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I N V I T A T I O N

for a

V E R A - S E M I N A R

with

Erik Strub

Division of Nuclear Chemistry, University of Cologne, Germany

AMS in nuclear decommissioning – possibilities and limitations

When a nuclear facility (power plant or other) is decommissioned, it has to be proven that the site is free from contaminations. While this is commonly demonstrated using radiometric methods, in the case of several long-lived radionuclides, accelerator mass spectrometry (AMS) measurements might contribute. This is the case for “classical” AMS radionuclides like ^{14}C, ^{36}Cl, ^{41}Ca, but also for radionuclides that are more commonly attributed to nuclear waste (Pu isotopes, ^{90}Sr, ^{137}Cs).

I will give a short introduction on how a nuclear power plant is decommissioned, what material is considered conventional waste and on typical requirements of authorities in this context. Afterwards, I will report on the several related AMS measurements that have been performed at CologneAMS so far and what the future of AMS in decommissiong might be.

Thursday, 10. November 2022, 16:30 o'clock

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1. Stock, Victor-Franz-Hess Hörsaal

R. Golser S. Merchel W. Kutschera