



Canadian Nuclear Society / Société Nucléaire Canadienne

Recommended Links for Educators and Students

2015-11-01
Page 1 of 5

Subject (alphabetical)	Organization	Website
Canadian Nuclear FAQ	Dr. Jeremy Whitlock	www.nuclearfaq.ca/
Canadian Nuclear Industry	Canadian Nuclear Association Teach Nuclear	www.cna.ca http://teachnuclear.ca/
Canadian Research Reactors	AECL / Canadian Nuclear Laboratories CBC Archives ZEEP Canadian Nuclear Laboratories NRU McMaster Nuclear Reactor Slowpoke University of Alberta Dalhousie University École Polytechnique Saskatchewan Research Council	http://www.cbc.ca/archives/categories/science-technology/energy-production/ http://media.cns-snc.ca/history/ZEEP/ZEEP_AECL1970.pdf http://www.cnl.ca/en/home/facilities-and-expertise/nru/default.aspx mnr.mcmaster.ca www.ualberta.ca/~slowpoke/ http://www.dal.ca/news/2011/05/05/gone_gone_gone.html www.polymtl.ca/nucleaire/en/LTN/SLP.php http://blog.src.sk.ca/environment/research-reactor-valuable-industry-tool/
Canadian Utility	Bruce Power	http://www.brucepower.com/
Canadian Utility	Hydro-Québec	http://www.hydroquebec.com/generation/centrale-nucleaire/index.html
Canadian Utility	New Brunswick Power	http://nbpower.com/html/en/about/operating/nuclear.html
Canadian Utility	Ontario Power Generation	http://www.opg.com/Pages/home.aspx
CANDU Reactors	Candu Energy Inc. Bill Garland's Nucl. Eng. CANDU textbook	www.candu.com/en/home/default.aspx http://www.nuceng.ca/candu/
CNA Education	Canadian Nuclear Association	http://teachnuclear.ca/
CNS Education Page	Canadian Nuclear Society	www.cns-snc.ca/cns/education-communications
CNSC Education Page	Canadian Nuclear Safety Commission	http://www.nuclearsafety.gc.ca/eng/educational-resources/index.cfm#
Cosmic Origins of Uranium	World Nuclear Association	http://www.world-nuclear.org/info/Nuclear-Fuel-Cycle/Uranium-Resources/The-Cosmic-Origins-of-Uranium/
Cosmic Rays	Moscow Neutron Monitor NASA's Cosmicopia Caltech: R.A. Mewaldt Max Planck Inst. – Atmospheric Cherenkov Light	http://cr0.izmiran.rssi.ru/mosc/main.htm http://helios.gsfc.nasa.gov/cosmic.html http://www.srl.caltech.edu/personnel/dick/cos_encyc.html http://www.mpi-hd.mpg.de/hfm/CosmicRay/ChLight/Cherenkov.html
Education / Radiation	CBC Radio archives, Montreal Laboratory 1945 Yes I Can Science Electromagnetic Radiation Measuring Radiation – EVARMS Ionising Radiation Unit	http://www.cbc.ca/archives/entry/_anada-and-the-atom http://resources.yesican-science.ca/trek/radiation/final/index_em_matter.html http://resources.yesican-science.ca/trek/radiation/final/index_EVARMS.html resources.yesican-science.ca/trek/radiation/final/index.html
Education / Nuclear	American Nuclear Society Teacher Resources	http://www.nuclearconnect.org/
Energy Supply	Nobody's Fuel	www.nobodysfuel.com
Flying – aircrew radiation briefing	Canadian Nuclear Society videos	https://www.youtube.com/channel/UCTDKqU_vz9icxDqRk3DWXMw/videos



Canadian Nuclear Society / Société Nucléaire Canadienne

Recommended Links for Educators and Students

2015-11-01
Page 2 of 5

Subject (alphabetical)	Organization	Website
Gamma Rays	NASA	http://missionscience.nasa.gov/ems/12_gammarays.html
Geiger detectors, software	Aware Electronics Corporation	www.aw-el.com/
Geiger detectors, software	Black Cat Systems (Windows® and Mac)	www.blackcatsystems.com/GM/GeigerCounters.html
Geiger tubes	LND Inc.	www.lndinc.com/
Half-life ONLINE LAB	Jefferson Laboratory equipment overview Collect the Data Calculations & Results Health Physics Soc. Long half-life estimation Standford U. News – solar flares affect decay rates? MIT Net Advance of Physics – variability of decay?	http://education.jlab.org/frost/halflife_part1.html http://education.jlab.org/frost/halflife_part2.html http://education.jlab.org/frost/halflife_part3.html http://hps.org/publicinformation/ate/q8270.html http://news.stanford.edu/news/2010/august/sun-082310.html http://web.mit.edu/redingtn/www/netadv/XperDecRat.html
Industrial Radioisotopes	World Nuclear Association	www.world-nuclear.org/info/inf56.html
Interactive Chart of the Nuclides	National Nuclear Data Centre, Brookhaven National Laboratory	www.nndc.bnl.gov/chart/
International Nuclear Industry	International Atomic Energy Agency World Nuclear Association (photos) Power Plants Around the World World Association of Nuclear Operators	www.iaea.org/ www.world-nuclear.org/ http://www.industcards.com/ppworld.htm#nuclear%20power%20plants http://www.wano.info/en-gb
Intensity of radiation over distance ONLINE LAB	iLabCentral, equipment in Australia	www.ilabcentral.org/10.php
Ionising and Non-ionising Radiation	US EPA	www.epa.gov/rpdweb00/understand/ionize_nonionize.html
Ionisation Energy	US NIST periodic table with html file	http://www.nist.gov/pml/data/ion_energy.cfm www.nist.gov/physlab/data/upload/periodic-table.pdf http://physics.nist.gov/cgi-bin/ASD/ie.pl?spectra=H-DS+i&units=1&at_num_out=on&el_name_out=on&shells_out=on&level_out=on&e_out=0&unc_out=on&biblio=on
Lord Ernest Rutherford Museum	Professor John Campbell (biographer) McGill University	www.rutherford.org.nz www.physics.mcgill.ca/museum/_oberta_rd_museum.htm
Medical Radioisotopes	MDS Nordion World Nuclear Association You Tube technetium scintigraphy	www.mds.nordion.com www.world-nuclear.org/info/inf55.html http://www.world-nuclear.org/info/Non-Power-Nuclear-Applications/Radioisotopes/Radioisotopes-in-Medicine/ www.youtube.com/watch?v=Mj0HDN82Pfo
Modern Physics for HS	Roberta Tevlin	http://roberta.tevlin.ca/
Natural Fission Reactors	American Nuclear Society	http://www.ans.org/pi/np/oklo/
Neutrinos	Laboratoire d'Annecy-le-Vieux de Physique des Particules, CEDEX France	www.lapp.in2p3.fr/neutrinos/anhhistory.html



Subject (alphabetical)	Organization	Website
Neutrinos – SNO Lab	Queen's University	www.sno.phy.queensu.ca/
Neutron Scattering	Canadian Nuclear Laboratories Canadian Neutron Beam Centre	http://www.cnl.ca/en/home/facilities-and-expertise/cnbc.aspx
Nuclear Energy Basics	University of British Columbia Faculty of Science	http://c21.phas.ubc.ca/article/nuclear-energy-basics
Nuclear Literacy Project		http://nuclearliteracy.org/
Nuclear Medicine	Sylvia Fedoruk	http://media.cns-snc.ca/history/fifty_years/fedoruk.html
Nuclear Wall Chart	Lawrence Livermore Laboratories	www.llnl.gov/abc/wallchart/guide.html
Nuclides	Nucleonica	www.nucleonica.net/poster.aspx
NORM about	World Nuclear Association	www.world-nuclear.org/info/inf30.html
NORM Transportation	Health Canada	www.hc-sc.gc.ca/ewh-semt/pubs/contaminants/norm-mrn/index-eng.php
NORM Specialists	Tervita	http://www.tervita.com/solutions/challenge/waste-management-and-disposal/norm-management
Particle Decay	Berkley Lab The Particle Adventure	www.particleadventure.org/decay_intro.html
Particle Physics for teachers	Berkley Lab The Particle Adventure	www.particleadventure.org/edumat.html
Periodic Table	US DOE Los Alamos Nuclear Lab – interactive U. of Nottingham Periodic videos	http://periodic.lanl.gov/index.shtml http://www.periodicvideos.com/
Periodic Table – song	Tom Lehrer's Elements song animated with table Animated words	https://www.youtube.com/watch?v=AcS3NOQnsQM https://www.youtube.com/watch?v=zGM-wSKFBpo https://www.youtube.com/watch?v=bfrv8Y9746g
Physics	MinutePhysics facebook & videos	www.youtube.com/user/minutephysics
Physics Demo	Awesome cloud chamber video / Berlin	www.youtube.com/watch?v=Efgy1bV2aQo
Physics Demos	St. Mary's University including mousetrap reactor	http://demos.smu.ca/index.php/demos/modern/30-mousetrap-reactor
Physics Education Project	Contemporary Physics Education Project	www.cpepweb.org/
Physics Fact Book	Scientific Essays	http://hypertextbook.com/facts/
Physics Students	The Feynman Lectures on Physics	http://www.feynmanlectures.info/
Physical Scales	Scale of the Universe -	http://scaleofuniverse.com/
Planck's Constant	Perimeter Institute high school experiment	http://www.perimeterinstitute.ca/outreach/teachers/class-kits/measuring-plancks-constant
Power Plants	Power Plants Around the World pictures	http://www.industcards.com/
Radiation & Radioactivity	Canadian Nuclear Association US Government Health Physics Society Science in School (European) (includes hot balloon!) Oak Ridge Area Universities Resonance Publications UN – Scientific Committee Effects Atomic Radiation	https://cna.ca/wp-content/uploads/2015/03/CAN-Factbook-2015-English1.pdf www.epa.gov/rpdweb00/understand/index.html www.hps.org/ http://www.scienceinschool.org/2009/issue12/radioactivity www.ornl.gov/ptp/collection/consumer%20products/consumer.htm www.resonancepub.com/wroentgen.htm www.unscear.org/unscear/en/publications.html
In the classroom Consumer Products Wilhelm Roentgen Radiation effects		



Canadian Nuclear Society / Société Nucléaire Canadienne

Recommended Links for Educators and Students

2015-11-01

Page 4 of 5

Subject (alphabetical)	Organization	Website
NORM Natural Reactors – Oklo Energy to decay / random # Quantum vacuum fluctuation Radiometric Time Scale Radioactive adventures	Idaho State University American Nuclear Society Fourmilab (Switzerland, not Fermilab) Absolute Astronomy US Geological Survey Science Et Cetera	www.physics.isu.edu/radinf/natural.htm http://www.ans.org/pi/np/oklo/ www.fourmilab.ch/hotbits/how3.html www.absoluteastronomy.com/topics/Radioactive_decay http://pubs.usgs.gov/gip/geotime/radiometric.html http://scienceetcetera.blogspot.ca/p/radioactivity.html
Radiation Epidemiology	International Commission on Radiation Protection	www.icrp.org/
Radiation Geophysics	US Geological Survey	http://pubs.usgs.gov/of/2005/1413/maps.htm
Radioactive Substances in Compact Fluorescent Lamps	NEMA Standard LSD 15-1993 (R2001)	www.nema.org/stds/lsd15.cfm
Radiation Safety	MSU – Historical Figures in Radiation Safety	http://www.orcbs.msu.edu/radiation/resources_links/historical_figures/historical_figures.htm
Radioactive tracers	Bizarre 1950s TV commercial on YouTube	www.youtube.com/watch?v=9Q1gksqghLU&NR=1
Radiometric Time Scale	US Geological Survey	http://pubs.usgs.gov/gip/geotime/radiometric.html
Radioisotopes – uses	US Nuclear Regulatory Commission	www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0217/r1/br0217r1.pdf
	US EPA	http://www.epa.gov/radiation/source-reduction-management/radionuclides.html
Radon	Health Canada	www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/radon-eng.php
Safety	Canadian Nuclear Safety Commission Nuclear Substances ... Regulations SOR /2000-207	www.nuclearsafety.gc.ca/eng/ www.nuclearsafety.gc.ca/pubs_catalogue/uploads/Sor207.pdf
Science Workbooks, lesson plans, Australian context	Australian Nuclear Science and Technology Org.	http://www.ansto.gov.au/Resources/DiscoveryCentre/EducationResources/index.htm
Shielding	Harvard	http://sciencedemonstrations.fas.harvard.edu/presentations/%CE%B1-%CE%B2-%CE%B3-penetration-and-shielding
Sources of Radioactivity	D.R. Lapp (paywall)	http://scitation.aip.org/content/aapt/journal/tpt/48/2/10.1119/1.3293653
Sticky Tape Gamma	Physics Dept., UCLA video	www.nature.com/nature/videoarchive/x-rays/
Sustainable Energy – without the hot air	David MacKay, U. of Cambridge free e-book	www.withouthotair.com/
Synchrotron (electron)	Canadian Light Source teachers workshop	www.lightsource.ca/education/
The Standard Model	Lawrence Berkeley National Laboratory	www.particleadventure.org/decay_intro.html
Uranium In drinking water Uranium and Depleted U	Cameco Corp. Educational Material Canadian Medical Association Journal World Nuclear Association	www.cameco.com/uranium_101/ www.cmaj.ca/cgi/content/full/170/6/951 http://www.world-nuclear.org/info/Nuclear-Fuel-Cycle/Uranium-Resources/Uranium-and-Depleted-Uranium/?jmid=2120&j=258864716
US Nuclear Industry	Whatisnuclear.com	www.whatisnuclear.com/
Vaseline Glass	Oak Ridge Area Universities	http://www.ornl.gov/ptp/collection/consumer%20products/vaseline.htm



Canadian Nuclear Society / Société Nuclaire Canadienne

Recommended Links for Educators and Students

2015-11-01
Page 5 of 5

Subject (alphabetical)	Organization	Website
Web driven nuclear science	Nucleonica	www.nucleonica.net/index.aspx

Internet links are ephemeral.

When you find a dead link, please contact the CNS and we will hunt for the new address or provide a replacement.