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RADON CAN DETECT POTENTIAL NATURAL DISASTERS

PENANG, July 2015 - Although radon is a radioactive gas which can cause lung cancer in instances of overexposure, it can also foretell the onset of natural disasters.

A physicist from Universiti Sains Malaysia (USM) specialising in radiation, Professor Dr. Mohamad Suhaimi Jaafar stated that to date most studies on radon tended to focus on its harmful effects on human beings.

Nevertheless, radon possesses its own uses as it has proven able to foretell the occurrence of natural disasters such as earthquakes and tsunamis.

"When there is friction caused by rocks rubbing against each other below the earth's surface, radon gas is emitted and this can be measured using a radon measurement device. A heightened presence of the gas as denoted by abnormally high readings indicates that an earthquake is imminent.

"This can serve as an indirect signal for people to be on the alert and take preventive measures before disaster strikes," he said during his Professorial Inaugural lecture titled *Radon: Undangan Tertangguh* (Radon: Pending Invitation) here recently.

Deputy Vice-Chancellor (Academic and International Affairs) Professor Dato' Dr. Ahmad Shukri Mustapa Kamal and over 200 guests were present at the interesting lecture delivered by Mohamad Suhaimi, who is also Dean of the School of Physics.

Besides acting as an early warning sign for natural disasters, radon can also be an economical early indicator in searching for water sources besides being of use in geothermal studies, and petroleum and mineral exploration.

"In the normal process of petroleum exploration for example, workers will drill beneath the earth's surface in search of oil and this is costly, with no guarantee of positive returns.

"However by measuring the levels of radon, the presence of petroleum sources can be determined before beginning the drilling process thereby saving costs and manpower," he said.

He also stated that radon is produced by uranium gas that is contained in the earth. Radon in itself does not pose a threat, however when it decays it emits alpha rays which can cause cancer.

"Nevertheless, the presence of radon gas in the air can be minimised by ensuring there is sufficient ventilation," he added.

Mohamad Suhaimi also explained the meaning of the subtitle of his lecture, "pending invitation" whereby he does not only examine radon gas but also links it to the spiritual, the philosophical and the natural environment.

He stated that man's greed in excessively adapting, exploring and exploiting natural resources has isolated man from one another and also man from the Creator.

The father of four also alluded to the risks and adverse effects faced today resulting from man's own actions.

"Mankind does not realise that disasters faced on this earth are all of their own doing. Allah S.W.T has created this perfect world but when greed overtakes everything, mankind forgets the pending invitation (disaster) that will ensue," he concluded.

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