Clearinghouse Update

From time to time we update our readers on situations which have been described in our *Newsletter*.

Project 2061 Develops Workshop for NOAA

Project 2061's "Using Atlas of Science Literacy" workshops provide hundreds of educators each year with the chance to improve their science knowledge through instructional resources and skills focused on benchmarks and standards. Thanks to a new grant from Triangle Coalition partner, the National Oceanic and Atmospheric Administration (NOAA: http://www.noaa.gov/), Project 2061 is now customizing its Atlas workshop to help NOAA develop a framework for climate and weather education. Based on a set of conceptual strand maps for climate and weather drawn from the forthcoming *Atlas of Science Literacy*, Volume 2, the spring 2007 workshop will address two key questions identified by NOAA as central to its education and outreach mission:

1. What should be the nature and content of curriculum resources for the study of earth science?
2. How can federal agencies such as NOAA ensure that their curriculum development efforts focused on climate and weather are of high quality and take advantage of national benchmarks and standards for science literacy?

"The strand maps will help NOAA see the 'big picture' of what key ideas related to weather and climate students should learn over time," said Ted Willard, Project 2061 senior program associate, who will develop and deliver the workshop. "This perspective is essential for planning learning experiences for students that go beyond isolated facts and make connections among ideas." By the end of the workshop, attendees from NOAA and elsewhere will be able to draw on Atlas of Science Literacy and on other Project 2061 resources and strategies to produce and refine a framework that can guide the development of programs, lessons, and other educational and outreach materials for the topics of climate and weather. Find out more at <http://www.project2061.org/events/workshops>

(*Editor's Note*: The foregoing was excerpted from the *Triangle Coalition Electronic Bulletin* for 9 November 2006, reprinted with permission.)

Solar Photovoltaic Power Update

An article by Michael Kanellos from the website of *The New York Times* on 20 November points up the materials challenge for producing solar photovoltaic electric energy. The photovoltaic cells required for a 1000 megawatt power plant require a year's output from a factory with ten production lines and 7000 tons of processed silicon.

More on the Accelerating Universe

Our Spring 2004 issue reported Robert Kirshner's description of his participation in the discovery of the acceleration of the universe from Type Ia supernovae. Alexei Filippenko, the Richtmyer Lecturer at the American Association of Physics Teachers meeting in Seattle continued the story on 9 January 2007. A member of the same team as Kirshner, Filippenko described attempts to measure a parameter denoted by *w*. The value of *w* is 0 for ordinary, nonrelativistic matter, 1/3 for photons (particles of electromagnetic radiation), and -1 for dark energy. Filippenko reported that data collected thus far indicate that, within 10%, *w* has a value of -1.

H.I.V. Microbicide Tests Stopped

According to *The New York Times* for 1 February 2007, some of the tests of H.I.V. microbicides described by David Fairhurst in our Fall 2006 issue have been stopped, for safety reasons: it was found that women using a gel with cellulose sulfate had a higher risk of H.I.V. infection than those using a placebo gel. Tests of three other potential microbicides continue -- Pro 2000 by Indevus Pharmaceuticals, BufferGel by ReProtect, and Carraguard, by the Population Council.

Nuclear Weapon Detection System to be Installed

Our Fall 2006 issue reported on the development of technology to detect enriched uranium in cargo. According to the 9 February 2007 issue of *The New York Times*, in spring 2007 detectors will be installed "at a Staten Island port terminal that are designed to screen cargo and automatically distinguish between naturally occurring radiation and critical bomb-building ingredients."

Bartlett on the September 2006 Issue of *Scientific American*

Our Fall 2006 issue reported on the special September issue of *Scientific American* on "Energy's Future Beyond Carbon." The December 2006 issue of *The Physics Teacher* carried a review of that issue by Al Bartlett, a frequent contributor to this *Newsletter*. Bartlett criticizes *Scientific American* for "rounding up the usual suspects" in addressing the problem of global warming instead of dealing with the ultimate cause of the problem, population growth. He also criticizes the issue for providing "no serious evaluation of the problems of peak production of global oil, which could happen any year now."

School Power Naturally receives IREC Award

Our Fall 2003 issue described the School Power Naturally program developed by NYSERDA (New York State Energy Research and Development Agency). In October 2006 this program, which provided 2 kilowatt solar photovoltaic systems to 50 New York State schools and a curriculum of lessons related to solar photovoltaic energy for a wide variety of disciplines and levels, received an Innovation Award from the Interstate Renewable Energy Council (IREC).

More information about School Power Naturally can be obtained by visiting < >.