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²²²Rn activity measurements in water samples in the Montagu area, Western Cape, South Africa using the RAD 7 alpha spectrometer detector

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Abstract content
   (Max 300 words)

²²²Rn is an inert radioactive gas that is generated by the decay of ²²⁶Ra (which forms part of the ²³⁸U series of natural radionuclides). Knowledge of activity concentrations of ²²²Rn in hot spring waters is of interest since it can provide new insight into the hydrogeology of the spring area and because it allows one to make estimates of the ionizing radiation dose to workers and public residing in these areas.

It is well known that ²²²Rn has a significant contribution to the background radiation dosage. It is thus of importance to develop and optimize ²²²Rn detectors for a large array of sample types. The RAD 7 will be used as an alpha-spectrometer to verify the decay constant of ²²²Rn using split ²²²Rn-rich water samples (from a borehole) which are measured over a period of days.

Apply to be
 consider for a student
   award (Yes / No)?

Yes

Level for award
 (Hons, MSc,
   PhD)?

Hons

Main supervisor (name and email)
and his / her institution

Prof R Newman, rtnewman@sun.ac.za

Would you like to <br> submit a short paper <br> for the Conference
 Proceedings (Yes / No)?

Yes

Primary author: Mr RYNO, Ryno (Univsersity of Stellenbosch)

Co-authors: Dr PEANE, Peane (iThemba Labs); Prof. RICHARD, Richard (Univsersity of Stellenbosch)

Presenter: Mr RYNO, Ryno (Univsersity of Stellenbosch)

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