# **Review Form 1.6**

| Journal Name:            | Chemical Science International Journal   |  |
|--------------------------|--|--|
| Manuscript Number:       | Ms_CSIJ_88605  |  |
| Title of the Manuscript: | Synthesis, Characterization and Biological Evaluation N-[5-(1H-indol-3-yl)-1,3,4-thiadiazol-2-yl]methanimine Derivatives |  |
| Type of the Article      | Original Research Article  |  |

## **General guideline for Peer Review process:**

This journal's peer review policy states that <u>NO</u> manuscript should be rejected only on the basis of '<u>lack of Novelty'</u>, 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:

(<a href="https://www.journalcsij.com/index.php/CSIJ/editorial-policy">https://www.journalcsij.com/index.php/CSIJ/editorial-policy</a>)

#### **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 | The manuscript describes a new class of 1,3,4-thiadiazole derivatives. Why do the authors provide information about thiazoles and pyrazoles in Introduction? I suggest you change the entire Introduction chapter and review it with data on 1,3,4-thiadiazole compounds.  Scheme 1 is missing. Scheme 1 and Scheme 2 are identical.  2. Experimental and 3. Result and Discussion have an identical paragraph:  "After this, an indole-3-carbaldehyde (1 mmol) is added. Mixing is continued for several minutes until to get smooth paste. The crude semicarbazone separates out when cold water is added to the paste and then it is recrystallized from ethanol".  3.1. Spectral data The chemical names of derivatives 3a, 3b, 3c and 3d are incorrect. FT-IR spectra - the absorption bands for the groups C=N thiadiazole, C=N imine, NH indole ring, C-S thiadiazole, C=C aromatic are missing.  There is a discrepancy between the compounds described in the Synthesis chapter (indole derivatives) and those described in the Experimental part (quinoline derivatives). The NMR and mass spectra are good evidences. The spectral charts in the images belong to quinoline derivatives and not to indole derivatives in the reaction scheme.  13C-NMR spectra are not described, although the authors recall in conclusion and abstract that they characterized the compounds by C-NMR spectra.  3.2. In vitro antioxidant screening What are compounds 4a, 4b, 4c and 4d (see the manuscript and Fig 3)? The standard ascorbic acid is not shown in Fig 3 – how did you compare its activity to thiadiazole derivatives? The text does not describe the concentration at which the compounds showed the antioxidant effect.  In addition, please revise the English version of entire manuscript. There are many paragraphs that are very difficult to understand. |   |
| Minor REVISION comments      |   |   |
| Optional/General comments    |   |   |

#### PART 2:

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

Created by: EA Checked by: ME Approved by: CEO Version: 1.6 (10-04-2018)

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## Reviewer Details:

| Name:                            | Serban Georgeta               |
|----------------------------------|-------------------------------|
| Department, University & Country | University of Oradea, Romania |

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