

Serbian Chemical Society
Serbian Young Chemists' Club



Eight Conference of the Young Chemists of Serbia

Book of Abstracts

Belgrade

29th OCTOBER 2022



8th Conference of Young Chemists of Serbia
Book of Abstracts

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

Dušan **SLADIĆ**, president of Serbian Chemical Society

Editors

Jelena **MILOVANOVIĆ**

Marko **RODIĆ**

Vuk **FILIPOVIĆ**

Života **SELAKOVIĆ**

Jelena **KESIĆ**

Mila **LAZOVIĆ**

Mihajlo **JAKANOVSKI**

Page Layout and Design

Vuk **FILIPOVIĆ**

Jelena **KESIĆ**

Mila **LAZOVIĆ**

Mihajlo **JAKANOVSKI**

Circulation

20 copies

ISBN 978-86-7132-080-1

Printing

Development and Research Centre of Graphic Engineering

Faculty of Technology and Metallurgy, Karnegijeva 4, Belgrade, Serbia

Scientific Committee

Dr. Jelena Milovanović – University of Belgrade, Institute of molecular genetics and genetic engineering

Dr. Marko Rodić – University of Novi Sad, Faculty of Sciences

Dr. Vuk Filipović – University of Belgrade, Institute of Chemistry, Technology and Metallurgy, National Institute of the Republic of Serbia

Dr. Života Selaković – University of Belgrade, Faculty of Chemistry

Organizing Committee

Jelena Kesić – University of Novi Sad, Faculty of Sciences

Mila Lazović – Innovative Centre of the Faculty of Chemistry, Belgrade

Mihajlo Jakanovski – Innovative Centre of the Faculty of Chemistry, Belgrade

European Young Chemists' Network

Dr. Maximillian Menche, chair of the EYCN

Sponsorship

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

European Young Chemists' Network



Analysis doo



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-acetylthiazole and thiosemicarbazide

Milica Savić¹, Mima Jevtović², Božidar Čobeljić³ and Katarina Anđelković³

¹ University of Belgrade, Institute of Chemistry, Technology and Metallurgy, National Institute of the Republic of Serbia, Belgrade, Serbia

² Innovative Centre of Faculty of Chemistry, Belgrade, Serbia

³ University of Belgrade, Faculty of Chemistry, Belgrade, Serbia

The ligand (**HL**) was synthesized by the reaction of 2-acetylthiazole and thiosemicarbazide in molar ratio 1:1 in water. In the reaction of ligand (**HL**) and nickel(II) tetrafluoroborate hexahydrate $[\text{Ni}(\text{HL})_2](\text{BF}_4)_2$ complex was obtained. The Ni(II) ion has octahedral coordination geometry. The tridentate ligand (**HL**) is coordinated to the nickel ion with a NNS set of donor atoms forming two five-membered chelate rings. The ligand (**HL**) and the $[\text{Ni}(\text{HL})_2](\text{BF}_4)_2$ complex were characterized by elemental analysis, IR and UV/Vis spectroscopy and the structure of the complex was defined by X-ray analysis.

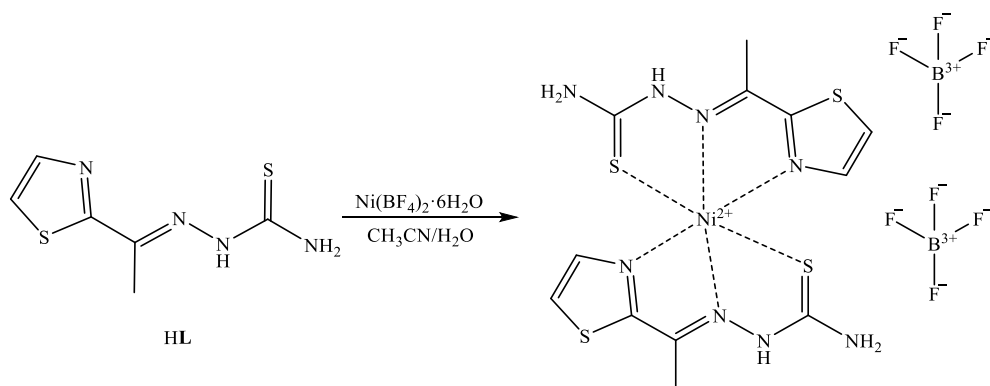


Figure 1. Synthesis of $[\text{Ni}(\text{HL})_2](\text{BF}_4)_2$ complex.

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

