

We are grateful to Reviewer 2 for her/his time to evaluate our ms and the valuable comments provided. We are pleased to see that the reviewer recommends minor revision before final acceptance.

Please find below our point-by-point answers to the reviewer's issues. Most comments were addressed. For her/his convenience and easy communication, we list each comment (highlighted in green) before our answer.

I have gone through the manuscript and my opinion is that the manuscript needs to undergo minor revision before it can be accepted for publication.

We thank the reviewer for her/his general positive comments.

The authors should revise and improve the whole abstract by mentioning the causes and rationality alongside the critical overview of this review of this paper.

We have revised and improve the "Abstract". We have added a part in the beginning ("The coordination chemistry..... their zinc(II) analogues") where we clearly describe the scope of our work, simultaneously providing the readers with the rationale behind our experimental work.

Amendment the key words

We have amended the keywords which are now completely consistent with the subject of the ms.

The introduction section: prefer to compare the estimated results with literatures not start with our research.....

The comment is absolutely correct. We have deleted the first large paragraph of "Introduction" of the originally submitted ms ("Our research efforts.....concerns the latter") where we had given an overview of our research, which incorporated other research themes from our group. Thus, "Introduction" in the revised ms is now focused only on the general family of ligands, a member of which is the ligand studied in the present work.

I suggest that the authors should provide more comparative samples to give more clarification to the results of the study.

If we understand correctly, this comment is particularly useful. We added two long paragraphs (“One family of such.....pyridyl nitrogen atom” and “The Cd(II)/pyridyl ketoxime chemistry.....their N_{pyridyl} and N_{oxime} atoms”) in “Introduction” of the revised ms. These paragraphs give, according to the suggestion by the reviewer, the existing literature (with all examples) on Cd(II)/pyridyl oxime chemistry; this overview covers both the pyridyl aldoxime and pyridyl ketoxime ligands, and it is not limited to the 2-pyridyl isomers but it is also extended to the 3- and 4-pyridyl ones. Thus, the reader has a clear overview of the relevant literature which helps her/him to understand the significance of the selection of di-2-pyridyl keton oxime as the ligand of study. If the reviewer means with her/his comment that we should incorporate other new compounds in the ms, this would require months of further work. The constant parameters of this study are Cd(II) and the ligand, and the varied parameter (which allows for comparative conclusions) is the nature of the halogeno donor.

The literature in the manuscript should be updated (currently, only a few recently published literature).

We had used the updated literature in the original version of the ms. Few old references (e.g. refs. 31 and 33 of the original version) have been removed, in order to satisfy the reviewer's suggestion.

Line 327: Figure 9. The Raman spectra of complexes **1**·2H₂O (black), **2** (blue) and **3** (red).

The caption of the old Figure 9 (now Figure 7) has been modified, so it is now absolutely clear.

Lines 332-333: This is a clear evidence.....not clear

If we understand correctly the comment, we have replaced “This is a clear evidence.....” with “This is an evidence”.

Lines 344-345: could you explain that through comparison on the charts

We are not sure what the reviewer means at this point. Perhaps she/he needs more clarification. Thus, we have added two sentences (“This means dpkoxH compound”) which make the solution situation unambiguous.

J coupling values are missing!

The J coupling values have been added in Part 3.2 of the “Experimental Section”.

Lines 437-438: %H 1.93(calcd) and %H 2.75 (found). Is that acceptable??

The comment is absolutely correct! This discrepancy can not be justified for a pure sample. We went again through our experimental notebook and we confirmed the found %H value of 2.75, which is unacceptable. Fortunately, we had kept a sample of compound 2 and submitted it to our Microanalytical Service. The new experimental value provided is 2.15%, which is now acceptable.

Establish the mechanism of formation of target compounds.

With no real experimental evidence at hand, we can only speculate about the mechanism of the formation of the complexes. Based on the solid-state structures of the products, we have proposed two mechanisms for the formation of precursor molecules in solution. Thus, we have added a whole paragraph (“A possible scenario.....precipitation of the products”) in Section 4 (“Conclusions in Brief and Perspectives”) where we explain the proposed mechanistic ideas.

Follow proper instruction from journal policy regarding the reference section.

We had strictly followed the journal policy regarding the reference section in the originally submitted ms. We have also followed this policy in the small number of the new references in the revised version. Thus, there is no need for changes.