

## What is geophysics?

Geophysicists are scientists who study the structure and composition of the Earth. They use sophisticated instruments to measure physical properties such as:

- Velocity of sound waves transmitted through the ground
- Density, electrical resistivity, electrical fields, and radioactivity of rocks
- Changes in gravity and magnetic fields of the Earth

Geophysics contributes to an understanding of the internal structure and evolution of the Earth, earthquakes, the ocean and many other physical phenomena, such as tsunamis and climate change. Geophysics has many business applications too.

## Geophysics & computer technology

Geophysicists "push the envelope" of computer applications. Specialized computer skills and the use of complex graphics applications are part of your career. Computer technology is an integral component of geophysics.



## More information

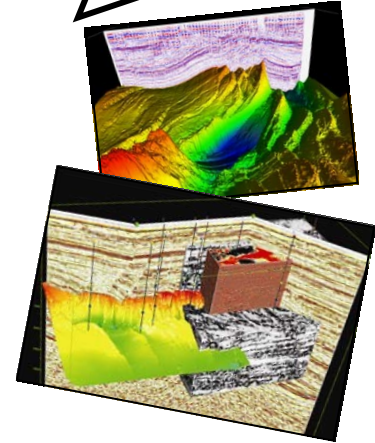


Canadian Society of Exploration Geophysicists  
600, 640-8th Avenue SW  
Calgary, Alberta, Canada T2P 1G7

Phone: 403.262.0015  
E-mail: outreach@cseg.ca or students@cseg.ca

[www.cseg.ca](http://www.cseg.ca)

## What is geophysics?



## Careers in Geophysics

- **Petroleum Geophysics**
- **Environmental Geophysics**
- **Mining Geophysics**
- **Crustal Geophysics**

► The study of the physical properties of the earth.

More info at [www.cseg.ca](http://www.cseg.ca)

## ► What do you want in your career?

- Would you like a career in science, with lots of challenge?
- Do you want to do work that is important to the world?
- Do you want to be able to develop your ideas and see them become reality?
- Do you want excitement, adventure and travel?
- Do you like technology and want to be at the leading edge of new advances in computer applications?

## ► What are you good at doing?

- Do you like learning about the Earth?
- Are you good at math & science?
- Are you creative, a good communicator and a team player?
- Do you like working with computers?
- Do you like to solve problems?

All of these ambitions may be realized in a career in **GEOPHYSICS**.

### Who hires Geophysicists?

Geophysicists work for many different employers. Many Geophysicists find employment in the petroleum industry.

Companies involved in field acquisition, data processing and interpretation of seismic data related to natural resource management



employ large numbers of geophysicists. Other employers include engineering companies, mining companies, universities, governments and space agencies.

### Education requirements?

To work as a Geophysicist, you will need a B.Sc. in geophysics, physics, mathematics or geology, and be licensed by your provincial regulatory association. Your University courses will typically involve mathematics, physics, computer science, geophysics, and geology.

### Salary?

Geophysicists are well paid for applying creativity and knowledge in a highly technical field. In 2007, the average starting salary for a Petroleum Geophysicist



working for an oil company was \$50,000 to \$70,000.

### Work opportunities?

Many Geophysicists work in seismic data acquisition, processing or interpretation for natural resource management.

Geophysicists are also involved in environmental studies, archaeological excavations, water resource management, forensic investigations, the Earth's climate, and the causes and prediction of natural phenomena such as earthquakes, volcanic activity, landslides, and tsunamis. Some geophysicists have even become astronauts. Opportunities abound in both technical and management positions in geophysics.

