



Showcasing research from Dr. Subban's laboratory, Energy and Environment Directorate, Pacific Northwest National Laboratory, and Department of Materials Science and Engineering, University of Washington, Seattle, Washington, USA.

Flow-driven enhancement of neodymium and dysprosium separation from aqueous solutions

Rare-earth element (REE) separation via selective precipitation is often time-consuming and resource-intensive. In this study, we report a flow-driven method that can rapidly generate a 99% Dy-purity precipitate from an aqueous solution containing both Nd and Dy salts. Such improvements in separation efficiency were demonstrated for a wide range of Nd:Dy ratios, suggesting promise of flow-driven method for selective REE recycling and extraction applications.

As featured in:



See Qingpu Wang and Chinmayee V. Subban, *RSC. Sustainability.*, 2024, **2**, 1400.