



**SDI Review Form 1.6**

Journal Name:	<a href="#">Journal of Advances in Mathematics and Computer Science</a>
Manuscript Number:	<b>Ms_JAMCS_50224</b>
Title of the Manuscript:	<b>On the Analytical Approximation of the Nonlinear Cubic Oscillator by an Iteration Method</b>
Type of the Article	<b>Original Research Article</b>

**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)
<b>Compulsory</b> REVISION comments	<ol style="list-style-type: none"> <li>Page 1. Abstract. Line 11 should read "This easily-calculated modified technique accelerates..."</li> <li>Page 2. Line 29 should read "...are the most important..."</li> <li>Page 2. Line 30 should read "Among them, those by Krylov.."</li> <li>Page 2. Line 33 should read "...considered. They have .."</li> <li>Page 2. The end of the first paragraph should further discuss that the new method is good or bad and in what way that it can help.</li> <li>Page 2. Line 35 should read "Harmonic balance (HB) method.."</li> <li>Page 2. Line 47 should read " parameter needs to exist."</li> <li>Page 2. Line 50 should read "Recently this method was used by Mickens (2010) in his book Truly Nonlinear Oscillation and before that also by Xu, 2007...."</li> <li>Page 2. Line 53-55 is grammatically wrong so it is hard to understand and it needs to be rewritten.</li> <li>Page 3. Line 60 should read "...valid for both small and large amplitude..."</li> <li>Page 3. Line 62. What are "some methods"? This must be clearly stated.</li> <li>Page 3. Line 63 should read "...which have been used..."</li> <li>Page 3. Line 66 should read "...for both small and large..."</li> <li>Page 3. Line 67 should read "...oscillation originated by R. E. Mickens in 1987. Later, Xu &amp; Cang..."</li> <li>Page 3. Line 68 should read "...for iteration method to calculate..."</li> <li>Page 3. Line 73 should read "The obtained results are compared with those by...(who, specify clearly)."</li> <li>Page 4. Line 91 should read "...a low order, usually the..."</li> <li>Page 5. Line 127 should read "In similar way, the third..."</li> <li>Page 5. Line 137 should read "An iteration method is developed based on that by Mickens [30]..."</li> <li>Page 5. Line 138 should read "...method was verified by comparing..."</li> <li>Page 6. Line 147 should read "...results in Table 1."</li> <li>Page 6. Line 152. The table should be numbered so it should read "Table 1. Comparison..."</li> <li>Page 6. Table 1. The errors should have the same number of significant figures.</li> <li>Page 7. Line 156 should read "The basic idea of...." Omit "We know".</li> <li>Page 7. Line 157 should read "...frequencies <math>\Omega_k</math>) that has a convergence property."</li> <li>Page 7. Line 172 should read "...nonlinearity. The method...."</li> <li>Page 7. Line 175 should read "...In this paper, the method has been..."</li> <li>Page 8. Conclusion. What is the conclusion about the comparison of the results? What about the errors?</li> <li>Page 8. Line 182. The pages should be specified.</li> <li>Page 8. Line 196. The pages should be specified.</li> </ol>	<ol style="list-style-type: none"> <li>The line 11 has been changed by "This easily-calculated modified technique accelerates the rapid convergence, ...".</li> <li>The line 29 has been changed by "are the most important among all ...".</li> <li>The line 30 has been changed by "Among them, those by Krylov and Bogoliubov [2] ...".</li> <li>The line 33 has been changed by "...are not considered. They have introduced a new ..."</li> <li>It has been discussed in third paragraph of Page 3.</li> <li>Page 2. Line 35 has been changed by "Harmonic balance (HB) method ..."</li> <li>Page 2. Line 47 has been changed by " parameter needs to exist."</li> <li>Page 2. Line 50 has been changed by "Recently this method was used by Mickens [31] in his book Truly Nonlinear Oscillation and before that also by Xu [25]..."</li> <li>Page 2. Line 53-55 has been rewritten by 'Rational harmonic balance approximation technique [27-29] is a useful alternative procedure for calculating a second-order nonlinear dynamical systems...'</li> <li>Page 3. Line 60 has been changed by "...valid for both small and large amplitude..."</li> <li>Page 3. Line 62&amp; 63 has been modified by "Besides this, the method of Matko &amp; Šafarić [36], Matko [37], Matko &amp; Milanović [38] are used to find an approximate solution in the case of large amplitude of oscillations..."</li> <li>Page 3. Line 63 has been rewritten.</li> <li>Page 3. Line 66 has been changed by "...for both small and large..."</li> <li>Page 3. Line 67 has been changed "...originated by R.E. Mickens [30]. Later, Xu &amp; Cang [39] ..."</li> <li>Page 3. Line 68 has been changed by "...for iteration method to calculate..."</li> <li>Page 3. Line 73 has been modified by "The obtained results are compared with those by Mickens Parameter Expansion method [31], Mickens HB method [31] and Mickens Iteration method [31]."</li> <li>Page 4. Line 91 has been changed by "...a low order, usually the..."</li> <li>Page 5. Line 127 has been changed by "In similar way, the third..."</li> <li>Page 5. Line 137 has been changed by "An iteration method is developed based on that by Mickens [30]..."</li> <li>Page 5. Line 138 has remained unchanged.</li> <li>Page 6. Line 147 has been changed by "...results in Table 1."</li> <li>Page 6. Line 152. The table has been numbered as "Table 1. Comparison..."</li> <li>Page 6. Table 1. The errors have been shown same number of significant figures.</li> <li>Page 7. Line 156 has been changed by "The basic idea of...."</li> <li>Page 7. Line 157 has been changed by "...frequencies <math>\Omega_k</math>) that has a convergence property."</li> <li>Page 7. Line 172 has been changed by "...nonlinearity. The method...."</li> <li>Page 7. Line 175 has been changed by "...In this paper, the method has been..."</li> <li>Conclusion has been rewritten including comparison and errors..</li> <li>Page 8,9,10: All journals references have been checked and corrected accordingly. Books references are rearranged according to guidelines.</li> </ol>



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	<p>31. Page 8. Line 204. The volume must be stated.</p> <p>32. Page 9. Line 202. Only one page?</p> <p>33. Page 9. Line 233. The pages should be specified.</p> <p>34. Page 10. Line 236. The city of the publisher must be stated.</p> <p>35. Page 10. Line 251. The pages must be specified.</p>	
<b><u>Minor</u></b> REVISION comments		
<b><u>Optional/General</u></b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <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>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	