

T3.1-P26. SAUNA- Equipment for low level measurement of radioactive xenon

Today, more than 25 SAUNA Systems are installed around the world, operated by national and international organisations. The activity measurement of the four xenon isotopes, ^{133}Xe , $^{131\text{m}}\text{Xe}$, $^{133\text{m}}\text{Xe}$, and ^{135}Xe is performed using the very sensitive beta gamma coincidence technique allowing high sensitivity also for the meta-stable states resulting in MDC:s of 0.3, 0.3, 0.3 and 0.7 mBq/m³ respectively. In the SAUNA Systems product portfolio there are systems for; continuous monitoring, in-field sampling, and reanalysis of archived samples. We also have a container solution for continuous monitoring with all infrastructure integrated. The SAUNA systems in the network are now being upgraded with the latest developments; memory free detector cells, new digital detector electronics, in house developed high voltage supply, new data acquisition software, new safety solutions, and a new sample archive. New developments for coming improvements and upgrades will be presented.

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