

2006 SCIENCE TEACHER WORKSHOP

"UNDERSTANDING NUCLEAR RADIATION"

Sponsored By:

- The Virginia Chapter of the Health Physics Society
- The Virginia Section of the American Nuclear Society
- The North American Young Generation in Nuclear



The 2006 One-Day Science Teacher's Workshop was held at [Central Virginia Community College \(CVCC\)](#) in Lynchburg on Saturday March 11, 2006. This year's event attracted 19 teachers from all over the state.

At the workshop they learned basic concepts of radiation, its sources and uses, as well as the benefits of nuclear science and technology. The event also included a guided tour of AREVA's training facilities in Lynchburg.

The workshop covered the following topics:

- Fundamentals of Ionizing Radiation
- Biological Effects of Radiation
- Beneficial Uses of Nuclear Science and Technology
- Nuclear Energy
- Nuclear Radiation Activities in the Classroom
- Using a Geiger Counter in the Classroom

The workshop covered the following SOLs from Standards of Learning for Virginia Public Schools, January 2003:

- 3.11 Different sources of energy (a, d)
- 5.4 Definition of matter (a)
- 6.2 Sources of Energy (c)
- 6.3 Role of radiation (b)
- 6.4 Definition of matter (a, b, c)
- 6.9 Public policy decisions (b)
- PS.2 Basic nature of matter (a, b, f)
- PS.3 Models of atomic structure
- PS.4 Using the periodic table (a)
- PS.5 Nuclear reactions-fission and fusion (b)
- PS.6 Forms of energy (b, c)
- ES.7 Renewable and nonrenewable sources of energy (a, d)
- CH.2 Periodic table and atomic structure (a, b, c, f)
- PH.5 Inter-relationships among mass, distance, force and time (g)
- PH.6 Quantities, mass, energy, momentum, charge
- PH.8 Energy transferred and transformed (a)
- PH.10 Electromagnetic spectrum (a)
- PH.14 Very large and very small quantities and non-Newtonian physics (f, i)

