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VKTA Rossendorf - Laboratory for Environmental and Radionuclide Analysis

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The VKTA (Nuclear Engineering and Analytics Inc.) is charged by the Free State of Saxony with the decommissioning and waste management of the nuclear installations at the research site Dresden-Rossendorf. This task includes the safe management and disposal of fissile material and radioactive wastes.

The acquired expertise and our solution-oriented way of working are the basis for a varied range of services especially the environmental and radionuclide analyses.

The Laboratory for Environmental and Radionuclide Analysis is accredited according to DIN EN ISO/IEC 17025 and provides a sound range of analytical and metrological services including their coordination and management. The personnel and the rooms, measuring and technical equipment are particularly designed for our special field, the measuring of radioactivity. We are focussed on measuring artificial and natural radionuclides in a wide range of activity and in different sample matrices (e.g. urine, faeces, metals, soil, concrete, food, liquids). With the flexible accreditation of the radionuclide analytics the Laboratory is able to react shortly to changing requirements in decommissioning, environmental monitoring and radiation protection. Essential chemical and radiochemical methods are e. g.:

- Alpha particle spectrometry
- Liquid scintillation counting
- gamma ray spectrometry, including Ultra-Low-Level
- High-resolution ICP-MS
- Chromatographic methods such as ion chromatography, gas chromatography, HPLC
- Electrochemical measuring methods such as potentiometry, voltammetry

The Laboratory offers analytical services to the research site Dresden-Rossendorf and national and international customers adapting its analytical procedures to the special needs of customers.

The presentation demonstrates on the basis of examples the work of Laboratory within the scope of decommissioning of nuclear facilities, especially at a research site, from radiological preliminary investigation to declaration of waste.

Country or International Organization

Germany

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