

## **Isomeric gamma ray measurement system at S2+ in SHARAQ13 experiment**

In the SHARAQ13 experiment, mass measurement of the proton-rich isotopes around  $^{47}\text{Fe}$  has been performed. To assist the particle identification and to search for new isomeric states, the gamma-ray detectors for the isomer tagging were installed in the air downstream of the final focal plane(S2).

Two HPGe detectors were placed perpendicular from the beam direction. To confirm the accuracy of isomer energy and half-life determination, the known isomers  $^{38}\text{K}$ ,  $^{43}\text{Sc}$ ,  $^{46}\text{Sc}$ ,  $^{43}\text{Ti}$ , and  $^{46}\text{V}$  were analyzed.

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