



## A Study Of Seismic Luminescence In Detecting The Earthquakes

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**Abstract:** Study of earthquakes in geological hazards is a key element. Many researches & studies have been conducted by me on the earthquakes to invent a device that should be used to study and predict the earthquakes and also solve the mysteries and other problems of the earth's underground and designed an architecture named Geoscope in 1987 to keeping the entire earth's underground to be under control of the geoscope with many revolutionary proposals. This is not what Buckminster had proposed in 1962. My Geoscope was designed to study the earth's underground mysteries, explore the underground minerals and predict the geological hazards and consisting of revolutionary proposals just like attracting the sea waters to the underground areas of deserts through the layers by electro-ionization and attracting the vaporized sea waters to the desert plains through the sky by geomagnetizing atmosphere when the weather is surrounded by water molecules during the trough of low pressure areas by constantly studying the underground. Let us, study about the exploitation of earthquakes and the methods of studying earthquakes. Seismic luminescence is one of the key study in earthquakes forecasting methods.

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### Introduction:

Geoscope is very useful in studying the earth sciences and geological hazards. Many researches and studies have been conducted by me on the geological sciences & hazards and invented the Geoscope which can help to study, explore and predict the geological hazards in advance.

Gas anomalies: Seismic luminescence studies are very helpful with earthquake prediction. Many studies have done by on the Seismic luminescence.

### Materials and Methods:

A deep bore-well having suitable width and depth has to be dug. An laboratory having most modern high-technological research and analysis facilities has to be constructed on that well. All types of modern electronic, physical and chemical sensors and apparatus, super high remote sensing technology in the area of sensor physics, signal processing used specially image processing, electromagnetic detection technology, deep underground detectors and mineral exploration equipments, natural gas sensors etc to recognize the underground mineral resources, rise and fall of the underground water levels, micro-vibrations and waves generated in the underground, differences in pressure, temperature and other seismic activities should be inserted into the underground and linked with the concerned research analyzing sections of the

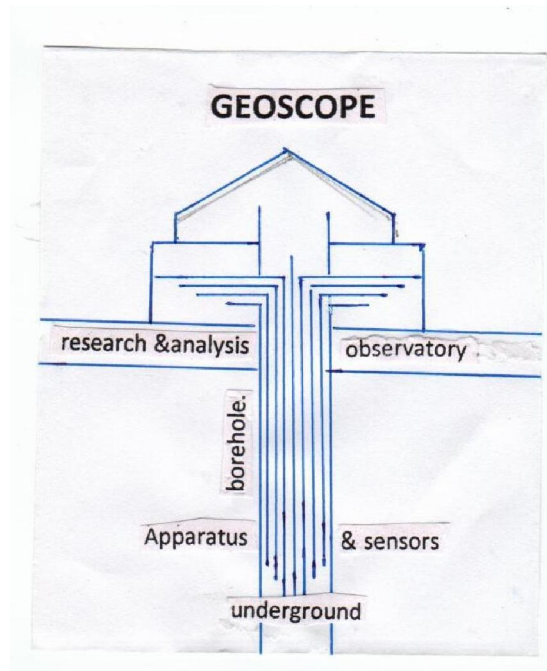
laboratory that is above the well to observe, study, research and analyze the mineral conditions and seismic changes existing and taking place in the underground.

### Management:

Observe the physical & chemical conditions and changes such as foreshocks, chemical changes, ground water levels, strain in rocks, thermal anomalies, factor luminescence gas anomalies, electrogeopulses, micro-vibrations, pressure, geomagnetic forces, etc existing and taking place in the underground. The existences of mineral resources and onset of earthquakes can be guessed by analyzing the aforesaid changes in the concerned analysis sections of the laboratory.

### Studies and discussions:

Several studies have been studied as described to study and explore the underground and all were successfully proved out in practice. Explained some of them as described below to study, explore and predict the earthquakes by studying the earth's underground radiations and scanning the earth's underground's electrogeogram test through the Geoscope. Seismic luminescence is one of the key study in earthquakes forecasting methods.



### Seismic luminescence study:

Gas anomalies emission: Over the centuries, there have been many reports of earthquake lights, both before and while the ground is shaking.

Most rock contain small amounts of gases that can be isotopically distinguished from the normal atmospheric gases. There are reports of spikes in the concentrations of such gases prior to a major earthquake; this has been attributed to release due to pre-seismic stress or fracturing of the rock. One of these gases is radon, produced by radioactive decay of the trace amounts of uranium present in most rock. Radon is useful as a potential earthquake predictor because it is radioactive and thus easily detected, and its short-half life makes radon levels sensitive to short-term fluctuations. The earthquakes with which these changes are supposedly linked were up to a thousand kilometers away, months later, and not at a magnitudes. In some cases the anomalies were observed at a distant site, but not at closer sites.

And, the lights are caused by electrical properties of certain rocks. The earthquake lights can take many different shapes, forms, and colors. Common forms of earthquake lights include bluish flames that appear to come out of the ground at ankle height; orbs of light called ball lightning that float in the air for tens of seconds or even minutes; and quick flashes of bright light that resemble regular lightning strikes, except they come out of the ground instead of the sky and can stretch up to 200 meters.

### How earthquake lights form;

When nature stresses certain rocks, electric charges are activated. The lights can occur hours to days before major earthquakes and also during actual shaking. They have been recorded at distance of up to 160 kilometers from the epicenter.

### Predicting earthquakes:

Earthquake lights are likely to be very helpful with earthquake prediction.

### Apparatus to study seismic luminescence:

Geoscope to study seismic luminescence can be built in many forms just like Simple Geoscope model, Home-made geoscope model and Micro-Geoscope model etc.

**Simple Geoscope method** is a simple model involving no expenditure. A deep well having suitable width and depth has to be dug. Construct a room over the well. Wash the inner walls of the room with white Lime. Fix an ordinary electric bulb in the room.

**Home-made Geoscope method** is also very simple and easy model involves no expenditure. Even students, children's and science enthusiasts can make the home-made geoscope and detect the earth-quakes 24 to 28 hrs in advance. By making certain changes and alterations, a house having a well can be converted into a geoscope i.e., wash the inner walls of that house with white Lime. Fix ordinary electric bulbs in the room.

**Management:** The two Geoscope structures described above are easy to construct, easy to use and easy to analyze the Seismic luminescence study.

Observe the color of the room lighting daily. When the bulb glows, the light in room generally appears white in color, but before occurrence of an earth-quake, the room lighting turns ultra violet blue in color. The onset of earth-quake can be guessed by this "Seismic luminescence emission"

### Modern Geoscope method:

In modern methods to analyze the seismic luminescence, a deep bore-well having suitable width and depth has to be dug. A laboratory having most modern high-technological research and analysis facilities including a mechanical system to analyze the seismic luminescence and gas anomalies emerging from underground has to be constructed on that well. All types of modern sensors and apparatus including a mechanical system to catching/grabbing/absorbing the seismic luminescence or gas anomalies emerging from the underground to recognize the seismic luminescence and other seismic activities should be inserted into the

underground and linked with the concerned research analyzing sections of the laboratory that is above the well to observe, study, research and analyze the seismic luminescence and seismic changes existing and taking place in the underground. By that earthquakes can be warned by analyzing the luminescence as given the above.

#### **Management:**

Observe the factor luminescence gas anomalies existing and taking place in the underground. The onset of earthquakes can be guessed by analyzing the aforesaid seismic luminescence studies in the concerned analysis sections of the laboratory that is above the well.

#### **Principle:**

Due to stress of continental plates and some other reasons on a place where there are favorable chances for earth-quake to occur, the pressure is induced in the underground. As a result, there is a steady rise in the pressure around the focus centre. Because of the large disparity in the magnitude of energies involved, gas anomalies such as shown below show up much earlier even at large distance from the epic-centre which enter the well through the underground springs.

- (a) Emission of Helium, Hydrogen etc
- (b) Emission of chemico-seismic evaporation anomalies such as sulphur, calcium, nitrogen etc., ,
- (c) Emission of seismic atomic radiations such as radon from radioactive mineral compounds etc

These gas anomalies occupy the room in this manner; emit radiation which gives blue color (sometimes red) to the room.

Collect and analyze the above-mentioned gas anomalies and seismic luminescence in the concerned section established in laboratory that is above the well. Observe the gas anomalies and seismic luminescence in the research and analysis sections of the Geoscope daily 24 hours 365 days. When the gas anomalies or seismic luminescence are released the earth-quakes can be considered.

Here is a very important is to be grasped. Before occurring of an earthquake-gas anomalies as stated above such as radon, helium, hydrogen and chemico-mineral evaporations such as sulphur, calcium, nitrogen and other fracto-luminescence radiations show up earlier even at large distances from the epicenter due to stress, disturbances, shock waves and fluctuations in the underground forces. These gas anomalies & fracto luminescence radiations and other chemical evaporations enter into the well through the underground springs. When these anomalies occupy

the simple Geoscope rooms or Home-made Geoscope rooms above the well, the room lighting turns violet in color. The light in the room scattered in the presence of these gas anomalies, fracto-luminescence radiations and other chemico-mineral evaporations the ultra violet radiation is emitted more and the room lighting turns in violet color. Our eye catches these variations in the radiation of the lighting in the room easily since  
The violet rays having smaller wave length  
The violet rays having property of extending greatly  
The light becoming weak in the violet region  
The eyes having greater sensitivity to violet radiation  
Due to all reasons, the room may appear violet in color then we can predict the impending earth quakes 12 hours in advance. This principle is also applies to the section built in modern research and analysis methods that is above the well.

#### **Conclusion:**

We can make many more research and analysis methods thus bringing many more developments and modifications in the Seismic luminescence research and study of the Geoscope and predict the earthquakes by virtue of performing studies as described above.

#### **Acknowledgements:**

Many consultations are made with university professors and research scientists for their suggestions and advices. There was also taken some information from the Wikipedia. I am grateful to them.

#### **Appeal:**

Kindly recognize me as the Father of geoscope who has worked hard to create an architecture to take the entire underground under control and keep named Geoscope by establishing in between the underground data procurement apparatus and surface data analysis laboratory with the help of a deep well to study the underground mysteries, explore the underground resources and predict the geological hazards to study the earth's underground mysteries, explore the underground minerals and predict the geological hazards, attracting the sea waters to the underground areas of deserts through the layers by electro-ionization and attracting the vaporized sea waters to the desert plains through the sky by geo-magnetizing atmosphere when the weather is surrounded by water molecules during the trough of low pressure areas by constantly studying the underground by constantly studying the underground through the Geoscope architecture system.

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