

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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Scientific Program

Time	Program
9:00	<i>Registration of the participants</i> Mounting posters for the Poster Session 1 (ODD POSTER NUMBERS)
10:00	<i>Conference opening</i> Serbian Chemical Society – Dušan Sladić Scientific Committee – Vuk Filipović Serbian Young Chemists' Club presentation – Mihajlo Jakanovski
10:15	<i>Plenary Lecture (PP OP 01)</i> Ilija Cvijetić <i>University of Belgrade, Faculty of Chemistry</i>
11:00	<i>Oral presentations, Session 1</i> Zorica Novaković (CMN OP 01) <i>University of Novi Sad, Faculty of Sciences</i> Marija Kaluderović (OC OP 01) <i>University of Montenegro, Faculty of Metallurgy and Technology</i> Marija Milošević (MS OC 01) <i>University Of Belgrade, Faculty of Technology and Metallurgy</i>
11:35	<i>Coffee break</i>
11:50	<i>European Young Chemists' Network (EYCN) ZOOM presentation</i> Maximillian Menche – Chair of the EYCN “The European Young Chemists' Network and the Power of Networking”
12:05	<i>Invited Lecture (PPP OP 01)</i> Ivana Kuzminac <i>University of Novi Sad, Faculty of Sciences</i>
12:40	<i>Oral presentations, Session 2</i> Dušica Jovanović (TC OP 01) <i>University of Belgrade, Institute of Nuclear Science Vinča</i> <i>University of Niš, Faculty of Science and Mathematics</i> Milica Đukić (IAC OP 01) <i>University Of Belgrade, Faculty of Technology and Metallurgy</i> Jovana Jovanović (OC OP 02) <i>University of Montenegro, Faculty of Medicine</i> Slađana Đorđević (TC OP 02) <i>University of Kragujevac, Faculty of Science</i>
13:25	*GROUP PHOTO*
13:30	<i>Poster session 1 (ODD POSTER NUMBERS)</i>
14:15	<i>Lunch</i> Removing posters from Poster Session 1 Mounting posters for Poster Session 2 (EVEN POSTER NUMBERS)

15:00	<i>Invited Lecture (PPP OP 02)</i> Branko Kordić <i>University of Novi Sad, Faculty of Sciences</i>
15:35	<i>Oral presentations, Session 3</i>
	Dušan Ružić (MC OP 01) <i>University of Belgrade, Faculty of Pharmacy</i>
	Ana-Andrea Holik (CE OP 01) <i>University of Belgrade, Faculty of Chemistry</i>
	Aleksa Savić (BB OP 01) <i>University of Belgrade, Faculty of Chemistry</i>
16:10	<i>Poster session 2 (EVEN POSTER NUMBERS)</i>
17:00	<i>Break</i>
	<i>Closing ceremony</i>
	<ul style="list-style-type: none"> • <i>Best Oral Presentation Award</i>
17:15	Board: Vuk Filipović, Ivana Kuzminac, Ilija Cvijetić
	<ul style="list-style-type: none"> • <i>Best Poster Presentation Award</i>
	Board: Jelena Milovanović, Branko Kordić
17:45	<i>End of the Conference</i>

POSTER NUMBER is the last part of contribution code, e.g. XY PP **15**.

VENUE:

- Lectures and oral presentations will be taken place at the **large chemistry amphitheater (VHA)** on the ground floor.
- The Poster sessions will take place in the **hallway in front of the library** on the 1st floor.

Synthesis and characterization of new [Ru(η^6 -*p*-cymene)Cl₂(L)] complex

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In this report, we have synthesized a complex of Ru(II)-*p*-cymene and 3-amino-2-cyano-*N*-phenyl-3-(4-phenyl-1-piperazinyl)-2-propenethioamide ligand. The new complex was synthesized according to the method described elsewhere with slight modifications.¹ To a solution of [Ru-(η^6 -*p*-cymene)Cl₂]₂ (0.0998 g, 0.1630 mmol) in methanol (15 mL) and 3-amino-2-cyano-*N*-phenyl-3-(4-phenyl-1-piperazinyl)-2-propenethioamide (L) (0.36348 g, 1 mmol) was added at room temperature (Fig. 1). The resulting mixture was heated and refluxed for 3 h. The solution was evaporated on a vacuum evaporator to a volume of 3 to 4 ml and then left at room temperature to slowly evaporate further. An orange powdery precipitate was separated. The precipitate was filtered off under a vacuum and washed with diethyl ether. The characterization of the synthesized complex [Ru(η^6 -*p*-cymene)Cl₂(L)] was performed using IR and NMR as well as by determining the melting point. The interactions of the new complex with CT-DNA and HSA molecules were examined, as well as its cytotoxic activity on certain cell lines.

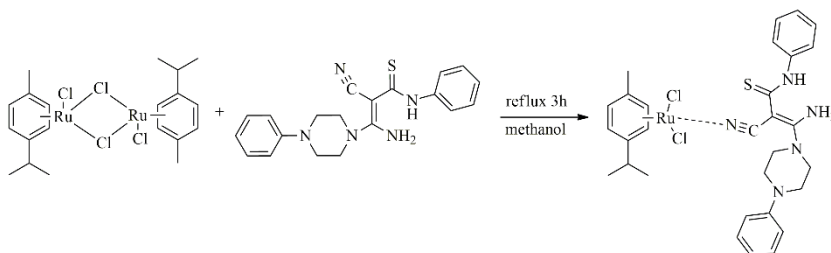


Figure 1. Synthetic route of new Ru(II) complex.

References

1. M. B. Đukić, M. S. Jeremić, I. P. Filipović, O. R. Klisurić, V. V. Kojić, D. S. Jakimov, R. M. Jelić, V. Onnise, Z. D. Matović, *J. I. Biochem.* **2022**, 213, 111256.

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