

Accepted Manuscript

Research paper

Cu(II) and Mn(II) coordination complexes constructed by C linked bispyrazoles:
Effect of Anions and Hydrogen bonding on the Self Assembly process

Mohamed El-Massaoudi, Smaail Radi, Yahia N. Mabkhot, Salim S. Al-
Showiman, Hazem A. Ghabbour, Marilena Ferbinteanu, N.N. Adarsh, Yann
Garcia

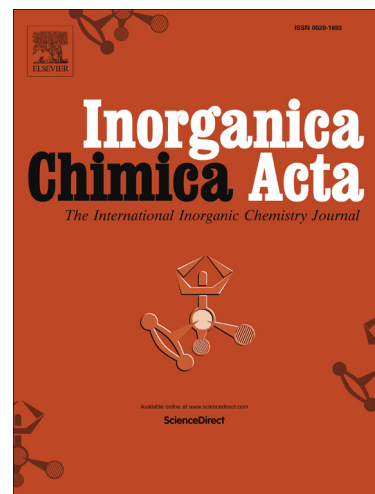
PII: S0020-1693(18)30688-1
DOI: <https://doi.org/10.1016/j.ica.2018.06.041>
Reference: ICA 18333

To appear in: *Inorganica Chimica Acta*

Received Date: 7 May 2018
Revised Date: 23 June 2018
Accepted Date: 25 June 2018

Please cite this article as: M. El-Massaoudi, S. Radi, Y.N. Mabkhot, S.S. Al-Showiman, H.A. Ghabbour, M. Ferbinteanu, N.N. Adarsh, Y. Garcia, Cu(II) and Mn(II) coordination complexes constructed by C linked bispyrazoles: Effect of Anions and Hydrogen bonding on the Self Assembly process, *Inorganica Chimica Acta* (2018), doi: <https://doi.org/10.1016/j.ica.2018.06.041>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Cu(II) and Mn(II) coordination complexes constructed by C linked bispyrazoles: Effect of Anions and Hydrogen bonding on the Self Assembly process

Mohamed El-Massaoudi ¹, Smaail Radi ^{*,1}, Yahia N. Mabkhot ², Salim S. Al-Showiman ²,
Hazem A. Ghabbour ³, Marilena Ferbinteanu ⁴, N. N. Adarsh ⁵, Yann Garcia ^{*,5}

¹ LCAE, Department of Chemistry, Faculty of Science, University Mohamed I, P.O. Box 524, Oujda 60 000, Morocco.

² Department of Chemistry, Faculty of Science, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia.

³ Department of Pharmaceutical Chemistry, College of Pharmacy, King Saud University, P. O. Box 2457, Riyadh 11451, Saudi Arabia.

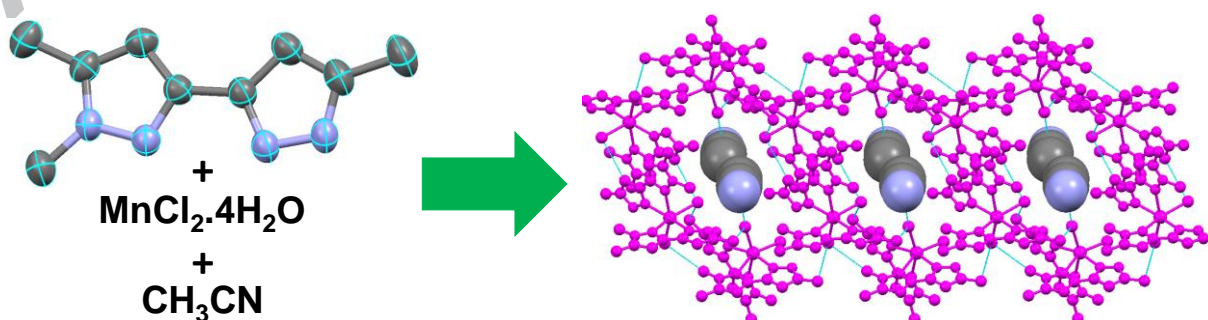
⁴ University of Bucharest, Faculty of Chemistry, Inorganic Chemistry Department, Dumbrova Rosie 23, Bucharest 020462, Romania.

⁵ Institute of Condensed Matter and Nanosciences, Université catholique de Louvain, Place L. Pasteur 1, 1348 Louvain-la-Neuve, Belgium.

Fax: +32-10472330 E-mail: yann.garcia@uclouvain.be ; radi_smaail@yahoo.fr

ABSTRACT:

The reaction of 1,5,5'-trimethyl-1H,1'H-3,3'-bipyrazole (**Hbpz**) with copper and manganese salts ($\text{Cu}(\text{BF}_4)_2 \cdot 6\text{H}_2\text{O}$, $\text{MnCl}_2 \cdot 4\text{H}_2\text{O}$ and $\text{Mn}(\text{NCS})_2$) leads to the formation of three mononuclear coordination complexes $[\text{Cu}(\text{Hbpz})_3](\text{BF}_4)_2$ (**1**), $[\text{Mn}(\text{Hbpz})_2\text{Cl}_2] \cdot \text{CH}_3\text{CN}$ (**2**) and $[\text{Mn}(\text{Hbpz})_2(\text{NCS})_2] \cdot \text{Et}_2\text{O}$ (**3**). These compounds have been characterized using single crystal X-ray diffraction and infrared spectroscopy. The single crystal structures of **1**, **2** and **3** are discussed in the context of the effect of hydrogen bonding functionalities and counter anions on the supramolecular structural diversities observed in these new coordination complexes.



Download English Version:

<https://daneshyari.com/en/article/7750266>

Download Persian Version:

<https://daneshyari.com/article/7750266>

[Daneshyari.com](https://daneshyari.com)