



SDI Review Form 1.6

Journal Name:	International Research Journal of Pure and Applied Chemistry
Manuscript Number:	Ms_IRJPAC_38221
Title of the Manuscript:	A New and Successful Utilization of Aluminum Solid Waste Derived from Aluminum Company in Adsorptive Removal of Nitrates from Water Supplies
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	This work is very common. Many researchers are using adsorption model to show the nitrate uptake, I don't see novelty in the materials design and functionalisation to maximise the nitrate uptake. Activated carbon, Zinc and titanium combination are being explored. - Why gamma alumina would adsorb ? - Chemisorption is mentioned. Alumina is in dispersed phase in the system and nitrate in dissolved phase in the same system, by varying pH <7, it is mentioned adsorption is increasing. May I know - What is the byproduct formed and in which state? if it is chemical reaction there should be 100% removal in nitrate. - Show the pH and potential graphs for the formation of compounds. - XRD graphs need base correction. Need to show peaks. - Both equilibrium curve is fitting such as Langmuir and Freundlich. Is it monolayer adsorption and followed by multilayer? - Intra particle diffusion model, can it be drawn schematically ? How the process flow film diffusion, surface diffusion etc.,	
Minor REVISION comments		
Optional/General comments		

Reviewer Details:

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