Dear Prof. Matjaž Kristl,

Thank you for the comments on the manuscript "Tetranuclear Copper(II) Complexes Derived from 5-Bromo-2-((2-(2-hydroxyethylamino)ethylimino)methyl)phenol: Synthesis, Characterization, Crystal Structures and Catalytic Oxidation of Olefins".

With your comments, we have revised the manuscript, as follows.

Sincerely yours,

Ling-Wei Xue

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Reviewer A:

-Page 3, line 85: Please name the software that was used for the refinement

(though it is evident from the literature cited).

Answer or revision:

The name of the software is given.

-Page 7, lines 149-150: »The molecular structure of the acetate bridged

tetranuclear copper complex 1 is shown 150 in Fig. 1« should be changed to

»The ORTEP plot of complex 1 is shown in Fig. 1«.

The same change is applicable to lines 182-184 on page 8.

Answer or revision: Corrected.

-Page 8, lines 165-167: The authors state the following about the vicinity

of Cu2 atoms: »The central Cu atom is coordinated by five acetate oxygen

atoms, forming a wonderful square pyramidal geometry.« This 'wonderful

square pyramidal geometry' or in fact a fragment [Cu2(CH3COO)4] has its name

Answer or revision:

The name "tetraacetatodicopper(II)" of the fragment is given.

– it's a paddle-wheel motif that is very frequent in copper coordination

chemistry. Here, it is the centre of the coordination molecules of 1.

To my opinion, the structure description might be more concise if the

authors start from this motif and then move outwards to two ligands L that

are coordinated unidentately to Cu2 via phenolate oxygen. Then they should

describe the vicinity of Cu1.

Answer or revision:

The description order of the inner and outer Cu coordination is corrected as suggested.

-It is not necessary but the intramolecular H-bond between N2…O4 might be

worth mentioning (it locks the conformation of the ligand L in structure 1).

Answer or revision:

The hydrogen bond is mentioned at section 3.2. In the Fig. 1, the hydrogen bonds are shown as dashed lines.

-Page 8, lines 184-185: It might be better if the authors first describe the

coordination molecule and add the sentence about the methanol solvent

molecules in the end – when mentioning the hydrogen bond scheme. Hydrogen

bonds that connect methanol and coordination moieties are quite strong and

hold methanol molecules in their place – each methanol molecule is

connected with two such bonds of O-H…O and O-H…Cl types.

Answer or revision:

The methanol solvent molecules are described in the end. The hydrogen bonding is mentioned.

-Conclusions:

Line 291: The Cu atoms should be changed to 'all Cu atoms'.

Lines 292-293: The statement »The acetate, chloride and azide are

interesting bridging ligands in the formation of polynuclear complexes.« is

too general. Please consider their binding mode refering to your compounds 1

and 2.

Answer or revision:

The specific bridging modes of the ligands are mentioned in conclusion section.

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Reviewer E:

1. For introduction, earlier reports can be compared.

2. There are only less references

Answer or revision for 1 and 2:

Some earlier reports are compared. More references are given.

3. TGA analysis can be done to know the fragments that get dissociated.

Answer or revision:

The catalytic property was determined in solution. The fragments dissociated under high temperature is non-sense for this work. In addition, due to summer holiday and covid-19, the TGA instrument is not work now.

4. In UV-visible the assignments of the bands are not done.

Answer or revision:

The assignments of the bands are done.

5. In line 249, special features means?

Answer or revision:

It means d-d bands centered at about 640 nm.

6. The presence of azide in the complex 2 is not clearly identified from IR

(N=N strtching frequency can be mentioned.

Answer or revision:

The IR of azide is given.

7. The number of substrates studied for catalytic property is low and the

mechanism is not proposed for complex 2

Answer or revision:

The number of substrates are low but representative. The mechanism is proposed for both complexes.