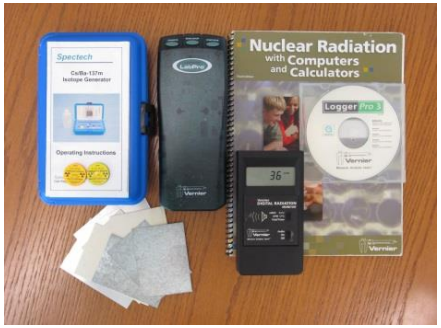
Radiation Instrument Kit



Contents of the Kit

The Radiation Instrument Kit provides the materials and equipment for students to conduct several data collection and radiation principle experiments. The kit contains a classroom set of 6 digital Vernier Radiation Monitors with LabPro interfaces, a copy of Vernier Logger Pro software, a copy of Nuclear Radiation with computers lab manual, and 6 each beta and gamma radiation sources. Shielding materials and a mini-generator for a half-life experiment are also included.

The kit is available for classroom use for periods of up to one week at a time.

North Central Chapter,
Health Physics Society

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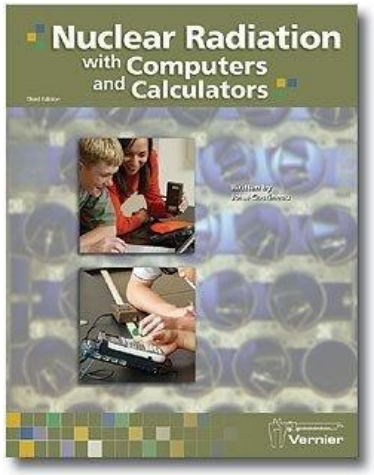
NCCHPS

North Central Chapter, Health Physics Society

Radiation Instrument Kit

Hands on educational aid in basic nuclear science for Physics and Science Teachers



Specialists in Radiation Safety

Phone: 651-737-4452

Radiation Detection

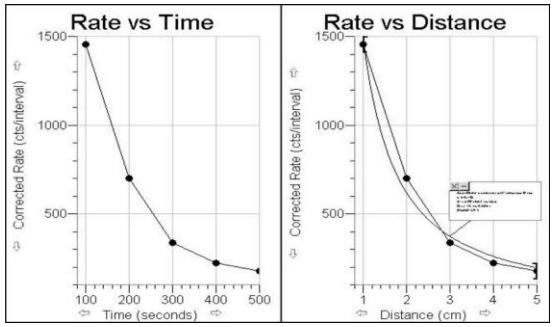
Geiger-Mueller (GM) Tube
Radiation Monitor

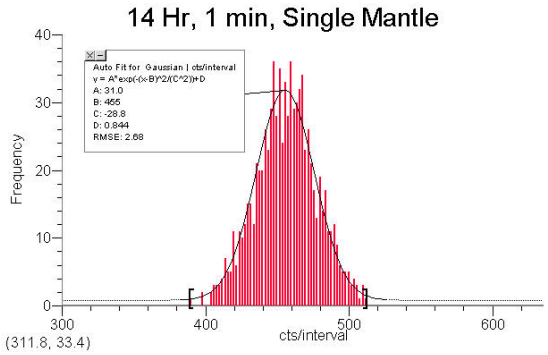
Radiation Monitor

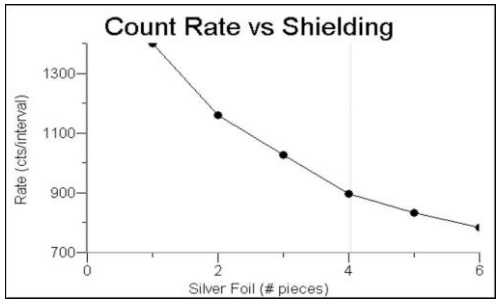
The Vernier Digital Radiation Monitor utilizes a fully enclosed Geiger-Mueller tube to detect alpha, beta, and gamma radiation. Alpha and beta radiations are measured in counts per minute (CPM). Gamma radiation measurement is displayed in milli-Roentgens per hour (mR/h).

The radiation monitor can be used with either a computer or graphing calculator.

Data Analysis







Classroom Applications

The curricular material contains six experiments written for use with the kit as well as a CD containing the word processing files for each of the student experiments.

Data collection, analysis, and experiments include counting statistics, background radiation quantification, radioactive material identification, effects of time, distance, and shielding, and differentiation between alpha, beta, and gamma radiation.

To request the kit online -

Log on to the NCCHPS website: http://hps1.org/chapters/ncc/

Click on "Radiation Instrument Kit"

Check availability of desired dates on calendar

Complete the reservation form and submit electronically