



Showcasing research from Assistant Professor Takafumi Hanada and Professor Masahiro Katoh, Tokushima University, Professor Masahiro Goto, Kyushu University, Japan, and Professor Joao Coutinho and Dr. Nicolas Schaeffer, University of Aveiro, Portugal.

Improved separation of rare earth elements using hydrophobic deep eutectic solvents: liquid-liquid extraction to selective dissolution

Hydrophobic deep eutectic solvents composed of a beta-diketone and a phosphine oxide were successfully employed as both liquid-liquid extraction and selective dissolution media for rare earth elements. Selective dissolution exhibited superior separation performance compared to liquid-liquid extraction. We found that the hydrophobicity of the deep eutectic solvent is crucial for enhancing the selective dissolution of rare earth elements.

As featured in:



See Takafumi Hanada, Masahiro Goto *et al.*, *Green Chem.*, 2024, **26**, 9671.