Prof. Branislav Ž. Nikolić

University of Belgrade

Editor-in-Chief, Journal of Serbian Chemical Society

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Dear Professor Nikolić,

We wish to submit a manuscript for possible publication in the *Journal of the Serbian Chemical Society* as an *Original scientific paper*.

Title: First cobalt complexes with methyl pyruvate semi/thiosemicarbazone – synthesis, physico-chemical and structural characterization

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The manuscript reports the synthesis of four cobalt(II) complexes with methyl pyruvate semicarbazone (Hmps, complexes **1** and **2**) and with methyl pyruvate thiosemicarbazone (Hmpt, complexes **3** and **4**). All complexes are characterized by elemental analysis, conductometry, IR spectroscopy, and magnetic measurements, while the structures of complexes (**2**–**4**) are unequivocally determined by single crystal X-ray crystallography.

The literature and Cambridge Structural Database were surveyed for similar complexes, revealing that complexes **1** and **2** are the first metal complexes with Hmps to be reported and that complexes **3** and **4** are the first cobalt complexes with Hmpt.

There are many reported reactions in which Hmpt hydrolyzes, giving complexes of pyruvic acid thiosemicarbazone (H2pt). This may explain why a very limited number of Hmpt complexes is known. We have found experimental conditions in which the hydrolysis Hmpt and formation of H2pt complex with H2pt do not take place.

We hope that this paper will be of interest to researchers in the field of structural coordination chemistry.

As a corresponding author, I warrant that the manuscript is original, has been written by the stated authors and has not been published elsewhere. The manuscript is currently not being considered for publication by any other journal and will not be submitted for such a review while under review by the Journal of the Serbian Chemical Society. The manuscript contains no libelous or other unlawful statements and does not contain any materials that violate any personal or proprietary rights of any other person or entity.

Finally, the names and addresses of potential Referees are provided:

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Sincerely yours,

Marko Rodić