



SDI Review Form 1.6

Journal Name:	American Chemical Science Journal
Manuscript Number:	2014_ACSj_10877
Title of the Manuscript:	Synthesis, Charecterization and Chelation Ion-Exchange Studies of a Resin Copolymer Derived from 8-Hydroxyquinoline-Formaldehyde-pyrogallol
Type of the Article	<u>Review Article</u>

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	This manuscript is recommended for publication after major revision. Comments: 1. This manuscript not suitable under review article. It should be under research paper. 2. Line 60: Authors mentioned about thermal studies. In this manuscript no result and discussion about thermal studies of resin. 3. The authors should rewrite the experimental section. The authors should not cite all tables and figures in this section. 4. Line 131: What is the unit for exchange capacity? 5. Line 155: Concentration of tartaric acid (1-5ppm). In Table 3, the values are from 0.1-1M. Please check. 6. Scheme 1: The authors should discuss about the synthesis before move to characterization. Is it Freidel-craft reaction? Is it the reaction is possible without any catalyst I eliminated a few figures and tables in the experimental part? 7. For my opinion, FTIR result is not enough to confirm the polymerization process is successful. 8. Table 2: Should be discussed in the text. 9. Line 191: Plomb(II) please change to Pb(II). 10. Line 229: The K_d values decrease with increasing electrolyte concentration. Why? 11. Please rewrite your conclusion. The existing	2.Line 60 was corrected in the manuscript 3.I eliminated a few figures and tables in the experimental part 4.mmol.g⁻¹. I mentioned in the manuscript (exchange capacity (mmol.g⁻¹) line 128 5. Concentration of tartaric acid (0.1-0.2-0.3-0.5 and 1M). Line 154 6.The reaction is not a Friedel-Craft recation since we did not use a Lewis acid. This is a polymerization based on the condensation of reactants in an acidic medium (2M HCl acid as catalyst). Line 74 and 75 corrected. 7.The polymerization process was confirmed not only with FTIR but also with results from elemental analysis(table1) 8.Table2 : Table 2 has been discussed in the text (line 159) 9. Plomb(II) was changed to Pb(II). 10. the K_d values decrease with increasing



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	conclusion is more like discussion.	electrolyte concentration and increase with increasing in pH. It is expected that the distribution coefficients of metal ions will vary depending on the stability of the metal complexes formed with the chelating groups of the resin. Greater stabilization results in higher distribution coefficients. The present investigation limits the distribution studies up to a certain pH for each metal ion to prevent the hydrolysis of metal ions at higher pH. I explained the causes detail in the text (line 292) 11.I rewrite the conclusion in the text (line 321)
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		