

Further Reading and References

A readable description of Chernobyl today, *Wormwood Forest, a natural history of Chernobyl* by Mary Mycio, together with the pictures on her website [14].

An accessible but more student-oriented account of the science, *Radiation and Health* by T. Henriksen and H. D. Maillie [16].

More on the science of nuclear and medical physics, *Fundamental Physics for Probing and Imaging* by Wade Allison, [4].

An article on the science of the power and influence of suggestion on life and health *The science of voodoo* by Helen Pilcher [2].

More on the science of energy production *Energy Science* by J. Andrews and N. Jelley, Oxford University Press (2007).

References

- [1] Wilmott, P (2000). *The use, misuse and abuse of mathematics in finance*. Philosophical Transactions of the Royal Society. A358:63–73. <http://www.jstor.org/pss/2666776> [accessed 15 February 2009].
- [2] Pilcher, H (2009). *The science of voodoo: when mind attacks body*. New Scientist. May 2009. <http://www.newscientist.com/article/mg20227081.100-the-science-of-voodoo-when-mind-attacks-body.html> [accessed 12 August 2009],
- [3] Deutsch, D. (1997). *The Fabric of Reality* Penguin.
- [4] Allison, W. (2006) *Fundamental Physics for Probing and Imaging*. Oxford University Press.
- [5] Watson, S J et al. (2005) *Ionising Radiation Exposure of the UK Population: 2005 Review*. UK Health Protection Agency, Report RPD-001.
- [6] Wikipedia (2009). *Natural Nuclear Fission Reactor* http://en.wikipedia.org/wiki/Natural_nuclear_fission_reactor [accessed 18 May 2009].
- [7] Meshik, A P. (2005) *The Workings of an Ancient Nuclear Reactor*. Scientific American, Nov 2005, 293:56–63.
- [8] IAEA (1996) *International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources 115*. The International Atomic Energy Agency.

http://www.pub.iaea.org/MTCD/publications/PDF/SS-115-Web/Pub996_web-1a.pdf [accessed 10 February 2009 but the text quoted was deleted shortly thereafter].

[9] WHO (2004) *Malaria and HIV/AIDS Interactions and Implications* Conclusions of a technical consultation convened by WHO. <http://www.emro.who.int/aiecf/web26.pdf> [accessed 12 February 2009].

[10] FHWA (2007) *Press Release: call on States to Immediately Inspect All Steel Arch Truss Bridges*. Federal Highway Administration, 2 August 2007. <http://www.fhwa.dot.gov/pressroom/fhwa0712.htm> [accessed 21 February 2009].

[11] OECD (2002) *Chernobyl: Assessment of Radiological and Health Impacts*. Report 3508, OECD/National Energy Agency, Paris. <http://www.nea.fr/html/rp/chernobyl/welcome.html> [accessed 11 February 2009].

[12] IAEA (2006) *Chernobyl's Legacy*. International Atomic Energy Agency. <http://www.iaea.org/Publications/Booklets/Chernobyl/chernobyl.pdf> [accessed 14 February 2009].

[13] WHO (2006) *Health effects of the Chernobyl accident and Special Health Care Programmes*. Report of the UN Chernobyl Forum, World Health Organization. http://whqlibdoc.who.int/publications/2006/9241594179_eng.pdf [accessed 5 July 2009].

[14] Mycio, M (2005). *Wormwood Forest, a natural history of Chernobyl*. Joseph Henry Press.

[15] BBC (2006) *Nuclear Nightmares*. BBC Horizon, 13 July 2006. <http://news.bbc.co.uk/1/hi/sci/tech/5173310.stm> [accessed July 2009].

Also <http://news.bbc.co.uk/1/hi/world/europe/4923342.stm> and <http://www.bbc.co.uk/iplayer/console/b010mckx> [accessed June 2011]

[16] Henriksen. T. and Maillie. H D. (2003) *Radiation & Health*. Tavlör & Francis.

- [17] Merkle, W. (1983) *Statistical methods in regression and calibration analysis of chromosome aberration data*. Radiation and Environmental Biophysics. 21:217–233. <http://www.springerlink.com/content/q84x2p284r380187/> [accessed 13 February 2009].
- [18] Nakamura, N. et al (1998) *A close correlation between electron spin resonance (ESR) dosimetry from tooth enamel and cytogenetic dosimetry from lymphocytes of Hiroshima atomic-bomb survivors*. Int. J. Radiat. Biol 73:619–627.1998. [CrossRef](#), [PubMed](#), [CSA](#) [accessed 5 June 2011].
- [19] Preston, Dale L. et al (2004) *Effect of Recent Changes in Atomic Bomb Survivor Dosimetry on Cancer Mortality Risk Estimates*. Radiation Research. 162: 377–389. <http://www.bioone.org/doi/abs/10.1667/RR3232> [accessed 6 February 2009].
- [20] Shimizu, Y. et al (1999) *Studies of the Mortality of Atomic Bomb Survivors. Report 12, Part II. Noncancer Mortality: 1950–1990*. Radiation Research. 152: 374–389. <http://www.jstor.org/pss/3580222> [accessed 27 February 2009].
- [21] Tubiana, M. and Aurengo, A. (2005) *Dose-effect relationships and estimation of the carcinogenic effects of low doses of ionizing radiation*. Joint Report of the Academie des Sciences (Paris) and the Academie Nationale de Medecine. http://www.academie-sciences.fr/publications/rapports/pdf/dose_effet_07_04_05.pdf [accessed 25 May 2009].
<http://www.radscihealth.org/rsh/docs/Correspondence/BEIRVII/TubianaAurengo5Oct05.pdf> [accessed 4 June 2011]

- [22] Tubiana, M and Aurengo, A. (2006) *Dose-effect relationships and estimation of the carcinogenic effects of low doses of ionizing radiation*. Joint Report of the Academie des Sciences (Paris) and the Academie Nationale de Medecine. International Journal of Low Radiation. 2:135–153.
<http://www.ingentaconnect.com/content/ind/ijlr/2006/00000002/F0020003/art00001> [accessed 11 February 2009].
- [23] NRPB (2001) *Stable Iodine Prophylaxis*. Recommendations of the 2nd UK Working Group on Stable Iodine Prophylaxis, National Radiological Protection Board.
http://www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1194947336017 [accessed 14 March 2009].
- [24] Windscale (2007). *The Windscale reactor accident—50 years on*. (Editorial) Journal of Radiological Protection.
http://iopscience.iop.org/0952-4746/27/3/E02/pdf/0952-4746_27_3_E02.pdf [accessed 4 June 2011]
- [25] Cardis, E. et al. (2005) *Risk of Thyroid Cancer after exposure to iodine-131 in childhood*, Journal of the National Cancer Institute 97(10) 724–732. <http://jnci.oxfordjournals.org/cgi/content/short/97/10/724> [accessed 21 February 2009].
- [26] Boice, J D. (2005) *Radiation-induced Thyroid Cancer – What's New?* Editorial, Journal of the National Cancer Institute 97(10):703–32. <http://jnci.oxfordjournals.org/cgi/content/full/97/10/703> [accessed 11 February 2009].
- [27] ICRP (2007) *Report 103: 2007 Recommendations*. International Commission for Radiological Protection.
<http://www.icrp.org> [accessed 10 February 2009].
- [28] Dagens Nyheter (2002). Article published in the major Stockholm morning paper on 24 April by Swedish Radiation Protection Authority. An English translation, http://www.radiationandreason.com/uploads/dagens_nyheter_C3D.pdf

[29] Simmons, J A. and Watt, D E. (1999) *Radiation Protection Dosimetry, A Radical Reappraisal*. Medical Physics Publishing, Madison, Wisconsin.

[30] RCR (2006) *Radiotherapy Dose Fractionation*. Royal College of Radiologists.
http://rcr.ac.uk/docs/oncology/pdf/Dose-Fractionation_Final.pdf [accessed 11 February 2009].

[31] Roychoudhuri, R. et al (2007) *Increased cardiovascular mortality more than fifteen years after radiotherapy for breast cancer: a population-based study*. BioMed Central Cancer, 7: 9. <http://www.ncbi.nlm.nih.gov/pubmed/17224064> [accessed 27 February 2009].

[32] GSI (2010) *Heavy Ion Therapy in Germany*
http://www.wapr.kansai.jaea.go.jp/pmrc_en/org/colloquium/download/colloquium17.pdf [accessed June 2011].

[33] BASROC (2006) *UK Hadron Therapy Accelerator Group*. <http://www.basroc.org.uk/documentation.htm> [accessed 21 February 2009].

[34] Darby, S. et al. (2005) *Radon in homes and risk of lung cancer: collaborative analysis of individual data from 13 European case-control studies*. British Medical Journal 2005; 330, 223–228.
<http://www.bmj.com/cgi/content/full/330/7485/223> [accessed 12 February 2009].

[35] Darby, S et al. (2006) *Residential radon and lung cancer, the risk of lung cancer* Scandinavian Journal of Work, Environment and Health 2006;32 supplement 1. http://www.sjweh.fi/order_supplement.php [accessed 11 February 2009].

- [36] WHO (2006) *Radon and Cancer*. World Health Organization <http://www.who.int/mediacentre/factsheets/fs291/en/index.html> [accessed 11 February 2009]. Unfortunately the quoted passage has recently been removed from this website. [May 2011]
- [37] Berrington et al (2001) *100 years of observation on British radiologists: mortality from cancer and other diseases, 1897–1997*. British Journal of Radiology, 74 (2001), 507–519. <http://bjr.birjournals.org/cgi/content/full/74/882/507> [accessed 25 May 2009].
- [38] Muirhead, C R et al (2009). *Mortality and cancer incidence following occupational radiation exposure: third analysis of the National Registry for Radiation Workers*. British Journal of Cancer, 100, 206–212. <http://www.nature.com/bjc/journal/v100/n1/full/6604825a.html> [accessed 3rd April 2009].
- [39] Simmons, J A. (2008) *Response to 'Commentary: What Can Epidemiology Tell us about Risks at Low Doses?'* Radiation Research. 170: 139–141. <http://www.bioone.org/doi/abs/10.1667/RR1391a.1> [accessed 25 May 2009].
- [40] Rowland, R.E. et al (1997) *Bone sarcoma in humans induced by radium: A threshold response?* Radioprotection 32: C1-331–C1-338.
- [41] Pollycove, M and Feinendegen, L E (2008) *Low-dose radioimmuno-therapy of cancer*. Human Experimental Toxicology. 2008; 27: 169–175. <http://het.sagepub.com/cgi/reprint/27/2/169> [accessed 27 February 2009].
- [42] BEIR VII (2005) *Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII – Phase 2*. The National Academies Press. <http://www.nap.edu/catalog/11340.html> [accessed 23rd March 2009].

- [43] UNSCEAR (1994). *Sources and Effects of Ionizing Radiation*. Report to UN General Assembly <http://www.unscear.org/unscear/en/publications/1994.html> [accessed 10 April 2009].
- [44] Mitchell, R E J. and Boreham, D R (2000). *Radiation Protection in the World of Modern Radiobiology: Time for A New Approach*. International Radiation Protection Association, Hiroshima, Japan, 15–19 May 2000. <http://www.radscihealth.org/rsh/docs/Mitchel.html> [accessed 12 February 2009].
- [45] Llewellyn-Smith C & Cowley S (2010) *The Path to Fusion Power* <http://rsta.royalsocietypublishing.org/content/368/1914/1091.full.pdf> [accessed June 2011].
- [46] World Nuclear Association (1999). *Conversion and Enrichment*. <http://www.world-nuclear.org/how/enrichment.html> [accessed 11 February 2009].
- [47] Areva (2009) *The 1600+ MWe Reactor*. Areva Company <http://www.epr-reactor.co.uk/scripts/ssmod/publigen/content/templates/show.asp?P=93&L=EN> [accessed 2 September 2009].
- [48] Royal Society (2001) *The health effects of depleted uranium munitions*. <http://royalsociety.org/The-health-hazards-of-depleted-uranium-munitions-Part-1-Full-Report/> [accessed 4 June 2011].
- [49] World Nuclear Association (2006) *Waste*. <http://www.world-nuclear.org/education/wast.htm> [accessed 4 April 2009].

- [50] Tubiana, M. et al. (2006) *Recent reports on the effect of low doses of ionizing radiation and its dose–effect relationship* Radiation and Environmental Biophysics 2006 44:245.
<http://www.springerlink.com/content/yg4m73410313447j/> [accessed 25 May 2009].
- [51] World Nuclear Association (2008) *Plans for New Nuclear Reactors Worldwide*.
<http://www.world-nuclear.org/info/inf17.html> [accessed 11 February 2009].
- [52] GenerationIV (2009) *Generation IV 2008 Annual Report*. Gen-IV International Forum.
http://www.gen-4.org/PDFs/GIF_2008_Annual_Report.pdf [accessed 6 April 2009].
- [53] World Nuclear Association (2008) *Generation IV Nuclear Reactors*. <http://www.world-nuclear.org/info/inf77.html> [accessed 11 February 2009].
- [54] ThorEA (2009) *Thorium energy amplifiers*. http://www2.hud.ac.uk/news/2009news/05_thorea.php [accessed 2 September 2009].
- [55] World Nuclear Association (2008) *Supply of Uranium*. <http://www.world-nuclear.org/info/inf75.html> [accessed 27 February 2009].
- [56] Kalinowski, M B. et al. (2004) *Conclusions on plutonium separation from atmospheric krypton-85 measured at various distances*. Journal of Environmental Radioactivity 2004. 73;2:203–222.
<http://cat.inist.fr/?aModele=afficheN&cpsidt=15580560> [accessed 11 February 2009].
- [57] El Baradei, M. (2009) *A Recipe for Survival*. International Herald Tribune, 16 February, 2009.
<http://www.iaea.org/newscenter/transcripts/2009/ih160209.html> [accessed 2 September 2009].

- [58] World Nuclear Association (2007) *Nuclear Fusion Power*. <http://www.world-nuclear.org/info/inf66.html> [accessed 29 March 2009].
- [59] IAEA (1990) *Costs of Decommissioning Nuclear Power Plants*. International Atomic Energy Agency. <http://www.iaea.org/Publications/Magazines/Bulletin/Bull323/32304783942.pdf> [accessed 23 February 2009].
- [60] BERR (2006) *Reactor Decommissioning*. Informal report prepared for the UK Government by Ernst and Young. <http://www.berr.gov.uk/files/file36327.pdf> [accessed 29 March 2009].
- [61] WHO (1997) *High-dose irradiation: wholesomeness of food irradiated with doses above 10 KGy*. A joint FAO/IAEA/WHO study group. World Health Organization. http://www.who.int/foodsafety/publications/fs_management/irradiation/en/ [accessed 11 February 2009].
- [62] National Police Agency of Japan (2011) http://www.npa.go.jp/archive/keibi/biki/higaijokyo_e.pdf [this site is regularly updated; accessed 27 May 2011]
- [63] World Nuclear Association (2011) *Fukushima accident* http://www.world-nuclear.org/info/fukushima_accident_inf129.html [this site is regularly updated; accessed 23 May 2011]
- [64] Trichopoulos et al (2007) *The victims of Chernobyl in Greece: induced abortions after the accident* <http://www.bmj.com/content/295/6606/1100.extract> [accessed 3 June 2011]
- [65] ICRP home page <http://www.icrp.org/> [accessed 3 June 2011]

[66] Allison (2011) *We should stop running away from radiation* <http://www.bbc.co.uk/news/world-12860842>
[accessed 4 June 2011]