Extractive Metallurgy of Non-Ferrous Metals

Recovery Process of Rare Metals in Non-Ferrous Extractive Metallurgy

In the non-ferrous smelting process, the base metals like copper, lead, and zinc as well as rare metals are produced from secondary materials such as scrap metals, alloys, and residues. The valuable metals that result from the refining process can provide raw materials for extensive applications in numerous fields.

We have suggested a new and effective recovery process of rare metals in the non-ferrous extractive metallurgy.

◆ Recovery of rare earth elements from magnet scrap by using B$_2$O$_3$ flux
◆ Copper enrichment based on liquid phase separations
◆ High-temperature calorimetry

Recovery of rare earth elements from HV and EV rotors

Copper enrichment based on liquid phase separations

High-temperature heat content measurement of silicon by drop calorimeter