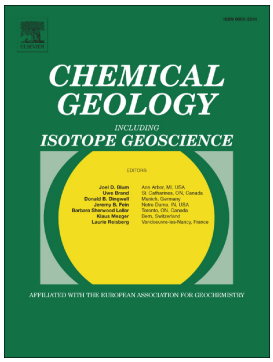

Long-lived radionuclides as chronometers and tracers of environmental processes at the Xi'an Accelerator Mass Spectrometry Center

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Abstract:

Long-lived radionuclides with half-lives ranging from 10^3 to 10^8years have wide applications in geochronology and environmental tracer studies. A wide range of climatic, geologic, and environmental records preserved in diverse natural archives can be characterized by measuring their concentrations, using accelerator mass spectrometry (AMS).The purpose of this paper is to highlight some representative works on ^{14}C, ^{10}Be, ^{26}Al and ^{129}I in these two aspects at the Xi'an AMS Center in the past ten years, since a dedicated AMS facility was established. The improvement of