

ChemSelect

Fast & Sustainable Critical Metals Recovery from E-Waste



Our technique increases the recovery of currently targeted critical metals (CM), such as gold and palladium, while also extending recovery beyond this range to additional metals, including gallium, indium, nickel, and copper, going well beyond 20% recovery rate from e-waste.

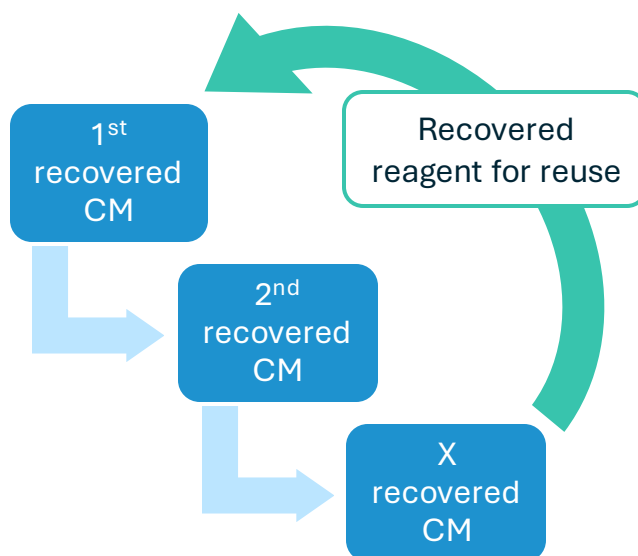
The process enables rapid, minutes-long separation and sequential CM recovery using safe and sustainable chemistry.

How it works

The method can recover several CMs using the same reagent. It allows for extracting each CM sequentially within one integrated process. The reagents can be used repeatedly, creating a seamless and efficient recovery process.

Examples of targeted metals

Gold, Palladium, Copper, Gallium, Indium, Nickel



Benefits

Rapid Speed & Superior Efficiency - Quickly recover different elements in just minutes to a few hours, unlike other toxic hydrometallurgical processes

Higher recovery rate - Recovery well beyond the current 20% recovery rate

Selectivity - Outperforms traditional e-waste metal recovery with greater selectivity and safer reagents

Sustainable - Employs reusable, multifunctional reagents to minimise environmental impact and energy consumption

Versatile Processing - Handles various waste stream sources

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