**Prof. Prof. Slavica Ražić**

**Editor**

**Journal of the Serbian Chemical Society**

October 24, 2018

Dear **Professor** **Ražić**,

Thank you very much for your last e-mail letter of September 25, 2018, concerning our MS and the corresponding Referees’ reports. With respect to these reports, we have revised our article in the following way:

1. The first paragraph of Introduction has been rewritten as “Organic complexing agents with the prevailing hydrophobic character form inclusion complexes with inorganic metal cations. That is why they found use especially as components for ion-selective electrodes involving liquid membranes. Theory and many applications of the ion-selective electrodes have been successfully summarized in several reviews.1-3”
2. The sentence “Generally only cesium cation can be extracted into the organic phase as a simple cation. For the extraction of multivalent cations the mixture of dicarbollylcobaltate extractant with the above mentioned neutral organic complexing ligands must be used” has been added to the second paragraph of Introduction.
3. The sentence “while in Russia trifluoronitrotoluene (abbrev. F-3) is used for the same purposes” has been added to the fourth paragraph of Introduction.
4. The sentence “It must be pointed out that this compound is commercially available” has been added to the seventh paragraph of Introduction.
5. The last paragraph of Introduction has been modified like this: “Therefore, in the current work, the solvent extraction of microamounts of trivalent europium and americium from aqueous nitric acid solution into nitrobenzene…
6. Structural formula of dicarbollylcobaltate anion has been added as Fig. 1.
7. The sentence “This value is the main criterion for the determination of the respective extraction mechanism” has been added after Eq. 11.
8. The “new” paragraph “Synergistic factor defined as S = D(Me3+)/ D0(Me3+), where D(Me3+) is the maximal distribution ratio of the extracted metals in the systems under study and D0(Me3+) is the distribution ratio reached for the same concentrations of HNO3 and dicarbollylcobaltate anion but in the absence of Calcium Ionophore I ligand is very high, log S (Eu) = 6.0 and log S (Am) = 6.9. This means that the extraction system water – HNO3 – calcium ionophore I – dicarbollylcobaltate – nitrobenzene can be used for the separation of Eu3+ and Am3+ from the PUREX process raffinate. Value of separation factor α(Am/Eu) ≈ 5 allows also mutual separation of Am/Eu by the same extraction agents” has been added to Results and Discussions.
9. Missing part “*c*(HNO3) = “ has been added to Fig. 5.
10. The first sentence in Conclusions has been changed to “In the present work, the solvent extraction of trivalent europium and americium from nitric acid solutions into nitrobenzene…”

In conclusion, we believe that the revised version of our manuscript will be accepted for publication in your **Journal**

Many thanks.

Sincerely yours,

Emanuel Makrlík