



SDI Review Form 1.6

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	MS: 2012/BJAST/2252
Title of the Manuscript:	Optimization of the Residence Time and Throughput in a Single Screw Extrusion of Cassava/African yam bean Mixtures.

General guideline for Peer Review process is available in this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: Review Comments

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Compulsory</u> REVISION comments	It is an interesting study but there are a lot of points that deserve to be explored. First, it is necessary to add a nomenclature because a lot of terms aren't defined. Then, in tables 1 and 2, the feed composition isn't described. When you introduce a red food colour to determine residence time, we don't know if it is a Dirac injection. Is this experience significant? Moreover, you define the residence time as the difference between the appearance of colour at the die and its disappearance. It isn't an appropriate definition, because it is possible to have stagnant volume in the extruder. Have you calculated the difference between this time and the geometrical residence time? (ratio between flow rate and volume in the extruder). It is necessary to define the two responses of the central composite design and to have the value of these responses for each experiment. Statistical analysis isn't described. For example, what do P or T mean? I guess it isn't the pressure and the temperature! A model obtained by a composite design is validated only for operating ranges defined at the beginning. The parameters for maximum residence time aren't in this range (109.45 rpm < 109.95 rpm). The model can't be applied. Have you done viscosity measurements? They can support your analysis.	I agree with the Reviewer in some areas, like addition of abbreviations, description of feed composition, changing the range of the maximum residence time and syntax errors. It is assumed that under steady state condition there should not be accumulation in the process. I did not measure the viscosity of the feed materials based on the fact that the materials were neither in liquid nor paste form but in moisten powdery form (moisture content range of 13.3 – 26.7%.)



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Minor REVISION comments	Some problems with the English language: syntax, grammar and vocabulary (example lines 42, 45, 217, 236...)	
Optional/General comments		