



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_15372
Title of the Manuscript:	STUDY OF THE BEHAVIOR OF DAIRY PROTEIN IN DIFFERENT CONDITIONS OF THERMAL PROCESSING USING CHEMOMETRIC APPROACH
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>)



SDI Review Form 1.6

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 : I suggest to the authors to change the title of the paper to "Study of thermal behaviour of milk protein products using chemometric approach" -English used in this paper is very poor! You might request the help of an English expert. Please check the matching tenses. -Abstract: Try to rewrite the abstract because it is not that clear. -Introduction is not "Top" there is a problem of restructuration! It would be good to briefly explain the importance of milk proteins, the different techniques of their hydrations and their thermal behaviour extensively studied in the literature... - To bring up to date the references used in this paper. There are lot of recent papers studying thermal behaviour of bovine proteins, and you can cite them. Materials and Methods : Line 65: What is the reason behind the use of these heat treatment parameters (65°C/30min, 85°/15min and 95°C/5min)? Was it optimized? Line 72: I think you should do a granulometric test to make sure about the complete dissolution of your protein products! If you did, could you send me the results? Are you sure that at 25°C, the dissolution was completed? Table 6: Statistical analyses are needed here. Differences between samples are significant or not? Deviations? -Results and Discussion: Use 3.1, 3.2 in Results and Discussion section to make it easy to the reader to follow your results... -Avoid repetitions and the use of the same phrases when you have the same results for different samples, I suggest to combine results when it shows the same behaviour. For example, you can make only one paragraph to describe your	Title: Title changed. Language: We have done our best for improve the language. Abstract: We have re-written the abstract. Introduction: we have done an improvement of the text, adding some new reference citations about the thermal behaviour of bovine proteins. Line 65: we have added a phrase to explain that. Line 72: We believe that the conjugation of prior hydration and high speed rotation of the RVA paddle in the beginning of the procedure can provide an efficient dispersion of the powder particles in the medium, so being unnecessary to perform a granulometric test. Table 6: It was not possible to provide statistical analyses for the data, since they are unique and different form each other.



SDI Review Form 1.6

	results about SMP, WPC ... and talk about differences in composition and their influence on viscosity and thermal behavior... Line 171: Discussion of SMP behaviour. Make a comparison of your results highlighting the difference in composition or pH between the samples Line 171-341: Many repetitions in this paragraph. Make one paragraph to describe all the results. The discussion is very poor and no comparison between samples was made. Line 205-214: MPC1 behaviour is poorly discussed Why not compare MPC1 behaviour with that of MPC2. Focus on the hydration difference between both samples. Line 342-368: very poor discussion! Lack of recent researches on the same topic. Be more explicit on the link between the cited literature and your results.	Results and Discussions: We agree with the reviewer comment, however we prefer to maintain the text style do present all the data for all the samples and discuss each one of them, without sub-sections, in order to provide a line of understanding for the reader. Line 171: All the discussion and comparison for the data are presented in Table 10 and Figures 6, 7 and 8, following the PCA results. Lines 171-341: We prefer to maintain the text style do present all the data for all the samples and discuss each one of them, without sub-sections, in order to provide a line of understanding for the reader. Lines 205-214: We do not agree with this specific comment, since there are hard discussions presented at the text about the comparison between MPC1 behaviour with MPC2. Lines 342-368: We are improving the text at this point of the manuscript, adding some recent literature and trying to make more explicit the discussion.
--	--	--



SDI Review Form 1.6

<u>Minor</u> REVISION comments	Line 70: et al. must be written in italics. The authors many times throughout the text made this mistake. Line 87: remove “and without prior hydration”, you wrote it twice. Table 3: Tempo? Line 197: You have written Table in small case letters while before you used capital letters Line 210: et al. must be written in italics. The authors many times throughout the text made this mistake. Line 214: et al. must be written in italics. The authors many times throughout the text made this mistake. Line 214: replace To with The Line 222: et al. must be written in italics. The authors many times throughout the text made this mistake. Line 345: et al. must be written in italics. The authors many times throughout the text made this mistake. Line 359: et al. must be written in italics. The authors many times throughout the text made this mistake. Line 371: put Table before number 8. Line 392: remove “The” Line 395: et al. must be written in italics. The authors many times throughout the text made this mistake. Line 451: et al. must be written in italics. The authors many times throughout the text made this mistake. Figures 3: it is Figure not “Figura” Figure 4 : it is Figure not “Figura” Figure 5: it is Figure not “Figura”	Line 70: It was modified. Line 87: It was modified. Table 3: It was modified. Line 197: It was modified. Line 210: It was modified. Line 214: It was modified. Line 214: It was modified. Line 222: It was modified. Line 345: It was modified. Line 359: It was modified. Line 371: It was modified.umber 8. Line 392: It was modified. Line 395: It was modified. this mistake. Line 451: It was modified. Figure 4 : It was modified. Figure 5: It was modified.
<u>Optional/General</u> comments	The article titled "STUDY OF THE BEHAVIOR OF DAIRY PROTEIN IN DIFFERENT CONDITIONS OF THERMAL PROCESSING USING CHEMOMETRIC APPROACH" is interesting in the area of application of such products to improve functional properties and nutritional composition of dairy products. However, the theoretical bases and the discussion of the results are weak, besides, no inferences on the parameters presented are made. In this sense, what was the basis for using these thermal parameters	We are grateful to the referee’s comments in order to provide an improvement of the manuscript; however, some of the important points addressed by the reviewer are not accepted, as for instance the comment about the size of the manuscript, and the specific repetition of the text on discussing the data for all the samples.



SDI Review Form 1.6

	and? What was the particle size after hydration of milk protein products? What was the aim of measuring the microbiological and chemical parameters of milk protein products (total fat, total nitrogen, pH, etc)? What is the effect of these parameters in the viscosity evolution of these products during heat treatment?	As we said before, the basis for using the parameters is the Brazilian industry, whereas the particle was not the focus of this investigation. In this sense, the chemical and microbiological parameters were just obtained for characterization, and not for any other purpose, whereas the viscosity evolution during the heat treatment was really the main goal, and is the unique purpose of this investigation.
--	--	---