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Title:

**Current status of BINP AMS and MICADAS facilities, working at AMS Golden Valley, Russia.**

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Abstract

The radiocarbon laboratory “AMS Golden Valley” was established in 2020 in Novosibirsk, Russia. At the present moment laboratory provides routine 14C analyses of various samples: collagen, cellulose, humic acids, carbonates from sediments, food soot, methane from seeps, CO2 dissolved in water etc. The main focus of the laboratory is to determine the age of archaeological artifacts by radiocarbon dating, some of the work is being carried out with 14C labels in the area of ​​biomedical application of AMS, in particular to study the penetrating ability of aerosols in the tissues of laboratory mice and the selectivity of oncolytic viruses.

Laboratory is equipped with two accelerator mass spectrometers: BINP (Budker Institute of Nuclear Physics) AMS facility and MICADAS-28. In 2022 AMS Golden Valley passed the Glasgow International Radiocarbon Intercomparison. Current status of the laboratory will be presented. BINP AMS facility is undergoing modernization to improve reliability and performance. MICADAS-28 continues to perform routine measurements of user samples.