

### **3.1-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,  $^{133}\text{Xe}$ ,  $^{131\text{m}}\text{Xe}$ ,  $^{133\text{m}}\text{Xe}$ , and  $^{135}\text{Xe}$  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/m<sup>3</sup> 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.

**Primary author:** BERGLUND, Helena (Scienta SAUNA Systems)

**Presenter:** BERGLUND, Helena (Scienta SAUNA Systems)

**Track Classification:** 3. Advances in sensors, networks and processing