



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2014_BJMCS_14237
Title of the Manuscript:	Controlled variational iteration method for Bratu equation arising in Electro-spun organic nanofibers elaboration
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	Authors implemented the classical VIM method to the well-known Gelfand equation. I have serious concerns: 1)- The so-called “new effective formulation” of the VIM in the present work is not new and well-known since the publication “An optimal variational iteration method, <u>Applied Mathematics Letters</u>, <u>Volume 24, Issue 5</u>, May 2011, Pages 762–765” 2)- The model (1) can be effectively solved by the method described in “A note on the homotopy analysis method, <u>Applied Mathematics Letters</u>, <u>Volume 23, Issue 10</u>, October 2010, Pages 1226–1230”. 3)- More iteration terms need to be evaluated to exhibit the power of the method. Indeed, one needs to see at least ten terms in each example to see how effective the method is.	1)- The term “new effective formulation” is replaced by “ effective formulation” and the paper “An optimal variational iteration method, <u>Applied Mathematics Letters</u>, <u>Volume 24, Issue 5</u>, May 2011, Pages 762–765” ,recommended by the referee, is cited in the my paper and added to the references. 2)- This remark is addressed through the paper. 3)- In my opinion, the power of the method can be exhibited using few iteration terms as seen in the considered examples. This is due to the nature of the considered problem which is boundary value one.



SDI Review Form 1.6

	4)- How would the present approach be modified for the boundary value problem of (1). 5)- The absolute residual error given by (5) is not appropriate and a squared residual must be adopted in general. 6)- A convergence criterion for the present technique may be obtained as in the articles “Solution of the Thomas–Fermi equation with a convergent approach, <u>Communications in Nonlinear Science and Numerical Simulation</u>, Volume 17, Issue 11, November 2012, Pages 4097–4103” and “Convergence of the homotopy perturbation method, 2011, <u>International Journal of Nonlinear Sciences and Numerical Simulation</u>, 12 (1-8), pp. 9-14”.	4)- The proposed method is used to solve both initial value problem as in example 4.1 and boundary value problem as in example 4.2. 5)- I don't understand why the used absolute residual error is not appropriate! 6)- I prefer not to address a convergence criterion of the method through the paper and use the comparison between the obtained results and the exact solutions as a tool to check the accuracy of the method.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		