Answer to the Reviewer 2

1. „Can author explain how to confirm the homogenous of the MMMs, maybe you can consider the EDS”.

EDS analysis could give some qualitative information but, unfortunately the resolution of such analyzer is too low to allow the precise evaluation of filler distribution. In the best way, the homogeneity of hybrid membranes can be checked by analyzing high resolution images from a TEM and/or SEM, e.g. by analyzing the membrane cross-sections it can be possible to asset the filler distribution. In case of poor compatibility, phase separation can be clearly seen. Another method is the use of fractal analysis supported image analysis described in the paper [G. Dudek, M. Krasowska, R. Turczyn, M. Gnus, A. Strzelewicz, Structure, morphology and separation efficiency of hybrid Alg/Fe3O4 membranes in pervaporative dehydration of ethanol. Separation and Purification Technology, 182 (2017) Pages 101-109]. By analyzing the fractal dimension and ΔD it is possible determine the self-similarity structure and, in consequence, distinguish the homogeneity of membranes.

2. „The figures needs to include the error bar for those with contact angles, Flux and selectivities”.

According to the Reviewer suggestion the errors bar were added to the Figures

3. „How long is the pervaporation testing, is the MMMs stale during the test?”.

A single measurement takes ten hours. However, the measurements were repeated at least three times using the same membrane and no noticeable deviation was observed. The membranes were stable and did not show signs of damage or deterioration. Our experience shows that the tested membranes are really robust. The longest tested membrane was a chitosan one, filled with magnetite. It was tested for two months, ten hours each day.