

CHEMISTRY BOOK READING LIST

The following list was kindly compiled by Dr Simon Cotton and contains books for peripheral reading/use, some of which might be useful to Chemistry Teachers and senior students.

Popular Chemistry

- P.W. Atkins, *Molecules*, W.H.Freeman, 1987; new edition is:- P. W. Atkins, *Atkins' Molecules*, CUP, 2003. [2003 is OOP! Lots of second hand 1987 edition around]

R. L. Myers, *The 100 Most Important Chemical Compounds: A Reference Guide*, Greenwood Press, 2007.

- B. Selinger, *Chemistry in the Market Place*, Harcourt Brace, 5th edition, 1998.
- P. Le Couteur and J. Burreson, *Napoleon's Buttons: How 17 Molecules Changed History*, Tarcher, 2003.

K. K. Karukstis and G. R. Van Hecke, *Chemistry Connections: The Chemical Basis of Everyday Phenomena*, Academic Press, 2003.

- J. Emsley, *The Consumer's Good Chemical Guide*, W.H.Freeman, 1994.
- J. Emsley, *Molecules at an Exhibition*, Oxford, 1998.
- J. Emsley, *The Shocking History of Phosphorus*, Macmillan, 2000.
- J. Emsley, *Vanity, Vitality and Virility, The Science Behind the Products You Love to Buy*, OUP, 2004.
- J. Emsley, *The Elements of Murder; the History of Poisons*, OUP, 2005.
- J. Emsley, *Better Looking, Better Living, Better Loving: How Chemistry Can Help You Achieve Life's Goals*, Wiley-VCH, 2007.
- J. Emsley, *Molecules of Murder: Criminal Molecules and Classic Murders*, RSC, 2008.
- J. Emsley, *Healthy, Wealthy, Sustainable World*, RSC, 2010.

J. Schwarcz, *The Genie in the Bottle*, W.H.Freeman, 2001.

J. Schwarcz, *Radar, Hula Hoops, and Playful Pigs*, Owl Books, 2001.

J. Schwarcz, *That's the Way the Cookie Crumbles: 62 All-New Commentaries on the Fascinating Chemistry of Everyday Life*, ECW Press, 2004.

J. Schwarcz, *The Fly in the Ointment: 70 Fascinating Commentaries on the Science of Everyday Life*, ECW Press, 2004.

J. Schwarcz, *Let Them Eat Flax: 70 All-New Commentaries on the Science of Everyday Food & Life*, ECW Press, 2005.

Chemistry of Food

- J. Schwarcz, *An Apple a Day: The Myths, Misconceptions, and Truths about the Foods We Eat*, Other Press [sic], 2009.

- P. Barham, *The Science of Cooking*, Springer, 2000.

- H. McGee, *On Food and Cooking*, Harper Collins 1986; second (enlarged) edition published 2004.

H. McGee, *The Curious Cook*, Harper Collins 1992.

H. McGee, *Keys to Good Cooking: A Guide to Making the Best of Foods and Recipes*, Hodder, 2010.

H. This, *Molecular Gastronomy: Exploring the Science of Flavor*, Columbia University Press, 2006.

H. This, *Kitchen Mysteries: Revealing the Science of Food*, Columbia University Press, 2007.

H. This, *Building a Meal: From Molecular Gastronomy to Culinary Constructivism*, Columbia University Press, 2009.

T. Lister and H. Blumenthal, *Kitchen Chemistry*, RSC, 2005.

Toxicology

- John Timbrell, *The Poison Paradox: Chemicals as Friends and Foes*, Oxford University Press, 2005.

Chemical and Biological warfare

- R. Harris and J. Paxman, *A Higher Form of Killing*, Chatto and Windus, 1982 (new pbk edition, Arrow Books 2002)

E. Croddy, *Chemical and Biological Warfare*, Copernicus Books, 2002.

G. I. Brown, *The Big Bang*, Sutton, 1998.

Periodic Table

P. W. Atkins, *The Periodic Kingdom*, Weidenfeld and Nicholson, 1995.

- Primo Levi, *The Periodic Table*, Everyman's Library, 1995 (other editions available).

P. Strathern, *Mendeleev's Kingdom*, Hamish Hamilton, 2000.

- J. Emsley, *Nature's Building Blocks*, Oxford, 2001.

Pheromones and chemistry in living things (also "drugs from rain forests")

- W. C. Agosta, *Chemical Communication*, Scientific American Library, 1992.

W. C. Agosta, *Thieves, Deceivers, and Killers*, Princeton University Press, 2001.

W. C. Agosta, *Bombardier Beetles and Fever Trees*, Perseus Press, 1995.

C. Joyce, *Earthly Goods*, Little Brown, 1994.

M. J. Plotkin, *Medicine Quest*, Viking, 2000.

Drugs and chemistry

- G. L. Patrick, *An Introduction to Medicinal Chemistry*, 2nd edition, Oxford, 2001.

- D. M. Perrine, *The Chemistry of Mind-Altering Drugs*, American Chemical Society, 1996.

J. S. Meyer and L. F. Quenzer, *Psychopharmacology: Drugs, The Brain, and Behavior*, Sinauer Associates, 2004.

S. H. Barondes, *Molecules and Mental Illness*, Scientific American Library, 1993.

S. H. Snyder, *Drugs and the Brain*, Scientific American Library, 1986.

R. Siegel, *Intoxication*, E.P.Dutton, 1989.

J. Stone and G. Darlington, *Pills, Potions, Poisons*, Oxford, 2000.

J. Mann, *Murder, Magic and Medicine*, Oxford, 1992;

- J. Mann, *The Elusive Magic Bullet*, OUP, 1999; second edition is *Life Saving Drugs: the Elusive Magic Bullet*, RSC, 2004.
- J. Mann, *Turn On and Tune In. Psychedelics, Narcotics and Euphorants*, RSC, 2009.
- R. Davenport-Hines, *The Pursuit of Oblivion*, Weidenfield and Nicholson, 2001.
- R. Rudgley, *The Encyclopedia of Psychoactive Substances*, Little Brown, 1998.
- R. Rudgley, *The Alchemy of Culture, Intoxicants in Society*, British Museum Press, 1991.
- L. L. Iversen, *Drugs: A Very Short Introduction*, Oxford, 2001.
- L. L. Iversen, *The Science of Marijuana*, Oxford, 2000.
- L. L. Iversen, *Speed, Ecstasy, Ritalin: The Science of Amphetamines*, Oxford, 2006.
- J. Holland (ed), *Ecstasy: The Complete Guide*, Park Street Press, 2001.
- D. Streatfield, *Cocaine*, Virgin, 2001.

Two on drugs and pop music

- H. Shapiro, *Waiting for the Man*, HelterSkelter Publishing, 1999.
- S. Napier-Bell, *Black Vinyl, White Powder*, Ebury Press, 2001.

Why Reactions Happen

- J. Keeler and P. Wothers, *Why Chemical Reactions Happen*, Oxford, 2003
- W. E. Dasent, *Nonexistent Compounds*, Marcel Dekker, 1965.

Bad Science

- B. Goldacre, *Bad Science*, HarperPerennial, 2009.
- W. Gratzer, *The Undergrowth of Science: Delusion, Self-deception and Human Frailty*, Oxford 2000.
- R. L. Park, *Voodoo Science: The Road from Foolishness to Fraud*, Oxford, 2000.

D. Goodstein, *On fact and Fraud: cautionary tales from the front lines of science*, Princeton UP, 2010.

How Scientific Research is done

J. E. Baggott, *Perfect Symmetry: Accidental Discovery of Buckminsterfullerene*, OUP 1994 (paperback 1996)

H. Aldersey-Williams, *The Most Beautiful Molecule: An Adventure in Chemistry*, Aurum Press, 1994 (paperback 1997) [*the discovery of Buckminsterfullerene*]

- J. D. Watson, *The Double Helix: Personal Account of the Discovery of the Structure of DNA*, Weidenfeld and Nicolson, 1968 [more recent editions available, esp in paperback]

R. Lee, *The Eureka Moment! 100 key scientific discoveries of the 20th century*, The British Library, 2002.

Steroids

L. V. Marks, *Sexual Chemistry*, Yale, 2001.

C. Djerassi, *Steroids Made it Possible*, American Chemical Society, 1990.

C. Djerassi, *The Pill, Pygmy Chimps and Degas' Horse*, Harper Collins, 1992.

C. Djerassi, *This Man's Pill*, Oxford, 2001.

Others

P.W. Atkins, *Atkins' Molecules*, Cambridge, 2003

P. Le Couteur and J. Bureson, *Napoleon's Buttons: How 17 Molecules Changed History*.

H. McGee, *On Food and Cooking*, Harper Collins 2004.

D. M. Perrine, *The Chemistry of Mind-Altering Drugs*, American Chemical Society, 1996