**Dear Editor,**

Authors would like to thank the Editor for accepting to evaluate our manuscript. We also thank the anonymous reviewers for their constructive comments.

Please find hereafter the responses to the Reviewer’s comments point by point. All the suggested additions and/or corrections have been incorporated in the revised manuscript.

Please let us know at your earlier convenience the progress of the revised version of our manuscript.

**The answers for the reviewer A:**

1. **Page 4, line 110: Specify the indicator used for determination of clay CEC.**

The indicator used was the Tashiro's indicator (methylene blue (0.1%) and methyl red (0.03%)). A sentence was added in ‘materials’ section and ‘Bentonite Treatments’ section in the corrected version of the manuscript.

1. **Page 4, line 114: The clay CEC (mmol/g) was calculated by using clay weight of 10 g, while you took only 10 ml of aqueous phase for determination the quantity of NH4+ (line 108) and not the full volume.**

Yes, I agree, the equation of CEC calculation was revised and corrected and then the new equation is:

CEC= $\frac{V\_{HCl} X C\_{HCl} }{10 g \_{MMT-Na^{+}}}X 10^{4}$ = mmol/ g (1)

Where;

 CEC = the cation exchange capacity of the sample expressed with mmol/g of MMT-Na+;

 $C\_{HCl}$ = the concentration of Hydrochloric acid with mole/l;

 $V\_{HCl}$ = the volume of Hydrochloric acid with l.

Also, we can say that 100 ml of aqueous solution was obtained from 10 g of clay weight, and only 1/10 of this volume (10 ml) was used for NH4+ quantity determination. So, the VHCl obtained after titration was multiplied by 10 to find the true value of CEC.

In other words:

CEC (mmol/g) = $\frac{10×V\_{HCl} X C\_{HCl} }{10 g \_{MMT-Na^{+}}}X 10^{3}$ = $\frac{V\_{HCl} X C\_{HCl} }{10 g \_{MMT-Na^{+}}}X 10^{4}$

1. **The “Characterization method”, given in “Experimental part”,
should be presented after “Formulation of polyurethane foam” section.**

Yes, I agree. Characterization method is moved after Preparation of nanocomposite PUR /OMMT foams samples.

1. **Page 7, line 179. Instead the term “distance” use “basal
spacing”.**

Yes, I agree.

All the terms ‘**Distance**’ in the manuscript were replaced by the ‘**basal spacing**’ term.

1. **Present and comment only stress-strain curves of composites (tensile
test), as well as tensile strength at break (in Pa), elongation at break (in
%) and Young's modulus (Pa) (Table IV).**

Yes, I agree. The previous fig.9 in the manuscript and the mentioned parameters were eliminated from comments and the table IV, in the new version of the manuscript.

1. **Page 15, line 309: XRD of composite**

Yes, I agree. The information given by the DRX, was not sufficient to say exactly that the OMMT is intercalated or exfoliated in the PUR matrix.

The comments were revised in the corrected version of the manuscript.

The previous reference was:

The X-ray diffraction for all PUR 3 loaded and unloaded foam samples shows large peak centered at 2θ=20°, which were not influenced by the addition of montmorillonite, this peak shows on the one hand the amorphous character of the polyurethane foam and on the other hand it indicates that the layers of OMMT are probably exfoliated. This peak characterizing the PUR chains is at the reflection plane (110) corresponds to a d-spacing between the chains of 0.442 nm.51

Nevertheless, there is a slight peak would appear towards an angle of 2θ=4° for PUR 3+ 3% OMMT foam, which indicates that the layers of OMMT are partially exfoliated. This result is in agreement with those obtained by Zheng et al8 in the reported work on the preparation of a polyurethane/montmorillonite nanocomposite with a phosphorus compound.

The corrected reference is after:

The X-ray diffraction for all PUR 3 loaded and unloaded foam samples shows large peak centered at 2θ=20°, which were not influenced by the addition of montmorillonite. This peak show, the amorphous character of the polyurethane foam, which is not influenced by the addition of the OMMT from one hand. On the other hand, it may be indicating that the layers of OMMT are exfoliated or intercalated, similar results was reported by Zheng et al. 8 This peak at 2θ=20°, characterizing the PUR chains is at the reflection plane (110) corresponds to a d-spacing between the chains of 0.442 nm.50

1. **Add the scale bar in SEM figures.**

Yes, I agree. The new versions of SEM figures in the revised manuscript present a scale bar.

1. **Page 20, line 421: Correct the reference.**

**the** reference was eliminated and a norm NF T 90-015-1 was cited in the “*Bentonite Treatments“section*.