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Type: **Wedge Participant**

Activity Quantification with the SPIR-Ace RID

Mirion Technologies, with the acquisition of Canberra, is currently in the process of merging the best technologies from their combined portfolios. The Spir-Ace is one product receiving such treatment. The Spir-Ace is a scintillator based portable Radionuclide Identification Device in an IP64 rated enclosure that has been tested to show ISOCS compatibility. With options that include alpha, beta and neutron detection, this comprehensive device meets or exceeds ANSI N42.34, IEC62327 and IAEA NSS 1 for detection of radionuclides. This modernized platform adds accessibility to contemporary portable systems such as GPS, accelerometer positioning, and wireless communications that allow remote reporting.

Recently, Mirion has characterized both the NaI and LaBr₃ detectors for ISOCS efficiency calibrations, allowing the development of a platform that both identifies radionuclides and quantifies the activities with accuracy that is consistent with the Inspector 1000 products. Initial testing has shown the Spir-Ace able to quantify known quantities of mixed nuclide radioactivity contained in a standard drum to within 25% or better of the certified activity, in a 10 minute sampling time.

The Spir-Ace allows for the same performance in activity calculation that has been established with the Inspector 1000, and combines it with a modern platform that complies with regulatory needs found in many countries. It allows for remote monitoring and reporting and has been deployed on remote stations that are either static or in motion. Safeguard applications could make significant use of the wide range of capability found in this small device.

Which "Key Question" does your Abstract address?

TEC2.6

Topics

TEC2

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