

Serbian Chemical Society
Serbian Young Chemists' Club



Eight Conference of the Young Chemists of Serbia

Book of Abstracts

Belgrade

29th OCTOBER 2022



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29th October 2022
University of Belgrade, Faculty of Chemistry

CIP – Kategorizacija u publikaciji
Narodna biblioteka Srbije, Beograd

8th Conference of Young Chemists of Serbia

Belgrade, 29th October 2022

Book of Abstracts

Published and organized by

Serbian Chemical Society and Serbian Young Chemists' Club

Karnegijeva 4/III, 11000 Belgrade, Serbia

Tel./fax: +381 11 3370 467; www.shd.org.rs; office@shd.org.rs

Publisher

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Circulation

20 copies

ISBN 978-86-7132-080-1

Printing

Development and Research Centre of Graphic Engineering

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The organizing committee is grateful for the donations of the selected sponsor participants

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Ministry of Education, Science and Technological Development, Republic of Serbia



Acknowledgement

Acknowledgement to the University of Belgrade, Faculty of Chemistry for the use of the space of the Faculty during the 8th Conference of Young Chemists' of Serbia.

Thanks to the Serbian chemical society for the supporting during organization of the Conference.

Deeply acknowledgments to the European Young Chemists' Network and European Chemical Society for the financial support of the best oral and poster presentations.

Thanks to the Analysis d.o.o. for support and the promoting material.

Synthesis and characterization of octahedral Ni(II) complex with condensation product of 2-acetylpyridine and Girard's P reagent

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The ligand (**[HL]Cl**) was synthesized by the reaction of 2-acetylpyridine and Girard's P reagent in molar ratio 1:1 in ethanol. In the reaction of ligand (**[HL]Cl**), nickel(II) tetrafluoroborate hexahydrate and sodium azide $[\text{Ni}(\text{HL})(\text{N}_3)_3]$ complex was obtained. The Ni(II) ion has a distorted octahedral coordination geometry. The tridentate ligand (**HL**) is coordinated to the nickel ion with an NNO set of donor atoms forming two five-membered chelate rings and the other three coordination sites are supplemented by azido ligands. The ligand (**HL**) and the $[\text{Ni}(\text{HL})(\text{N}_3)_3]$ complex were characterized by elemental analysis, IR and UV/Vis spectroscopy and structure of the complex was defined by X-ray analysis.

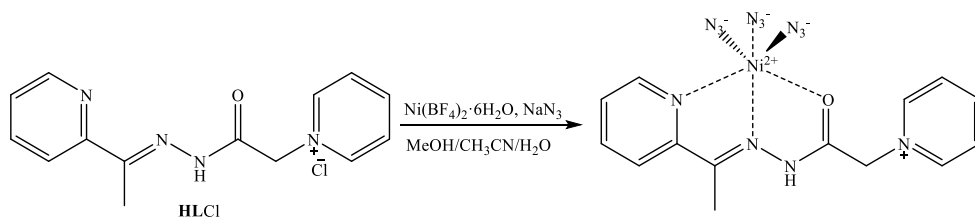


Figure 1. Synthesis of $[\text{NiHL}(\text{N}_3)_3]$ complex.

Acknowledgments

This research was supported by the Science Fund of the Republic of Serbia, #7750288, Tailoring Molecular Magnets and Catalysts Based on Transition Metal Complexes – TMMagCat.

Supported by



**Ministarstvo prosvete,
nauke i tehnološkog razvoja**
Ministry of Education, Science and
Technological Development



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