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SDI Review Form 1.6

Journal Name:	**Asian Journal of Chemical Sciences**
Manuscript Number:	**Ms_AJOCS_36462**
Title of the Manuscript:	**Preliminary studies on equilibrium and kinetics of heavy metal ion sorption on immobilized Ficus asperifolia stembark biomass**
Type of the 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	The author commented: "The modified biomass exhibited synergetic effects resulting in a very strong affinity for the aqueous heavy metal ions studied." But no adsorption studies with calcium alginate matrix or biomass only were reported!! So it is hard to infer the synergistic action. What is the recycling efficiency of the adsorbent?	A synergetic effect was inferred from our result compared to other studies in which the calcium alginate matrix only was used in sorption studies. Corresponding doses of calcium alginate used in our immobilization show less sorption capacities (these studies are now sited in the report). The crude biomass leaches out its content and degrades in water. This process may be faster in aqueous solution hence the need for its modification. This is not in the scope of this report. We however wish to present this in subsequent reports.
Minor REVISION comments	**No chemical composition/ characterization of the adsorbent *Ficus asperifolia* bark stem is reported here.** It is essential as to know the chemistry/ mechanism of removal for the metal ions. It is therefore hard to infer whether some new material is being developed or a repetition in crude form!!!! At higher pH, metal hydroxides get precipitated. So, the concentration in the solution decreases. Therefore it is to identify the contribution of adsorbent in the removal process in this regard.	Agreed. Well, the aim of the study is to try the interaction of the calcium alginate with the biomass, a success of wish can be virtually made from the texture of the product when dried. And the basic mechanism to the reaction is as given in equation 1 in the report. And then try if the product changes the initial concentration of the aqueous solution of the studied metal ions. It is a preliminary study. Agreed. This is why we kept the pH range within the acidic region.
Optional/General comments	It is always a good option to use local available materials for water treatment purpose. The adsorbent material seems to have linear selectivity towards many heavy metal ions. The work done is precise and narrative. But above points needed be addressed before accepting the manuscript.	Thank you.