Dear Editors-in-Chief, Professors Bergaya and Yuan,
Dear Associate Editor, Professor Juraj Bujdák
Dear Members of the Editorial board,

We are grateful for the comments you provided in consideration to our research article and the valuable comments of the Editorial Board and the reviewers.

After discussing with the co-authors, we present in this report the changes that have been conducted on the manuscript which is now entitled “A comparative adsorption study of benzophenone-3 onto synthesized lipophilic organosilicate, Laponite and montmorillonite”.

We additionally answered to the specific questions addressed by the Reviewers. Our comments are written in red italic font below.

We sincerely thank you for your time and consideration for our work.

With our best regards,

Sincerely yours

Samar ISSA and co-authors.
COMMENTS FROM EDITOR AND/OR REVIEWERS

Editor’s Comments
We would like to thank the Editor for his comments and suggestions. We have replied to each comment as follows:

1. Highlights are limited in length. Check the rules of the journal.

   Highlights have been optimized as follows:
   - Adsorption capacity BZ-3 onto lipophilic organosilicates (OSL) was studied.
   - OSL adsorption capacity was compared to the Laponite and montmorillonite adsorption.
   - The effects of the solvent, pH, temperature, and contact time were studied.
   - OSL-montmorillonite fitted with the Langmuir, Laponite with the Freundlich model.

2. Graphical abstract should not contain so much text. It should be mainly graphical and text could be used to label objects in.

   The graphical abstract has been optimized.

3. Figure 9: What is LnCe? Use italics format for the symbols of physical quantities. Use subscripts and superscript, where appropriate.

   LnCe has been replaced by Ln(Ce): the changes have been done.

4. Figure 9 and others: Use only significant digits of the values. How to round them should be determined from standard errors. For example, if you get 50.544 ±0.8, then it makes sense to change it to 50 (not 50.544), etc. The same should be done for some values in tables.

   The changes have been done.

5. Check carefully the review of the reviewer 1 (attached file).

   Comments to Reviewer 1 have been answered and improvements made to the manuscript.
**Reviewers' comments:**

Reviewer #1: Comments to the paper.

**GENERAL COMMENT**

This paper presents the results of batch adsorption experiments which were designed to compare the adsorption of a bioactive compound, benzophenone-3 (BZ-3), on three adsorbents: a synthetic organosilicate, Laponite, and montmorillonite. The effect of pH, temperature, initial concentration of BZ-3 and contact time on the adsorption by the adsorbents was investigated and optimal conditions were elucidated. A key point of the experimental procedure is that adsorption experiments were conducted using ethanol as a solvent.

Although the topic is relevant for readers of Applied Clay Science, I found a considerable number of flaws in the manuscript. The objective of the paper should be better elaborated. The rationale for measuring adsorption of BZ-3 from ethanolic solutions rather than from aqueous solutions should be emphasized. Some experimental methods are not sufficiently described. In particular, the use of controls in adsorption measurements at different pH values and in complex preparation should be described. Discussion and interpretation of the data need extensive revisions, in particular bearing in mind the specific (charge) characteristics of the tested compound (acid) and the solvent from which adsorption was measured. Appropriate comparisons with previous studies on adsorption of acid/anionic organic compounds (rather than cationic dyes or heavy metals) from organic solvents (ethanol/methanol) should be included. An itemized list of additional specific comments is given below.

*We would like to thank Reviewer 1 for his positive comments and suggestions. We have replied to each comment as follows:*

**SPECIFIC COMMENTS**

**Graphical abstract, highlights and title**

1. Graphical abstract: The explanation appearing below the figure of adsorption isotherms should be removed to make the graphical abstract simpler.

*The explanations appearing below the figure of adsorption isotherms have been removed.*

2. Highlights: Highlights #1 and #2 exceed the maximum of 85 characters, including spaces, per bullet point. Highlights should also be improved to reflect new findings rather than what was done. Change “laponite” to “Laponite”.

*Highlights have been optimized as mentioned in the Editor’s Comment 1.*

3. Title and throughout the manuscript: Change “organosilicates” to “organosilicate”

*“Organosilicates” have been changed to “organosilicate” throughout the manuscript*
Revised Notes for the submission of the Manuscript: “A comparative adsorption study of benzophenone-3 onto synthesized lipophilic organosilicate, Laponite and montmorillonite” by Charaabi et al.

Abstract

4. Lines 22-33: According to the journal’s guidelines, personal expressions like “we” or “our” should be avoided as much as possible. The authors repeatedly use such expressions in the abstract section (lines 24, 25, 27, 30, 31)

“Personal expressions like “we” or “our” have been avoided.

5. Line 25: Delete “isotherm”

“Isotherm” has been deleted.

Introduction:

6. Line 57: Replace “Clays” with “Clays and clay minerals”

“Clays” has been replaced by “clays and clay minerals”.

7. Lines 58-60: Revise these sentences.
The sentences have been revised.

8. Line 60: Replace “increase” with “increased”

“increase” has been replaced with “increased”.

9. Line 68: Change “synthetized” to “synthesized”

“synthetized” has been changed to “synthesized”

10. Line 69: Change “In our previous works” to “In previous works”

“In our previous works” have been changed to “In previous works”.

11. Lines 69-75: A brief description of the structural characteristics of the organosilicate OSL (layered structure, isomorphic substitution, layer charge…?) should be given in this paragraph.
The characteristics have been added.

12. Lines 76-85: This paragraph could be better elaborated. Sentences should be reorganized to clearly present the objective(s) of the work.
The sentences have been revised.


“Freundlich, 1960” has been changed “Freundlich, 1906”.

Materials and Methods

14. Line 88: Change “organosilicates” to “organosilicate” and “were” to “was”

“Organosilicates” has been changed to “Organosilicate”.

15. Lines 88-102: The cation exchange capacity of the minerals used in the study is an important property and should be given.

“The cation exchange capacity of the minerals used in the study is given”.

16. Lines 106-107: The rationale for the choice of the “optimal solvent for the batch sorption experiments” is not clear. Did you aim at the solvent in which BZ-3 displayed the highest solubility? Actually, adsorption usually increases from solvents in which the solute displays lower solubility. Was ethanol selected because it was an appropriate solvent (better than water) to prepare BZ-3 formulations? The section of the manuscript related to the selection of the solvent needs to be improved.
In a preliminary study, the investigation of the most appropriate solvent for the couple adsorbent–BZ-3 has been conducted. Particular attention was given to both OS₄ dispersibility and BZ-3 dissolution, and ethanol was chosen as the most appropriate solvent for both OS₄ and BZ-3. The Figure and results were transferred to the Supplementary information file.

17. Line 114 and 115: Delete “isotherm”

   “Isotherm” has been deleted.

18. Lines 114-115: “0.5 g of each adsorbent was put in contact with 25 mL of BZ-3 in 50 mL solution” (?). Was the volume of BZ-3 solution 25 mL or 50 mL? In any case, this solid to solution ratio is not consistent with the value of 2 g/L indicated in the captions of Figs. 2-9.

   For each batch adsorption experiment, 25 mL of BZ-3 solution was added to 50 mL conical tube containing 0.5 g (weighted per duplicate) of OS₄, Lap or Mt and protected from light. This mixture was stirred with a constant speed of 150 rpm. At the end of each experiment, sample were withdrawn, and centrifugated (5000 rpm, 5 min) and an aliquot of the corresponding supernatants were analyzed for BZ-3 concentration. Blanks without adsorbent were run to rule out possible BZ-3 losses due to degradation, volatilization, or adsorption on tube walls.

19. Line 117: Please, clarify if the supernatant solutions were filtered and directly analyzed by HPLC. In addition, you should have also prepared controls without adsorbent at different pH values to identify possible losses of BZ-3 by processes different from adsorption onto the adsorbents (precipitation, adsorption to the tubes or filters, etc.). Results of controls need to be included.

   The sentences have been clarified and revised. Results of controls have been included in the manuscript and Supplementary information file, Fig. S4.

20. Line 118: Information about the final/equilibrium pH values in the experiments at different initial pH values should also be included.

   Experiments related to pH values were included in the Supplementary information file, Fig. S3.

21. Line 130: Information about the standards use for quantification and the LOD/LOQ of the analytical method should be added. Were adsorption supernatants directly analyzed by HPLC or previously extracted/concentrated before analysis?

   Using common analytical method based on signal to noise (S/N) ratio (Kasichayanula et al., 2005), the limit of detection (LOD) was calculated as three times greater than the baseline noise and the limit of quantification (LOQ) was calculated as ten times greater than the baseline noise. Under chromatographic conditions in this study, LOD and LOQ values were 0.002 g/L and 0.01 g/L, respectively (Fig. S2 in the Supplementary Information file).

Reference:

22. Lines 132-134: The information included in this sentence is a repetition of that provided in section 2.2.2.

   The sentence has been revised.
23. Lines 137-151: Describe the sample pre-treatment for particle size analyses and infrared spectroscopy measurements. Were these analyses conducted directly on the solid samples or in suspensions (particle size) or KBr disks (FTIR)? Also, describe how the adsorbent – BZ-3 complexes

Sample pretreatment has been added to the manuscript:
For the particle size analyses: Control samples (without BZ-3) were prepared ahead from the analysis by putting each adsorbent in the medium (ethanol) for the same contacting time (24 h).
Infrared spectroscopy measurements were directly conducted on powder samples.

24. Line 160: Consider replacing “regression coefficient” with “coefficient of determination”
“regression coefficient” has been replaced with “coefficient of determination”.

Results and discussion
25. Lines 169-173: Delete this paragraph.
The paragraph has been deleted.

26. It is not clear why the authors chose ethanol as solvent for the adsorption experiments (see specific comment #16). As mentioned above, adsorption usually increases from solvents in which the solute is poorly soluble. Did you conduct any experimental measurement of BZ-3 adsorption from different solvents to support your choice? Data on BZ-3 adsorption from selected solvents would be very valuable.
The lipophilic organosilicate aggregates in water, and the choice of ethanol was taken based on the dissolution of all the adsorbents in this solvent and the BZ-3 solubility.

27. Line 190: Measurement of pH of ethanolic solutions. Did you need any specific instrumentation to measure pH in pure ethanol solutions (electrode…)? This should be indicated in the Materials and Methods section.
Following the reviewer’s suggesting we indicated the ethanolic electrode reference in the Material and Methods section: Each pH value was measured using a specific ethanolic solution electrode (EtOH-Trode, inner and bridge electrolyte KCl = 3 mol/L, Metrohm, Ionenstrasse, Switzerland).

28. Line 192: Replace “used” with “used as”
“used” has been replaced with “used as”.

29. Line193: The authors indicate that BZ-3 has a pKa of 7.56. The authors should discuss if this value applies to ethanolic solutions and if dissociation in ethanol would differ from that in water.
Silva et al. have mentioned in their study on the evaluation of BZ-3 in water a pKa of 7.56 (Silva et al., 2013). The source of this value has been reported by Rodil et al. who calculated this obtained this software calculated value, from SciFinder Scholar Database 2006: http://www.cas.org/products/sfacad/ (Rodil et al., 2009).
New studies have been reported to evaluate the pKa of BZ-3 in ethanolic solutions, pKaw in water (with 20% ethanol) was 9.6 as described by Castro et al. This could be explained by the resonant forms of BZ-3 (participation of the C=O function, electron- donating effect of OCH3, increased intramolecular hydrogen bonds) that could influence the acid-base properties of the hydroxyl group (Castro et al., 2000). This pKa increases in ethanolic solutions, further modeling studies by the Castro et al. studied the difference in pKa values between pure aqueous and ethanolic solutions. The authors showed that at 29% w/w ethanol in water, pKaw was 10.7 (Castro et al., 2003). In the study presented, the % of ethanol is more than 30% which could explain that BZ-3 in ethanol was in its neutral form and had interactions with the negatively charged Mt and Lap. We retrieved from the manuscript the discussion related to the ionized form of BZ-3.

References:


**Silva, C.P.D., Emídio, E.S., de Marchi, M.R., 2013. UV filters in water samples: experimental design on the SPE optimization followed by GC-MS/MS analysis. J. Braz. Chem. Soc. 24, 1433-1441.**

30. Line 193: The reference “Silva et al., 2016” appears as “Silva et al., 2013” in the reference list. The reference “Silva et al., 2016” has been replaced by “Silva et al., 2013”.

31. Lines 194-195: I am surprised that at pH less than 5.5 the solubility of BZ-3 decreased, resulting in precipitation. Usually, neutral organic molecules (as BZ-3 below its pKa) have a high solubility in organic solvents such as methanol or ethanol. On the contrary, salts are usually less soluble in methanol/ethanol than in water. **We have observed a difference at low pH that could be related to the mixed water-ethanol and decreased solubility when adding HCl 1 M.**

32. Line 204, “may interact”: with what? “*may interact with guest molecule*” has been added to the sentence.

33. Line 208: “showed the highest activity”? Confusing, please use another term. The “highest activity” has been replaced by “the adsorption capacity”.

34. Lines 208-221: This section of the manuscript is quite confusing and needs substantial improvement. For example, the authors cite Liu et al. (2012) to support their statement that “BZ3 adsorption onto OSL showed the highest activity at pH 10 which can be explained by surface interactions with the organic moieties (Liu et al., 2012)”. However, Liu et al. (2012) studied a very different compound, tetracycline, with different charge characteristics. Also, I found surprising that BZ-3 was adsorbed to a greater extent at higher pH values, at which anionic BZ-3 species predominated. This behavior is repeated for Lap and Mt, which is even more surprising given that all Lap, Mt and BZ-3 are negatively charged at high pH levels (i.e., pH 10). Could BZ-3 have precipitated in ethanol at high pH levels? Did you prepare control BZ-3 solutions (without adsorbent) at different pH values to discard precipitation? Results of such controls need to be included. **The paragraph has been revised, please refer to discussion in comment 29.**

35. Line 218: The reference “Park et al., 2001” appears as “Park et al., 2011” in the reference list. “Park et al., 2001” has been changed to “Park et al., 2011”.

36. Lines 234-237: The adsorption behavior of heavy metals on Mt at low pH values is not relevant in the context of the present work. At low pH levels, BZ-3 exists mainly as molecular species, and so its adsorption behavior will be very different from that of heavy metal cations. **The paragraph has been deleted.**
37. Lines 237-241: Similarly, the adsorption behavior of tetracycline on Mt is of little relevance since, contrary to BZ-3, tetracycline can exist as TCH3+, TCH2 (zwitterion), TCH- and TC2- species, and the presence of a positive charge in its structure strongly determines its adsorption behavior. 

The paragraph has been deleted.

38. Line 281: Change “Arellano-Cárdenas, 2013” to “Arellano-Cárdenas et al., 2013”

“Arellano-Cárdenas, 2013” have been changed to “Arellano-Cárdenas et al., 2013”.

39. Line 284: Replace “slightly higher than” with “different from”

“slightly higher than” has been changed to “different from”.

40. Lines 289-291: Delete this sentence.

The sentence has been deleted.

41. Lines 299-306: This paragraph needs improvement. I am not that sure that the shape of the adsorption isotherm indicates chemisorption process for all sorbents. Also, to avoid confusion, it should be clarified that Almeida et al. (2009) did not use BZ-3, but a different compound (cationic dye) in their experiments. 

The paragraph has been revised, and the adsorption of Methylene Blue (MB) was added to avoid confusion.

42. Line 303 (and 474): The authors state that “the adsorption reached a plateau when initial BZ3 concentration exceeded 1.5 g/L”. Later, in line 312, the authors select an initial concentration of BZ-3 of 2.5 g/L for subsequent experiments. In my opinion, there is no need to increase the initial concentration to 2.5 g/L if a plateau is already reached at about 1.5 g/L. Plateau was reached for Lap and Mt at 2 g/L but with large Standard Error of the Mean values. For this study, the choice of the concentration of 2.5 g/L was the most adequate for a comparative study between the three adsorbents.

43. Lines 320-322: This sentence should be moved to a more appropriate place in the manuscript.

The sentence has been moved.

44. Line 333: “Adsorption isotherm studies”. An adsorption isotherm study refers to adsorption measurements at different adsorbate concentrations (at constant temperature). An adsorption isotherm represents the amount of adsorbate adsorbed as a function of the adsorbate concentration in solution at equilibrium. However, in lines 334-335 the authors state that the adsorption isotherm study was conducted “at initial BZ-3 concentration at 2.5 g/L”. On the other hand, the results presented in this section (section 3.6) should be merged with those presented in section 3.4.

The sentence has been revised.

45. Line 335: delete “models”

“models” has been deleted.

46. Line 339: The authors state that “The plateau was reached at qe value of 300 mg/g, 200 mg/g and 130 mg/g” According to Fig. 6, a clear plateau with these values is not seen for the isotherms.

The sentence has been moved.

47. Lines 346-352: This paragraph does not apply to appropriate calculations for adsorption isotherms (% of BZ-3 adsorbed are not discussed, concentrations at different times, t, are not applicable in an adsorption isotherm study, etc.). Probably, the information given in this paragraph should be moved to a general section of the Materials and methods section (section 2.2.2 or 2.3).

The paragraph has been moved to section 2.2.2.
48. Lines 348-349: Change “Equilibrium adsorption capacity was” to “Amounts adsorbed were”
“Equilibrium adsorption capacity” has been changed to “Amounts adsorbed were”.

49. Line 350: Delete “(mg/g)” after “equilibrium” and change “(mg. g-1)” with “mg L-1)”
“(mg/g)” after “equilibrium” has been deleted and “(mg. g-1)” changed to” (mg/L).

50. Line 357: Change “another” to “other”.
“another” has been changed to “other”.

“Nafees et al., 2014” has been changed to “Nafees and Waseem, 2014”.

52. Line 359 and 368-369: The first two equations describing the Langmuir model should be double checked. I could not find them in Nafees and Waseem (2014) and they seem wrong. The units for aL should also be double checked. If RL is dimensionless (line 368) and the units for C0 are mg/L (line 369), then according to equation 5 (line 368) the units for aL should be L/mg, not L/mmol (line 359).
As the review’s suggested, the first two equations describing the Langmuir model has been checked.
The correct linear form of the Langmuir equation is represented by Eq. (4) and reported by Abbass et al. :
\[
\frac{c_e}{Q} = \frac{1}{k_LQ_m} + \frac{c_e}{Q_m}
\]
Equation (4)

Reference:

53. Line 382: Change “Vinati et al., 2015” to “Vinati and Mahanty, 2015”
“Vinati et al., 2015” has been Changed to “Vinati and Mahanty, 2015”

54. Line 386 and Table 2: Actually, units for KF are not mg/g (as stated in line 386) or L/g (as indicated in Table 2). Correct units for KF are mg1-1/n L1/n g-1. The unit for Kf has been checked and it has been changed to mg1−1/n L1/n/g as suggested.

55. Line 387: To avoid confusion and to be consistent with equation 7, I suggest the authors to use and discuss the values of 1/n rather than the values of n (e.g., give 1/n values in Table 2 and write “1/n < 1” in lines 392 and 394).
As suggested, in the case of Freundlich model, we discussed the value of 1/n rather than values of n. This part has been included in the manuscript.

56. Line 394: “desorbed”? or adsorbed?
“desorbed” has been changed to “adsorbed”.

57. Line 403: “Freundlich”? or Temkin?
“Freundlich” has been changed to “Temkin”.

58. Line 410: Could you discuss the goodness of the fits in terms of Chi-square value?
Following reviewer’s suggestion, the goodness of the fits in terms of Chi-square value has been discussed.
Revised Notes for the submission of the Manuscript: “A comparative adsorption study of benzophenone-3 onto synthesized lipophilic organosilicate, Laponite and montmorillonite” by Charaabi et al.

   *The sentence has been revised and briefly explained in the paragraph.*

60. Lines 448-466: In general, ATR-FTIR results are poorly presented. This section needs extensive revision. A few examples are given below:
   *FTIR results have been explained and changes have been made as described below:*

   a) Line 451: “The sharp peak observed around 1200 cm⁻¹ for both samples”. This band is evident in Fig. 4b for the OS₃L–BZ-3 complex, but not for the untreated OS₃L sample.
   *FTIR measurement of the untreated OS₃L has been done and the sharp peak seen.*

   b) Lines 455-457: Differences in the FTIR spectra of OS₃L and OS₃L–BZ-3 complex should be emphasized, rather than stating that “OS₃L – BZ-3 complex ATR-FTIR spectra could bring insights in understanding the role of organic moieties at the surface of OS₃L.”
   *Changes in the paragraph and peaks in the Figure have been done.*

   c) Line 457: The authors indicate that “Mt and Mt – BZ-3 complex ATR-FTIR spectra for as shown in Fig. 11 (c)”. According to Fig. 11, these spectra are given in Fig. 11 (d), not in Fig. 11 (c). In addition, the values of 1115, 1035, 915, 875 and 836 cm⁻¹ mentioned in the text (lines 458 and 459) are not indicated in the spectra.
   *Changes in the paragraph and peaks in the Figure have been done.*

   d) Lines 460-461: The authors indicate that “Lap – BZ-3 complex and Lap ATR – FTIR spectrum shown in Fig. 11(d)...”. According to Fig. 11, these spectra are given in Fig. 11 (c), not in Fig. 11 (d). In addition, the values of 655 and 1010 cm⁻¹ mentioned in the text (lines 461-462) are not indicated in the spectra.
   *Changes in the paragraph and peaks in the Figure have been done.*

   e) The authors should discuss if they prepared samples of the adsorbents (OS₃L, Lap and Mt) not treated with BZ-3 but treated with ethanol as controls (see specific comment #22). Bands corresponding to C-H stretching vibrations (from ethanol?) seem to be present in the spectra of untreated Lap and Mt samples in Fig. 11 (c) and (d).
   *Untreated Lap and Mt samples were not treated in ethanol.*

61. Line 469: Change “the batch” to “batch”.
   *“the batch” has been changed to “batch”.*

62. Lines 477-479: Reword this sentence.
   *The sentence has been revised.*

63. Lines 480-484: If the authors think that TGA, XRDP, and porosity measurements of OS₃L and OS₃L–BZ-3 complex could help explain differences in adsorption and elucidate the interaction mechanism of BZ-3 and OS₃L, these measurements should have been included in the paper (since they are easy to conduct on the already prepared complexes).
   *TGA measurements of OS₃L and OS₃L-BZ-3 parameters have been included in the paper. A preliminary porosity measurement was conducted but required further confirmation. As for the XRDP this analysis could not be done within the revision delay.*

**References**

   *Z. Phys. Chem. has been changed to “J. Phys. Chem.”*
Revised Notes for the submission of the Manuscript: "A comparative adsorption study of benzophenone-3 onto synthesized lipophilic organosilicate, Laponite and montmorillonite” by Charaabi et al.

**Figures**

65. The graphs shown in Figures 7, 8 and 9 could be combined in a single figure. In this way, the maximum number of illustrations (10) will not be exceeded. 
*Figures 7, 8 and 9 were combined in a single figure.*

66. Figure 7: Give units for the Y-axis. 
*Units have been given for the Y-axis in Figure 7.*

**Tables**

67. Table 1. Table 1 can be removed since the data reported in this table duplicate those given in Figure 4. 
*Table 1 has been removed.*
Reviewer #2: Reviewer Comments:

We would like Reviewer 2 for his comments and questions. We have replied to each comment as follows:

In the following, there is a list of questions that the authors should answer:

1) Why were IR spectra recorded between 6000-400 cm\(^{-1}\) and not between 4000-400 cm\(^{-1}\)?
   
   Changes in the Material and Methods paragraph have been done. IR spectra were recorded between 4500-600 cm\(^{-1}\) as presented in Figure 7.

2) The amount of BZ-3 adsorbed is high in Fig. 5 while % of adsorbed BZ-3 in Fig. 3 is low. Why is that?
   
   The adsorbed amount of BZ-3 in pH 10 and 38°C in Figure 5 and expressed in quantity q (mg/g) while in Figure 3 the adsorbed amount of BZ-3 is expressed in % at 38°C but at different pH values.

3) Why was 38°C selected in adsorption experiments? Why not 40°C.
   
   The choice of the temperature was related to the similarity with the body’s temperature.

4) How was the adsorbent dosage used in adsorption experiments? It must be explained in the text.
   
   In all experiments, an adsorbent dosage of 20g/L was reported. Please refer to answer to comment 18 (Reviewer 1).

5) In page 11, lines 267-268, although the importance of thermodynamic parameters for the understanding of the adsorption mechanism is mentioned in the text, these parameters are not determined. Why?
   
   The thermodynamic study has been carried out and added to the manuscript.

6) In Page 17, lines 403-404, the sentence relates to Freundlich isotherm. It must be corrected.
   
   The sentence has been revised.

7) How was ANOVA test applied to experimental values? I didn't find an information about ANOVA test in the text.
   
   The text has been revised for the ANOVA test.

8) From Figs. 7 and 8, it can be seen that R\(^2\) of Freundlich isotherm is bigger than that of Langmuir isotherm for Mt. But it was impressed as "Lap adsorption seemed to slightly better fit with the Freundlich model" in page 16, line 395. Why?
   
   Value of R\(^2\) in Table 1 shows that R\(^2\) of Langmuir isotherm is higher than that of Freundlich isotherm. Figure 6 has been checked and value of R\(^2\) has been revised. According to R\(^2\) and \(\chi^2\) values: adsorption of BZ-3 onto OS\(_L\) and Mt better fit with the Langmuir model while Lap better fitted with the Freundlich model.

9) How can the relationship between benzophenone-3 and adsorbents be explained by which adsorption mechanism?
   
   Two control adsorbents, Mt and Lap were used to study the adsorption capacity of OS\(_L\). The choice of these adsorbents is due to the OS\(_L\) structure previously described to be the closest to these adsorbents. BZ-3 was used as a probe molecule to investigate in the case of such adsorbents, how similar would be the mechanism of adsorption of the non-previously described OS\(_L\).
10) The order of adsorbed BZ-3 amount is OSL>Mt>Lap while the order of the particle size for OSL - BZ-3>Lap -424 BZ-3>Mt - BZ-3. Why? 

*The order of particle size for Mt and Lap before adsorption is Lap>Mt which could explain the fact that particle size of Lap-BZ-3 was larger than the Mt-BZ-3 complex. This could not only be explained by adsorption but could be related to complexes aggregation. This Figure was transferred to the Supplementary Information File, Figure S6.*

11) In Fig. 11 (d), is it peak of CO$_2$ at about 2500 cm$^{-1}$? 

*FTIR spectra for this compound has been measured without interferences with the CO$_2$ peak and the new analysed was added to Figure 7.*

12) It can be observed that the adsorbed amounts of BZ-3 are 137 mg/g, 192.3 mg/g and 340 mg/g for Lap, Mt and OSL, respectively. But it was specified as "at optimal conditions of pH, temperature, initial BZ-3 concentration and contacting time, maximum adsorption of 340 mg/g, 137 mg/g and 200 mg/g was achieved for OSL, Lap and Mt, respectively”. This contradiction must be eliminated.

*The sentences have been revised to present the adsorbents in the same order OSL, Lap and Mt.*

13) Freundlich isotherm best defined the adsorption process for Mt. But the maximum capacity was calculated from Langmuir. How is this possible? 

*Langmuir isotherm best defined the adsorption process for Mt from where the maximum capacity was calculated.*

14) References must be checked.

*The references have been fully checked and corrected if necessary.*