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**(1) Manuscript title: Nanoclay/Polymer Composite Powders for use in Laser Sintering Applications: Effects of Nanoclay Plasma Treatment.**

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**Change to original:**

- Removed abbreviations EC and NEC, and replaced by plasma treated and untreated clays throughout the manuscript.
- Added the manufacturing process to the Table 4.1
- The following sentences were added to the materials and preparation methods:

*(The temperatures of the upper and lower parts were adjusted by two digital electronic thermometers were attached on the hot press...) (...Natural cooling process were carried out outside the hot press without cooling chillers, therefore samples shrink to less than the mold standard dimensions. Therefore, dimensions of samples (tensile testing samples) released from molds were measured using digital calipers before tensile testing...).*

- And to the experimental section:

*(In DSC, three samples of each powder were tested ...)*

- In the Optimisation of processing conditions by HSM section, the following was added:

*(The average melting temperature at peak points for all samples are almost the same (PA12:  $185.5 \pm 0.56$  °C, untreated composite:  $185.8 \pm 0.18$  °C, and plasma treated composite:  $185.3 \pm 0.19$  °C)).*

- More information was added to the caption of figure 1, as follow:

*(showing no significant changes between peaks especially if the standard deviation mentioned in the text was considered.)*

- In section Effect of Plasma Treatment on the Nanoclay (Characterisation Techniques), sentences below were added:

*(It is noted that the platelets of as received C30B nanoclay were conjoined in micron-size irregular shaped agglomerates. Some of the aggregated particles are relatively large, round or oval in shape as shown in the SEM image in Figure 3b-i. Full scale images are found in Chapter 5, in Figure 5-3.)*

- Similarly, a sentence was added to section Testing the mechanical properties

*(This reveals that the plasma treatment does not prevent the agglomeration of nanoclay at higher nanoclay loadings.)*

- Figure 5, was split to two figures and a table and the following explanation was added as follow:

*(The presence of agglomerations may cause poor interfacial bonding and microcracks resulting in poor mechanical properties and brittle fractures. The effect of plasma treatment on nano-scale dispersion was not shown here in this study.)*

- Finally, the text in figure 8 (originally from the paper supplementary information) was changed from mostly to more, and a new sentence was added to the caption as follow:

*(in which more brittle fracture was occurred with no clear deformation before fracture (a) and 3% treated C30B composite indicating the sample was plastically deformed before fracture).*

## **(2) Surface Modification of the Laser Sintering Standard Powder Polyamide 12 by Plasma Treatments**

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**Change to original:**

- In Introduction, this sentence was added:

*(PA12 particles were rapidly responded to PJ at shorter exposure time (1-3min.) contrary to the LP-PT.)*

- And in Chemical analysis using FTIR section, the following was added, and in FTIR figures, Wavelength changed to wavenumber,

*(in the range between 600-1800 cm<sup>-1</sup>. Full range spectra are available in Figure S 6.6 in...)*