

WebSights features announcements and reviews of select sites of interest to physics teachers. All sites are copyrighted by their authors. This column is available as a web page at PhysicsEd.BuffaloState.Edu/pubs/WebSights/. If you have successfully used a physics website that you feel is outstanding and appropriate for WebSights, please email me the URL and describe how you use it to teach or learn physics—macisadl@buffalostate.edu.

• **Smart Phone Accelerometer from Bill Hammack, EngineerGuy.com** [tinyurl.com/WS-cellacc](http://tinyurl.com/WS-cellacc;);
www.engineerguy.com/

Another short vignette from a very delightful physics, engineering, and technology series by Hammack of UIUC Chemical Engineering. This four-minute clip shows a cell-phone teardown followed by animations describing the functions of the differential capacitors etched in silicon that form a tiny expensive cellphone accelerometer.

Submitted to OPHUN-L by Tom Kenyon of CRCS
Mathematics/Physics

DOI: 10.1119/1.4820871

• **GlowScript Applets by Bruce Sherwood and other Matter and Interactions Resources**
www.glowscript.org/#/user/Bruce_Sherwood/folder/MI/matterandinteractions.org

Sherwood is famous for coauthoring the Matter and Interactions (M&I) modern introductory physics curriculum; he also plays an important role in the development and promotion of VPython Modeling for physics instruction. Lately Bruce has been experimenting with GlowScript, a browser-based simulation environment (which does require a computer with graphic GPU and 32-bit browser). I have used the SpaceStation and PotentialEnergyWell applets to warrant student claims in class activity and discussion of rotational motion and Newton's laws, gravitation, and the electric potential.

My students have also used Sherwood's library of VPython applets from his lecture-demo materials webpage for visualization (and in some fewer cases for their own coding). I also regularly use the "Observing Surface Charge" and "Charged Straw" videos from this page in classes linking static electric and circuit phenomena.

Finally, a number of my own graduate students in physics education have directed me to the excellent collection of

video recorded lectures on the M&I curriculum by Ruth Chabay and Matthew Kohlmyer under the M&I website Instructor Resources tab.

Posted to PHYS-L by Bruce Sherwood of NCSU Physics, also suggested by PHY622 students

DOI: 10.1119/1.4820872

• **Energy Conservation, Energy Literacy and the DoE**

eere.energy.gov/education/energy_literacy.html

Given that *energy conservation* is a physicist's phrase describing an important guiding principle in physics, with a meaning quite different from the equally important societal need for responsible energy consumption, it is a relief to see the phrase *energy literacy* being advanced through these DOE (U.S. Department of Energy) materials. Now when you get frustrated with environmentally conscious folk who insist "we all need to try harder to conserve energy," you can direct them to this website. Linked pages include an Energy 101 course framework, resources, K-12 lesson plans, coloring books and activities, videos, and other energy-related instructional materials and propaganda.

Posted to the Science Matters NSTA e-blast mailing list by Ms. DaNel Hogan of US DoE

DOI: 10.1119/1.4820873

• **A Brief History of Physics from the BBC Science Club**

gizmodo.com/a-brief-history-of-physics-1147115801
vimeo.com/asalucander/videos

An under-five-minute amusing, class-enlivening animated trite history of physics highlighting contributions by Galileo, Newton, Maxwell, and particularly Einstein. Other BBC Science Club animated videos by Asa Lucander address the Brain, Music, Inheritance, and Extinction.

Submitted to OPHUN-L by Tom Good

DOI: 10.1119/1.4820874