Dr. Oleg PALAMARCIUC

Institutional addresses:	Moldova State University, 60 A. Mateevici, MD2009 Chisinau, Republic of Moldova
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Birth Place:	Briceni, Republic of Moldova
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Education

12.2022	Invited researcher, Bordeaux University – ICMCB, France, Supervisor: dr. Hab. Chastanet Guillaume
07.2021 – 09.2021	Senior Postdoc Fellowship
02.2022 – 06.2022	Institute of Inorganic Chemistry, University of Vienna, Austria,
09.2023 – 12.2023	Supervisor: Prof. Vladimir Arion.
02.2018	Invited researcher CNRS, Institute of Coordination Chemistry, Toulouse, Supervisor: Prof. Azzedine Bousseksou.
11.2017	Invited researcher CNRS, Centre de Recherche Paul Pascal, Bordeaux, Supervisor: Prof. Rodolphe Clérac
10.2013 – 07.2014 (10 months)	Postdoc Alexandru Ioan Cuza University, Faculty of Chemistry, Supervisor: Prof. Aurel Pui
05.2013 – 08.2013	Invited researcher Bayreuth University, Inorganic Chemistry II, Supervisor: Prof. Birgit Weber, Germany
05.2012 – 04.2013 (12 months)	Postdoc CNRS, Institut de Physique et Chimie des Matériaux de Strasbourg (IPCMS) Research team "Hybrid organic-inorganic materials", Supervisor: Dr. Guillaume Rogez 23 rue du Loess, 67034 Strasbourg, France.
11.2008 – 04.2012	PhD Moldova State University & Université Bordeaux-1, Title: *"Synthesis, structure and magnetical properties of mono - and poly- nuclear coordination compounds with ligands derived from 2-formylpyridine and salicylaldehyde"* Supervisors: Prof. Revenco Mihail (Moldova State Univesity), HDr. Rodolphe Clérac (Centre de Recherche Paul Pascal)
09.2007 – 07.2008	Master of Chemistry Moldova State University, Faculty of Chemistry and Chemical Technology, Department of Analytical and Organic Chemistry Title: *"Coordination compounds of Fe(III) and Cu(II) with some derivatives of Girard's T reagent "*
09.2002 – 07.2007	B. S. in Chemistry Moldova State University, Faculty of Chemistry and Chemical Technology, Department of Analytical and Organic Chemistry Title: *"Synthesis and analytical properties of some derivatives of Girard's T reagent"*

Summer school

2009 – „Analyse Structurale par Difraction des Rayons X sur Monocristal et Application a la Cristallographie sous Contraintes".

Grants & Awards

2023	H2020 research grant „Chiroptical, optical and magnetic probes for protein sensing based on cage metal complexes (CLATHROPROBES)"
2020	Yurii Simonov Memorial Prize
2017 – 2022	H2020 research grant „Multifunctional Spin Crossover Materials"
2008 – 2011	Mobility grant in the frame of Erasmus Mundus External Cooperation Window Lot 6 (EMECW-Lot6), Bordeaux I University, France.
2010	Excellence grant for PhD-student of the Government of Republic of Moldova.
2011	Municipal Prize for Youth in Science and Engineering. Chișinău, Republic of Moldova.

2014	Prize for Youth in Science and Engineering, Ministry of Youth and Sports of the Republic of Moldova

Professional experience

2020 – present	Associate Researcher, Moldova State University, Physics of semiconductors and devices laboratory.
2014 – 2019	Senior Researcher, Moldova State University, Faculty of Chemistry and Chemical Technology.
2005 – 2013	Chemistry researcher, Moldova State University, Faculty of Chemistry and Chemical Technology, Laboratory of Analytical and General Chemistry.

Skills

- Molecular chemistry:
  - Fine organic synthesis
  - Inorganic synthesis
  - Coordination chemistry (template & direct synthesis,)
- Synthesis in anaerobic conditions: Schlenk line, glove box
- FT – IR, UV-Vis, ISP spectroscopies.
- Single crystal X-ray Nonius *k*-CCD (collecting and solving crystal structures)
- Magnetic measurements (ac and dc susceptibility)
- Optical measurements (absorbance and reflectivity)
- Management of the cryogenic fluids (Helium, Nitrogen) for physical measurements
- Management of the chemistry lab

Areas of interest

- Coordination chemistry: Single Molecule Magnets, Spin crossover materials, Electron transfer complexes, Photomagnetic systems, biological systems, catalytic systems.
- Molecular magnetism.
- Biologic active materials: antibacterial, anticancer or antioxidant.
- Food industry
- Expertise on research project
- Expertise on industrial way (like: food industry, infrastructure equipment, local food policies)

Languages

English	medium level
French	fluent
Russian	fluent
Romanian	native language

Collaboration

- France: Bordeaux University, Strasbourg University, Toulouse University.
- Austria: University of Vienna.
- Germany: Bayreuth University and Mainz University.
- Romania: Alexandru Ioan Cuza University of Iaşi, Stefan cel Mare University of Suceava, Institute of Macromolecular Chemistry Petru Poni, Iaşi. Babes-Bolyai University, Cluj-Napoca.
- USA: Florida State University.

Publications

1. Vladimir B Arion, **Oleg Palamarciuc**, Sergiu Shova, Ghenadie Novitchi, Peter Rapta, Iron(III) complexes with ditopic macrocycles bearing crown-ether and bis(salicylidene) isothiosemicarbazide moieties, *J. Serb. Chem. Soc.*, Sep. 2023, https://doi.org/10.2298/JSC230607065A .
2. Angela Sîrbu, **Oleg Palamarciuc**, Elena Stratulat, Coordination of the 5-sulfonate salicylaldehyde thiosemicarbazone sodium salt with nichel(II) ions in aqueous solutions. În: *Studia Universitatis Moldaviae (Seria Ştiinţe Reale şi ale Naturii)*. 2022, nr. 6(156), pp. 138-143. ISSN 1814-3237. DOI: 10.5281/zenodo.7445695.
3. Ionela Rusu, Ioan Cosmin Manolache-Rusu, Andrei Diaconu, **Oleg Palamarciuc**, Il'ya A. Gural'skiy, Gabor Molnar, Aurelian Rotaru, Pressure Gradient Effect on Spin-Crossover Materials: Experiment vs. Theory, Journal of Applied Physics, 129, 064501 (2021).

4. Angela Sirbu, **Oleg Palamarciuc**, Study on the formation in aqueous solution of coordinative compound of nickel(II) with 5-sulfosalicylaldehyde 4-ethylthiosemicarbazone, Studias Universitate Moldaviae, 2020, Nr 6 (136) p. 144-149.
5. Miljan N. M. Milunovi, **Oleg Palamarciuc**, Angela Sirbu, Sergiu Shova, Dan Dumitrescu, Dana Dvoranová, Peter Rapta, Tatsiana V. Petrasheuskaya, Eva A. Enyedy, Gabriella Spengler, Marija Ilic, Harald H. Sitte, Gert Lubec and Vladimir B. Arion, Insight into the Anticancer Activity of Copper(II)5-Methylenetrimethylammonium-Thiosemicarbazonates and Their Interaction with Organic Cation Transporters, Biomolecules **2020**,10, 1213.
6. R. Danac, A. Pui, I. Corja, R. Amarandi, C. Ciobanu, M. Apostu, **O. Palamarciuc**, New M(II) (M¼Mn, Co, Ni, Cu, Zn, Pd) coordinative compounds with 2-formylpyridine S-methyl-isothiosemicarbazide, Journal of Molecular Structure 1207 (**2020**) 127747.
7. Alin-Ciprian Bas, Xavier Thompson, Lionel Salmon, Christophe Thibault, Gábor Molnár, **Oleg Palamarciuc**, Lucie Routaboul and Azzedine Bousseksou, Bilayer Thin Films That Combine Luminescent and Spin Crossover Properties for an Efficient and Reversible Fluorescence Switching, Magnetochemistry 2019, 5(2), 28.
8. **Oleg Palamarciuc**, Miljan N. M. Milunovic, Angela Sîrbu, Elena Stratulat, Aurel Pui, et al., The cytotoxic/cytostatic potential of methyl imidazole-derived thiosemicarbazones and their copper(II) complexes with dichloroacetate as co-ligand, accepted manuscript, New J. Chem., 2019, 43, 1340-1357.
9. Hricovíni M., Mazúr M., Sîrbu A., **Palamarciuc O**., Arion V.B., Brezová V., Copper(II) Thiosemicarbazone Complexes and Their Proligands upon UVA Irradiation: An EPR and Spectrophotometric Steady-State Study, Molecules 2018, *23*(4), p. 721.
10. A. Sîrbu, **O**. **Palamarciuc**, et all, Copper(II) thiosemicarbazone complexes induce marked ROS accumulation and promote nrf2-mediated antioxidant response in highly resistant breast cancer cells, Dalton Trans., 2017, 46, 3833.
11. E. Stratulat, S. Șova, V. Prisacari, A. Dizdari, I. Corja, A. Pui, **O. Palamarciuc**, Sinteza, structura și proprietățile compușilor coordinativi ai cuprului(II) cu derivații tiosemicarbazonei 8-formilchinolinei, Studias Universitate Moldaviae, 2017, 6(106), p.107-115.
12. T. Palamarciuc, A. Sîrbu, **O**. **Palamarciuc**, The synthesis, structure and properties of the coordinating compounds of iron with 4-phenyl thiosemicarbazade and 4-phenyl-s-methylthiosemicarbazie 2-acetylpyridine, *Studias Universitates Moldaviae*, nr. 6(96), p. 178-184.
13. A. Sîrbu, M. Secu, P. Bouroş, **O**. **Palamarciuc**, Synthesis and structure of coordination compounds of copper(II) with 5-(methylenetrimetylamonium)salicylaldehyde thiosemicarbazone, *Studias Universitates Moldaviae*, 2016, nr. 6(96), p. 214-224.
14. Revenco M., Secu M., **Palamarciuc** O., et all, Slow relaxation of magnetization in a family of linear MnIIIMIIIMnIII (M = Fe, Ru, Os) Compounds, IFMBE Proceedings 55,V. Sontea and I. Tiginyanu (eds.), 3rd International Conference on Nanotechnologies and Biomedical Engineering, Springer Science-Business Media Singapore, 2016, pp. 131-133.
15. **Palamarciuc** O.; Palamarciuc T.; Corja I.; Synthesis, structure and magnetic properties of coordinating compounds of iron with Girard T reactive derivatives, *Studias Universitates Moldaviae*, 2015, nr.1(81), p. 216-223. ISSN 1857-498X.
16. Secu M.; **Palamarciuc** O.; Dechambenoit P.; Clérac, R.; Synthesis and structural characterization of the N^{1},N^{4}-bis (salicylidene)-S-mehyl-isothiosemicarbazide trinuclear compound, *Studia Universitatis Moldaviae*, 2014, nr. 6 (76) p.130-136. ISSN 1857-498X.
17. M. Revenco, P. Bulmaga, E. Jora, **O. Palamarciuc**, Victor Kravtsov and Paulina Bourosh, *"Specificity of salicylaldehyde S-alkylisothiosemicarbazones coordination in palladium(II) complexes"*, ***Polyhedron, 2014,*** Vol. 80, p. 250 - 255.
18. **O. Palamarciuc**, E. Delahaye, P. Rabu and G. Rogez, *"Microwave-assisted post-synthesis modification of layered simple hydroxides"*, ***New Journal of Chemistry***, **2014**, 38, 2016-2023.
19. Mihail D. Revenco, **Oleg V. Palamarciuc**, Paulina N. Bourosh, Janusz Lipkowski, M.Gdanec, Yurii A. Simonov, Rodolphe Clérac, "*New template reactions of salicylaldehyde S-methylisothiosemicarbazone with 2-formylpyridine promoted by Ni(II) or Cu(II) metal ions",* ***Inorganica Chimica Acta*** 368, **2011**, 157–164.
20. **Oleg V. Palamarciuc**, Paulina N. Bourosh, Mihail D. Revenco, Janusz Lipkowski, Yurii A. Simonov, Rodolphe Clérac, "*Synthesis, crystal structure and characterizations of iron(III) and copper(II) complexes with the hydrazone ligand obtained from 2-formyl-pyridine and Girard's T reagent"*, ***Inorganica Chimica Acta*** 363, ***2010***, 2561–2566.
21. M. Revenco, P.Bourosh, **O. Palamarciuc**,Y.Lipkovsky, Yu. Simonov, "*Synthesis and Structure of a New Ligand Derived from Girard T Reagent and its Iron(III) Complexes"*, ***Russian Journal of Inorganic Chemistry,*** **2009**, vol. 54, issue10, p.1581-1589.

22. **O. Palamarciuc,** M. Revenco. "*Analytical agents and coordination compounds based on Girard's T reagent*". ***Scientific journal of the Moldova State University***, vol. 7, issue 3, **2007**, p.54-57.

Patents

1. Stratulat, E., Corja, I., **Palamarciuc, O.** și alții, acetato-(8-formilchinolintiosemicarbazono)cupru(II) - compus ccordinativ nou cu activitate antimicrobiană, brevet Nr. MD4383 anul obținerii 2016.
2. Dîru, M., Revenco, M., **Palamarciuc, O.**, Metodă de determinare a conținutului de potasiu în preparate farmaceutice, brevet de invenție MD4488 (13) B1, anul obținerii 2017.
3. Dîru, M., Rusu, A., Popovici, E., **Palamarciuc, O.**, Membrană a electrodului Cu^{2+} - selectiv, brevet de invenție MD4523 (13) B1, anul obținerii 2017**.**