



SDI Review Form 1.6

Journal Name:	Asian Journal of Chemical Sciences
Manuscript Number:	Ms_AJOCS_40345
Title of the Manuscript:	Potential Effect of Modified Chitosan in Environmental Treatment: Metal Uptake, Ion Selectivity and Bioactivity
Type of the Article	Original Research Article

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>)

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	1) 3.3. X-Ray Photoelectrons Spectroscopy (XPS) : The authors mentioned that "The complex structure may be structure A (scheme 4) in case of Cd ²⁺ or Pd ²⁺ , although it may be structure B (scheme 4) in case of Cu ²⁺ . What is the difference caused by? How do you explain? The character of each element? The difference of ionic radius? 2) 3.4. Ion Selectivity (line 213-215): Which type of chelating center do Ca and Mg prefer? Please refer if possible.	1) The Cu(II) complex (structure B) different than that of Cd(II) and Pd(II) (structure A) may be due to the difference of ionic radius in addition, the ionic radius of Cu(II) more fit with the bidentate chelating center N-O. 2) 2) Both of Ca ²⁺ and Mg ²⁺ may be embedded in the polymeric chain.
Minor REVISION comments	1) There are no errors for data presented in Tables. Please show experimental errors for measurement results in Tables 1-6, if possible. 2) 2.3.1 (line 88): The sentence should be revised "The reaction mixture was <u>refluxed</u> for 12hr." instead of "The reaction mixture was <u>reflux</u> for 12hr." Please confirm.	1) Experimental error not possible because there are no experimental calculations. However, according to the quality control the tolerance not exceeds 10%. 2) correct in the text and highlighted by yellow colour
Optional/General comments	This paper describes potential effect of modified chitosan about metal uptake, ion selectivity and bioactivity. It provides useful data for the application of chitosan. The results are important for environmental chemistry and biochemistry. There is no problem regarding English. Therefore, I feel this paper should be acceptable after suitable revision as mentioned before.	