



**Short Communication**

**Extraction Studies of Scandium(III) Metal Ion Using Cyanex-923**

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**ABSTRACT**

*The present paper deals with the extraction of Scandium(III) from Sodium salicylate medium using trialkyl phosphine oxide Cyanex-923 extractant dissolved in toluene. The Sc(III) metal ion was quantitatively extracted at pH 9.0 with Cyanex-923. The extracted Sc(III) was stripped with 4.0 M HCl solution. On Sc(III) extraction, the influence of various parameters like pH, Cyanex-923 reagent concentration and sodium salicylate concentration, stripping agent, diluents and equilibration period were studied. The probable species extracted in the organic phase is  $[Sc(HSal)_3 \cdot 2Cyanex-923]$  which were proposed based on slope analysis method.*

**Keywords:** Extraction, Scandium(III), Cyanex923, Sodium salicylate, Separation.

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