



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	Ms_BJAST_32126
Title of the Manuscript:	CRITICAL ANALYSIS OF POLYCYCLIC AROMATIC HYDROCARBONS RING SIZE DISTRIBUTION IN MARSHY SOILS AND SEDIMENTS IN WARRI CITY AND ITS ENVIRONS, SOUTHERN NIGERIA
Type of Article:	A case study

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
- Line 37: the rates of degradation vary and generally decrease with increasing number of aromatic rings, oxygen concentration, temperature and light intensity" this refers solely to biodegradation by microorganisms! - Line 58 : PAHs are mostly insoluble in water! At a solubility of 0.0022mg/L anthracene can be considered water soluble?? - Line 186-line 187: There is no data regarding the column used for the separation of the PAHs and temperature program used. Also, there no data on how the concentration of various PAHs calculated. Was there an internal standard used? - Line 201 Figure 2. I can't find figure 2 - Line 209 Figure 3 is also missing - Line 213: "total concentration of PAHs within Warri was recorded for BaP - benzo(a)pyrene at 3.302mg/kg in soil samples" This phrase is illogical; Total concentration of PAHs is the sum of all PAHs! Bap is one individual component of this sum. Please rephrase. - Line 264: There is no way a naphthalene will transform in a methylated compound in aqueous solution! It is impossible for any analytical device NOT TO detect a two-ringed compound just for having a methyl group attached!	- Yes, the statement relates to microbial degradation of PAHs and a preceding statement has been included to reflect that. Thanks - We meant "higher molecular weight (HMW) PAHs" as stated in Line 63 of my first revised version. 3 ringed Anthracene which can be considered relatively water soluble is a low molecular weight PAHs. Solubility decreases with increase in molecular weight. - Data on the column used for the separation of the PAHs has been added (lines 208). Information on the temperature program used has been included (lines 209-212). The concentration of various PAHs was calculated by CLARITY-GC interfaced software. No, an internal standard was not used. Thanks - Please find Fig 2 titled The distribution pattern of 2–6-ring PAHs in Marshy Soil at different sampling locations on Line 217 of my first revised version - Please find Fig 3 titled The distribution pattern of 2–6-ring PAHs in Marshy Soil at different sampling locations on Line 227 of my first revised version - Statement has been rephrased to "Highest total concentration of individual PAHs within Warri was recorded for BaP - benzo(a)pyrene at 3.302mg/kg in soil samples.". Thanks 2-ringed Naphthalene was detected in the samples. In addition, we had to analyse for the methylated forms of Naphthalene because of the information obtained in literature according to Botkin and Keller (2005) captured in Lines 295-300. However, we are willing to expunge the statement if you are not convinced with it. Thanks