic table, your map for this trip, is the most important concept in chemistry. It hangs in classrooms and labs throughout the world, providing support for students, suggesting new avenues of research for professionals, succinctly organizing the whole of chemistry. The one hundred or so elements listed in the table make up everything in the universe, from microscopic organisms to distant planets. Just how does the

periodic table help us make sense of the world around us? Using vivid imagery, ingenious analogies, and liberal doses of humour P. W. Atkins answers this question. He shows us that the Periodic Kingdom is a systematic place. Detailing the geography, history and governing institutions of this imaginary landscape, he demonstrates how physical similarities can point to deeper affinities, and how



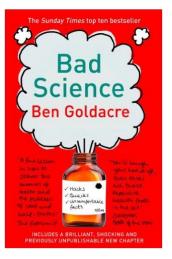
the location of an element can be used to predict its properties.

Food: The Chemistry of its Components

The book investigates food components which are present in large amounts (carbohydrates, fats, proteins, minerals and water) and also those that occur in smaller amounts (colours, flavours, vitamins and preservatives). Food borne toxins, allergens, pesticide residues and other undesirables are also given detailed consideration. Attention is drawn to the nutritional and health significance of food components.

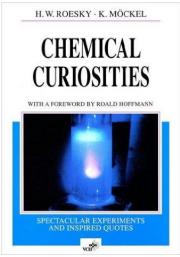
Bad Science

en Goldacre's wise and witty bestseller, shortlisted for the Samuel Johnson Prize, lifts the lid on quack doctors, flaky statistics, scaremongering journalists and evil pharmaceutical corporations.



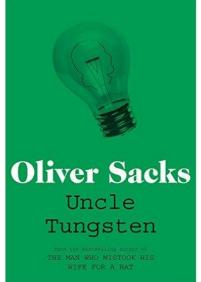
Dr Ben Goldacre has been exposing dodgy medical data in his popular Guardian column. In this eye-opening book he takes on the MMR hoax and misleading cosmetics ads, acupuncture and homeopathy, vitamins and mankind's vexed relationship with all manner of 'toxins'. Along the way, the self-confessed 'Johnny Ball cum Witchfinder General' performs a successful detox on a Barbie doll, sees his dead cat become a certified nutritionist and probes the supposed medical gualifications of 'Dr' Gillian McKeith.

Chemical Curiosities: Spectacular Experiments and Inspired Quotes



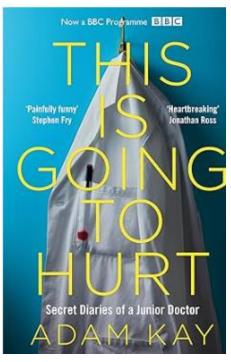
Could it be magic...? Chemical experiments are not only essential for teaching chemistry, they also fascinate the audience. This book is an excellent source of inspiration for every 'magic show' and classroom demonstration. In a very playful manner, the experiments described here open up the manifold, colourful, and sometimes ear-splitting world of chemistry. Ranging from unusual (but useful) properties of matter to the illustration of the greenhouse effect, this masterful chemist's 'cookbook' is highly suitable for preparing demonstrations in front of larger audiences. Building a bridge between science and

the arts, every experiment is introduced by inspiring citations from prose and poetry, which makes reading and experimenting equally enjoyable.



Uncle Tungsten: Memories of a Chemical Boyhood

In Uncle Tungsten Oliver Sacks evokes, with warmth and wit, his upbringing in wartime England. He tells of the large science-steeped family who fostered his early fascination with chemistry. There follow his years at boarding school where, though unhappy, he developed the intellectual curiosity that would shape his later life. And we hear of his return to London, an emotionally bereft ten-year-old who found solace in his passion for learning. Uncle Tungsten radiates all the delight and wonder of a boy's adventures, and is an unforgettable portrait of an extraordinary young mind.

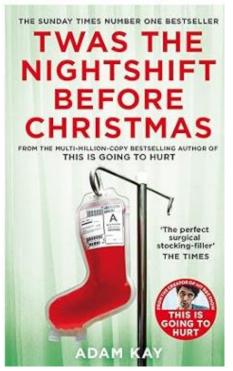


Adam Kay: This is Going to Hurt: Secret Diaries of <u>a Junior Doctor</u>

Welcome to the life of a junior doctor: 97-hour weeks, life and death decisions, a constant tsunami of bodily fluids, and the hospital parking meter earns more than you.

Scribbled in secret after endless days, sleepless nights and missed weekends, Adam Kay's This is Going to Hurt provides a no-holds-barred account of his time on the NHS front line. Hilarious, horrifying and heartbreaking, this diary is everything you wanted to know - and more than a few things you didn't - about life on and off the hospital ward.

Sunday Times Number One Bestseller for over eight months and winner of a record FOUR National Book Awards: Book of the Year, Non-Fiction Book of the Year, New Writer of the Year and Zoe Ball Book Club Book of the Year.



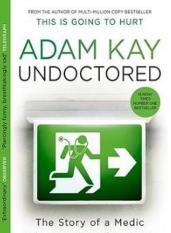
Adam Kay: Twas the Nightshift before Christmas

Christmas is coming, the goose is getting fat ... but 1.4 million NHS staff are heading off to work. In this perfect present for anyone who has ever set foot in a hospital, Adam Kay delves back into his diaries for a hilarious, horrifying and sometimes heartbreaking peek behind the blue curtain at Christmastime.

This is a love letter to all those who spend their festive season on the front line, removing babies and baubles from the various places they get stuck, at the most wonderful time of the year.

Adam Kay: Undoctored

THIS IS GOING TO HURT was the bestselling non-fiction book of the century



Who Ran Out of Patients

Poll over image to zoom in

- a frank, funny and furious look at the brutal realities of life in the NHS.

But it was only part of Adam Kay's story. With his stethoscope now hung up, Adam shares more suture-splitting anecdotes from both on and off the wards. From the hilarious to the profoundly moving, from the first days of medical school to life after the NHS, UNDOCTORED is an astonishing portrait of an extraordinary life, from one of Britain's finest - and funniest - storytellers.