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# ICP-MS For Analysis of Lithium Isotopic Ratios in Materials Highly Enriched in $^7\text{Li}$ (Abstract)

CRADA #626 (PNNL #82577)

September 2023

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Kairos Power LLC

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Abstract

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Sean R Scott

Prepared for  
the U.S. Department of Energy  
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## Abstract

The purpose of this project is to develop analytical methods that can be deployed for analysis of lithium isotope enrichment products. One method involves rapid, high-throughput, relatively low precision analysis for direct monitoring of enrichment processes. A second method involves slower, but more precise analysis of final products of the enrichment process. We will use commercially available analytical equipment (quadrupole base inductively coupled plasma mass spectrometry and multi-collector magnetic sector inductively coupled plasma mass spectrometry) so that the analytical methods developed can be applied broadly.

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