



Contribution ID: 134

Type: **Wedge Participant**

Shaping together the future of the hybrid K-edge / K-XRF technique

The Joint Research Centre (JRC) and the International Atomic Energy Agency (IAEA) are organizing a workshop on the Hybrid K-Edge/K-XRF (HKED) technique in Karlsruhe, Germany, from 23 - 25 April 2018. The HKED technique is a key method for safeguards nuclear material accountancy at bulk-handling facilities. It allows one to measure uranium and plutonium concentration in liquid samples with uncertainties down to about 0.2% and 0.6%, respectively. The workshop will bring together users of the Hybrid K-Edge / K-XRF (HKED) technique to discuss topics of common interest, such as performance and maintainability of HKED hardware and software, analytical performance of HKED, specific HKED applications and future developments. Particular focus will be given to possible future collaborations.

The workshop will consist of presentations and discussions on the above topics and will include a live demonstration of the HKED setup installed at JRC-Karlsruhe. To facilitate discussions, each participant was asked to present the HKED hardware and software used in their lab, the types and numbers of samples they analyse by HKED, their uncertainty requirements for HKED and any current or anticipated challenges/problems.

A set of HKED spectra has been distributed to the registered participants for independent analysis. The results of these analyses will be shared during the workshop so that participants can benefit from each other's experiences.

The outcomes of the workshop will be presented during the IAEA Symposium. The workshop is expected to contribute to a common understanding of the current status of the HKED technique worldwide, and to addressing current and future challenges of the HKED technique.

Which "Key Question" does your Abstract address?

TEC1.3

Which alternative "Key Question" does your Abstract address? (if any)

TEC1.2

Topics

TEC1

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