

Research strategy of multi-isotope studies on environmental research

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Environmental traceability method is based on material cycling, and thus considered to be applicable to the studies on various environmental issues. Especially, the method can be applicable to evaluate human impacts on ecosystem properties. In terrestrial ecosystems, heterogeneity of local environment in multiple elements and isotope ratios exists in geology, providing information to watershed ecosystems through water cycling, material cycling and movement of living organisms. The information can be used as an indicator of environmental traceability method.

The Research Institute for Humanity and Nature (RIHN) is operating a co-research framework, named "Isotope Environmental Research Collaboration". The research pursues research development through multi-elemental analysis and multi-isotope analysis, considering the environmental traceability. To achieve the goal, various approaches are required including development of manuals for observation, standardization of analysis and construction of protocols for sharing data, etc.

It is recently considered that research collaboration with local people, local government, and local education is important to solve environmental issue. We propose the importance of research collaboration between universities and our role to enhance research collaboration based on RIHN initiative.

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