



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_9887
Title of the Manuscript:	Coag-flocculation approach to removal of colloidal particles from brewery waste water using okra seed extract
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>)



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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	❖ Title: The term (approach) in the title of current research is not appropriate because the research is conventional method or process and there is not any new concept applied as approach. You should change (approach) to method or process. ❖ Abstract: You should clarify precisely whether you treated colloid particles or turbidity because the title refers to colloid particles. While in conclusion, in line 191, you referred to turbidity. On the other hand, in line 149, there is an initial SDP (728.249 mg/L). You have to explain accurately which of them you used. Also, you should clarify the objective of using the equation (16) as conversion factor. ❖ Introduction In line 31: you have to include another reference in the use of natural coagulants such as (date seeds and pollen sheath) as shown in the paper "A Novel Water Pretreatment Approach for Turbidity Removal Using Date Seeds and Pollen Sheath". ❖ The theory of rapid coagulation In line 77+78: you should mention the numeric value of TSS_f that used to convert turbidity to TSS. In line 82: change (m=1) to (n=1).	(All correction are highlighted in bright green color) Thank sir for these observations and comment made on the manuscript, the corrections has been affected and highlighted. The title of the manuscript were changed The study was to investigate the performance of okra seed extract in removing turbidity in brewery effluent and is highlighted in 5 and 6. In the introduction, more reference in the use of natural coagulants is included and highlighted in line 31-33 The theory of rapid coagulation: The numeric value of TSS_f is given in lines 89-94 and m=1 is been change to n=1 and highlighted.



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	❖ 3.1.1 Brewery Effluent In line 96+97+98: you should mention the numeric values of the characteristics of brewery effluent such as (pH, TSS, turbidity,...) before treatment. ❖ Coagulation theory and Model Development You should include references for researchers who used coagulation theory and kinetic modelling as a literature review. ❖ 4.0 Results and discussion In section 4.1: There is no clear explanation to the relation between E% versus pH, time and dosage. You should include references for researchers who applied coagulation-flocculation processes and explained their findings. In section 4.2: you should clarify how you find the parameters that listed in table 1-5 precisely and what are the equations that used to find these parameters accordingly. In section 4.3: you should mention reference to support your findings in figure 9 and 10. Also, you should clarify how you find the number of particles on the basis of equation or turbidity or others.	The characterization of brewery effluent is given in Table 1. Reviewer 5 also made the same comment. Coagulation theory and Model Development: References for researchers who used coagulation theory and kinetic modeling is added in line 50. The relation between E% versus pH, time and dosage is explained in lines 133-139, also reviewer 2 and 5 made the same comment. The parameters in table 3-7 were determine by using equations 14 and 15 shown in lines 81-88. In lines 98-103 the number of particles were determined by using equation 17, 18 and 19, which is highlighted in lines 181-184
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<u>Minor</u> REVISION comments	<u>English language Correction</u> In line 5: explores=investigates or investigated. In line 17: remove (been). In line 19: add (from brewery industry) after the large quantity of wastewater produced...contains significant. In line 21: remove (so many)=several. In line 21+22: remove (but this work will focus on coagulation and flocculation processes. Over the years, ...wastewater treatment. Add (coagulation-flocculation processes are widely used for the treatment of water and wastewater treatment. In these processes, three important steps.....[2,3,4,5]. In line 32: Add (the objective of the current work is to investigate the natural coagulant (okra seed extract) using coagulation-flocculation processes on the removal of turbidity from brewery effluent for a range of parameters (pH, doses, time). In line 41: change n_i, n_j to smaller font. In line 76: change $K_M = Km$. In line 102: change (was) to (were)...(bases) to (basis). In line 104: change (Experiment) to (Experiments)...(was) to (were). In line 110: cut (The data were subsequently fitted in appropriate kinetic model) and put it within section 4.1. <u>Nomenclature</u> • Define BRE. • Define TDSP. • Define SDP. • Define No, Nt. • Define parameters listed in tables 1-5.	. All the English language corrections are done. Nomenclature is done and highlighted.
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<u>Optional/General</u> comments	☒ I suggest the following title: "Coag-flocculation method to removal of turbidity from brewery wastewater effluent using okra seed extract as a natural coagulant". ☒ You can use the following papers as a literature review for kinetic modelling: 1. Coag-Flocculation Kinetics and Functional Parameters Response of Mucuna Seed Coagulant to pH Variation in Organic Rich Coal Effluent Medium. 2. Coag-flocculation studies of <i>Moringa oleifera</i> coagulant (MOC) in brewery effluent: Nephelometric approach.	I have changed the manuscript title as suggested.
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