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Functionalized phosphoryl compounds: Synthesis, extraction, transport and ionophore properties

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Abstract

The row of phosphoryl compounds, having additional functional groups with complexating abilities were synthesized via the classical methods of the organophosphorus chemistry. The extraction properties of the mono- and biphosphorilated amines were investigated and it is shown the high efficiency and selectivity of the noble metal ions extraction from acid water solutions. Some phosphorylated azapodands were obtained by Kabachnik-Fields reaction and their membrane transport and ionophoric properties were investigated. Copyright © Taylor & Francis Group, LLC.

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Keywords

Aminophosphonates, Extraction, Interphase distribution, Ion-selective electrodes, Membrane transport, Phosphoryl compounds, Phosphorylated azapodands