## SDI FINAL EVALUATION FORM 1.1

**PART 1:**

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| Journal Name: | **Chemical Science International Journal** |
| Manuscript Number: | **2019/CSIJ/49886** |
| Title of the Manuscript: | **DETERMINATION OF SELECTED HEAVY METALS IN TOBACCO TREE SHRUBS GROWING AROUND DANDORA DUMPSITE, NAIROBI, KENYA** |
| Type of Article: | **Original Research Article** |

**PART 2:**

| FINAL EVALUATOR'S comments on revised paper (if any) | Authors' response to final evaluator's comments |
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| The authors did not rectify most of the flaws pointed out in my previous review, namely the following:<br><br>In the spelling of the scientific names of the species, the binomial nomenclature rules should be applied always! Both the first part of the name, the genus, and the second part, the species, should be italicized when a binomial name occurs in normal text, but the botanical authority not.<br><br>The "Materials and methods" section should give more details about Quality Assurance and Quality Control. Authors should indicate the obtained accuracy values. It would be also interesting to provide the reader with limits of detection/determination of analyzed elements.<br><br>In addition, the "Materials and methods" section needs a subsection on statistical tests. Although the use of statistics in the study is obvious, the statistical methods should be clearly described in appropriate sub-section.<br><br>The authors refer to "total metal content". However, they used a digestion method with nitric acid, perchloric acid and hydrochloric acid. Therefore, no hydrofluoric acid was used, so the silicates were not dissolved and therefore the measured concentrations are not total. They are only pseudo-totals. Since this method is not intended to accomplish total decomposition of the sample, the extracted analyte concentrations may not reflect the total content in the sample. Therefore, if the authors intended to obtain the total concentrations, the samples digestion method was poorly chosen.<br><br>Tables 1 to 7: Authors should indicate the number of samples (n =).<br><br>Throughout the manuscript: "*Nicotiana glauca graham.*" should be "*Nicotiana glauca* Graham"<br><br>I cannot understand the statistical analysis. The authors using parametric statistics (Pearson correlation coefficients). Have the authors check for normality? Authors should explain which test they used for evaluation of the normality of the analysed features. It is known, for the scientist working on evaluation of pollutants, that these substances rarely own normal distributions but highly skewed to the left and showing long right tails. Taking this into account I wonder they decided to use directly parametric statistics (Pearson correlation) without (at least this is not noted in the manuscript) any previous evaluation of normality (e.g. Shapiro-Wilk test). For | |

| data not showing normal distributions there are a lot of equivalent statistical test that allow to do the same analysis but in a proper way. | |
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