



E I N L A D U N G

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

von

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**Research at the Centre for Accelerator Mass
Spectrometry (AMS) in Bucharest**

The AMS center in Bucharest was founded in 2013, relying on a High Voltage 1 MV Tandetron particle accelerator and the associated sample preparation laboratory. With this multi-isotopic AMS machine the routinely analyzed species are ^{14}C , ^{10}Be , ^{26}Al and ^{129}I , while recently different tests were performed to determine isotopic ratios in actinide species ($^{239,240,242}\text{Pu}$, ^{236}U). Radiocarbon remains the isotope with the largest share within our measurements, enabling studies in archaeology, environment and cultural heritage. A niche position in our radiocarbon analysis is represented by the dating of single amino-acids resulting from the separation of collagen extracted from potentially risky bone material using a High Pressure Liquid Chromatography (HPLC) method. Beside the radiocarbon applications we present also some research examples of using isotopic ratios of $^{10}\text{Be}/^9\text{Be}$, $^{26}\text{Al}/^{27}\text{Al}$ and $^{129}\text{I}/^{127}\text{I}$ for paleo-reconstruction of glaciers and oceanography, respectively.

Donnerstag, 24. Januar 2019, 16:30 Uhr

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Victor-Franz-Hess Hörsaal**