**Reply to the Reviewer Comments**

Thank you very much for the positive response. Here are replies to the following two comments/issues.

**Comment 1:** page 10, 6th and 5th row from the bottom:  Could you please cite a reference for the statement “… due to the alloying of platinum with copper which may be attributed to the “ligand effect” by which copper donates its electrons to platinum …”

**Author Reply:** The references for the above statement have been cited. These references are Ref. 22 and 31 in the revised manuscript

**Comment 1:** page 10, 2nd row from the bottom:  “The alloying of nanoparticles also produces strain in the catalyst surface” Why the strain should be only at the surface, the particles are nano-alloys and entire crystal lattice of Pt is under compressive strain due to incorporation of smaller Cu atoms?

**Author Reply:** Thank you very much for a very constructive comment. Of course, the entire crystal lattice of the synthesized catalyst is under strain, which we had also discussed in XRD analysis. Actually, the phrase “catalyst surface” was employed just to emphasize the catalysis phenomena, as its the surface of the catalyst where the electrocatalysis of methanol is taking place. However, as per suggestion of reviewer the word “surface” was removed to generalized the strain effect to the entire crystal lattice and clarify the sentence