

BIO**MATION**

ENVIRONMENTAL

WATCH



MORE
Radon
Measurement
Course Dates •

SUMMER - 2008 VOLUME 3

Radon Measurement Course Schedule – with instructor Bernie Katz 2008

- TORONTO June 4 – 5
- SASKATOON Aug 22 – 23
- WINNIPEG Sept 19 – 20
- CANMORE, AB Nov 7 – 8

To take advantage of new opportunities in radon testing, the Radon Measurement Course is the best way to get started quickly. It is a fast-paced technical skills course for home inspectors, environmental consultants and safety inspectors.

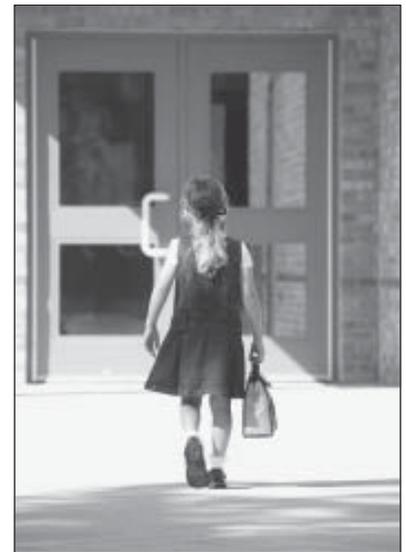
The earlybird course fee is \$339.00, including lunch both days.

Call for a brochure and registration form. Toll Free: 1-888-667-2324
www.biomation.com/radon

RADON in Schools

All schools need to be tested for radon gas. Children are at increased risk from radon gas exposure that can lead to lung cancer later in life. Many schools have been tested for radon but many have not. Many schools have inadequate ventilation, characterized by high carbon dioxide levels. Increasing the ventilation will help to lower the radon levels, as well as improve air quality.

You will find that clients will be more interested if you recommend conducting the radon tests when school is underway, and not just during holidays or weekends. Long-term tests with E-PERMs are preferred, but short term-tests will give quicker preliminary results. You will need one E-PERM per classroom. Larger rooms need one detector for every 2500 square feet. You can use your femtoTECH or Radon Scout data logger to investigate changes in radon from day to night and on weekends to help determine the school's radon characteristics. By using different methods – short-term, long-term and continuous monitoring – you will produce a strong report that can be acted upon as needed.



Many schools have inadequate ventilation, characterized by elevated radon and carbon dioxide levels.

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Continuous Radon Monitor

The Radon Scout is a direct-reading radon monitor that is calibrated to give accurate measurements. Because it functions by diffusion of radon gas into its internal solid-state detector, there are no pumps or moving parts. It connects to your computer for printing reports. At the client's site, you can start recording by means of an ON-OFF switch. Except for this switch, all settings are made from the computer keyboard.



**Radon Scout
Radon Scout - Plus**

Radon
Data
Logging!

To help you interpret the radon data, the Scout also records relative humidity and temperature. A built-in tilt sensor functions as an effective tamper monitor to help ensure valid data. Measurement intervals are one hour or three hours.

The Radon Scout - Plus adds a display of the radon level, and records air pressure. The measurement interval can be set from 1 to 255 minutes (4+ hours).

Alpha-Track Radon Detector



Model AT-101

Purchase
off-the-
shelf!

For project managers and home owners that want to purchase radon detectors off-the-shelf, we are supplying the model AT-101 alpha-track radon detector. It is ideal for a 3-month long-term test, but can also be exposed for as short as one month because of its large track reading area.

A Professional Image

At Biomation we believe your professional image is important in winning new business. All of our equipment looks impressive and will give your business the image that it needs.

Clients will be further impressed with your knowledge of the subject, and the ability to produce accurate results immediately at the end of the testing period.

Immediate
Results!



Indoor Air Quality Course

You can combine your indoor air quality and radon measurement courses.

Toronto - June 6 - 7
Saskatoon - Aug 21

Call **ESA** at 570-326-3700 for information

Risk of Lung Cancer at Low Radon Levels

Exposure to the low radon levels found in many homes appears to actually reduce the risk of developing lung cancer, according to a study published in the March issue of the journal of Health Physics. The findings differ significantly from the results of previous case-controlled studies of the effects of low-level radon exposure which detected a slight risk or no risk. The findings were reported on News-Medical, Science News and Medical News Today.

The study is the first to observe a statistically-significant hormetic effect from low levels of radon exposure, below 200 Bq/m³. Toxins and radiation that have beneficial effects at low doses are said to exhibit hormesis. Scientists believe that low doses can stimulate repair mechanisms in cells.

The aim of the study was to try to establish

what level of radon exposure actually correlated with significant lung cancer risk and to define a safety zone for home radon levels.

The observed hormetic effect was a surprise. The study exhibits a large degree of uncertainty in the findings, but still a hormetic effect from radon is certainly possible. It will reignite the debates with proponents of the linear no-threshold model.

The real problem with this study is that it increases attention to the health effects of radon below 100 Bq/m³ that nobody is concerned about anyway. Who performs mitigation to reduce radon from 50 to 25 Bq/m³? The main emphasis should be that it is another study showing that reducing high radon levels to below 200 Bq/m³ is important in reducing the risk of lung cancer.

Prestigious Award!

Radiation Industry

Award Winner!

Almost 20 years ago, the E-PERM system won an important award - The E-PERM was the recipient of American Nuclear Society's prestigious 1989 Radiation Industry Award. Rad Elec's E-PERM®, with state-of-the-art electret ion chamber technology, is internationally recognized for its accuracy and simplicity. It has consistently been the most successful technology in the U.S. EPA and NEHA Radon Measurement Proficiency Programs.



E-PERM Reader

BIOIMATION

— Your source for radon testing equipment supplies and training.

Method	Equipment	Model	Total Duration
Passive Radon Detectors	E-PERM electret method 	E-PERM Radon Introductory Kit - Short-Term - Long-Term - Radon in Water	- 24 h minimum - 12 months maximum - 4-day typical short-term test - 3-month typical long-term test
	 Alpha-Track	Model AT-101 - Long-term	- 14 days minimum - 3 months typical - 12 months maximum
Continuous Radon Monitors - Short-Term Testing - Data Logging	 femto-TECH	Model CRM-510LP - with display - portable printer	- typical 1-hour intervals
	 SARAD	Radon Scout Radon Scout - Plus - with display	- typical 3-hour intervals



Radon and Real-Estate

Some real-estate agents consider radon to be a deal-breaker. They use misleading statements such as "Radon is not a problem in this area."

Better agents are more proactive, and will use radon testing to their advantage

for the purpose of listing quality properties. They will suggest that the seller arrange for a radon test when a property is first listed. Real-estate can be an important source of leads.

Professional Insurance

Many radon inspectors consider it important to carry errors and omissions insurance. But are radon testing activities insurable at reasonable rates? Insurers tend to ask the following questions:

- Have you taken a training course?
- Have you completed a certification process?
- Are you using proper equipment that is calibrated on a regular basis?
- Do you use established methods and protocols?

If you can answer "yes", you should be able to avoid any issues and problems with your clients, and you will be more insurable.

National Environmental Health Association Certification



In addition to the certificate of proficiency that is earned in the radon measurement course, we are offering the option of writing the NEHA certification exam at the end of the course. For radon testing, NEHA certification is a recognized measure of professional qualification. Fees are \$125.00 + GST for the exam and \$150.00

for certification for two years. You will be listed on the NEHA web site in the Canadian data base of qualified radon testing individuals. Although NEHA certification is not required in Canada for radon testing, many of the contracts that have been issued specify NEHA certification as a requirement.

All of our radon measuring equipment is supplied with a radon testing protocol that you can follow to produce valid results, and a model Quality Assurance Plan that you can use to set up your testing procedures.

ISO 9001:2000 Certified

® E-PERM is a registered trademark of Rad Elec Inc.

For Course Participants

Valid up to two months following course

2008

5% OFF YOUR PURCHASE

E-PERM System, Continuous Radon Monitor, Gamma Monitor or E-PERM Detectors up to a maximum of \$8,000.00 purchase

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