

Extraction properties of new aminophosphin oxide compounds

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Abstract

Extraction of Sc(III) ions by new α -aminomethylphosphin oxides was studied. Preliminary experiments with acid solutions allowed for selection of low-basicity compounds, which demonstrated a poor coefficient of the acids extraction. When applied for the aqueous solution of various salts, they appeared to be good extractants of Sc(III), Fe(III), Bi(III), In(III), and lanthanide ions in toluene and chloroform and discriminated Co(II) , Ni(II), Cu(II), alkaline, and alkaline-earth elements. Copyright © Taylor & Francis Group, LLC.

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Keywords

α -aminophosphinyl compounds, Extraction, Rare-earth elements ions, Scandium