



Tetyana Malakhovska

📍 **Home** : F. Rakoczi Str. 16, 15 , 88000, Uzhhorod, Ukraine

📍 **Work** : Pidhirna Str.46, 88000, Uzhhorod, Ukraine

✉ **Email**: tetyana.malakhovska@uzhnu.edu.ua

Gender: Female **Date of birth**: 13/08/1983 **Nationality**: Ukrainian

WORK EXPERIENCE

[2011 – Current]

Senior researcher

Uzhhorod National University

City: Uzhhorod

Country: Ukraine

Performing research in experimental, solid state chemistry and material science

[2010 – 2011]

Researcher

Uzhhorod National University

City: Uzhhorod

Country: Ukraine

Performing research in experimental, solid state chemistry and material science.

[2008 – 2010]

Research Assistant

Uzhhorod National University

City: Uzhhorod

Country: Ukraine

Performing research in experimental, solid state chemistry and material science.

[2015 – 2020]

Chairman of the Council of Young Scientists of Uzhhorod National University

Uzhhorod National University

City: Uzhhorod

Country: Ukraine

Coordination the activities of young scientists at the university, and organization and conduct of research work of young scientists

EDUCATION AND TRAINING

Candidate of chemical sciences (PhD) (02.00.01. Inorganic chemistry)

Uzhhorod National University <https://www.uzhnu.edu.ua/en/>

Address: Pidhirna Str.46, 88000, Uzhhorod, Ukraine

Performing research in experimental, solid state chemistry and material science. Thesis title: Systems $\text{Ti-Sn(Pb)-S(Se, Te)}$: phases equilibria, single crystals growth of the ternary compounds and their properties.

DK №059708 Surname: Malakhovska-Rosokha Tetyana Oleksandrivna

[2005 – 2008]

postgraduate studies

Uzhhorod National University <https://www.uzhnu.edu.ua/en/>

Address: Pidhirna Str.46, 88000, Uzhhorod, Ukraine

Performing research in experimental, solid state chemistry and material science

[2004 – 2005]

Master of Science in Chemistry

Uzhhorod National University <https://www.uzhnu.edu.ua/en/>

Address: Pidhirna Str.46, 88000, Uzhhorod, Ukraine

Guided scientific research in the Inorganic Chemistry

[2000 – 2004]

Bsc degree in Chemistry

Uzhhorod National University <https://www.uzhnu.edu.ua/en/>

Address: Pidhirna Str.46, 88000, Uzhhorod, Ukraine

Guided scientific research in the Inorganic Chemistry

LANGUAGE SKILLS

Mother tongue(s): Ukrainian

Other language(s):

English

LISTENING B1 READING B1 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Slovak

LISTENING A2 READING A2 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

DIGITAL SKILLS

Origin 2015 | Zoom | Google Docs | AMSCOPE | Findit | Social Media | Internet user
| Corel DRAW | Google Drive | Microsoft Office

Social skills and competences

Good ability to research team work

Organisational skills and competences

Experience in project management

Technical skills and competences

Experience in written and oral presentation of scientific results

Driving licence

Driver License (Category B, C1, C)

ADDITIONAL INFORMATION

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h-index=4, 19 papers in international journals, indexed in Scopus database, 58 citations;
the author of 139 scientific publications, including 8 publications of Q1 and Q2 levels, 18
articles indexed in WoS database and 19 articles indexed in Scopus database, is the
author of 1 monograph and 10 patents of Ukraine, more than 59 oral or poster
presentations at conferences and 2 textbooks.

PUBLICATIONS

List of selected publications Q1 and Q2 level (Scimago).

List of selected publications Q1 and Q2 level (Scimago).

1. A.I. Pogodin, M.M. Pop, I.O. Shender, I.P. Studenyak, M.J. Filep, T.O. Malakhovska, O.P. Kokhan, T.Y. Babuka, I.P. Stercho, V.M. Rubish, P. Kopcansky. Effect of structural site disorder on the optical properties of $\text{Ag}_{6+x}(\text{P}_{1-x}\text{Ge}_x)\text{S}_5\text{I}$ solid solutions. *Journal of Materials Science: Materials in Electronics*, (2022), 57(12), 6706–6722. <https://doi.org/10.1007/s10854-022-08974-4>
2. A.I. Pogodin, M.J. Filep, T.O. Malakhovska, V.V. Vakulchak, V. Komanicky, V. Izai, Y.I. Studenyak, Y.P. Zhukova, I.O. Shender, V.S. Bilanych, O.P. Kokhan, P. Kúš. Microstructural, mechanical and electrical properties of superionic $\text{Ag}_{6+x}(\text{P}_{1-x}\text{Ge}_x)\text{S}_5\text{I}$ ceramic materials // *Journal of Physics and Chemistry of Solids*, (2022), 171, 111042. <https://doi.org/10.1016/j.jpcs.2022.111042>
3. A.I. Pogodin, M.M. Pop, I.A. Shender, I.P. Studenyak, M.J. Filep, T.O. Malakhovska, O.P. Kokhan, T.Y. Babuka, L.M. Suslikov, V.M. Rubish Influence of order–disorder effects on the optical parameters of $\text{Ag}_7(\text{Si}_{1-x}\text{Ge}_x)\text{S}_5\text{I}$ -mixed crystals. *Journal of Materials Science: Materials in Electronics* (2022), 33(18), 15054 – 15066. DOI 10.1007/s10854-022-08422-3
4. A.I. Pogodin, I.P. Studenyak, I.A. Shender, M.M. Pop, M.J. Filep, T.O. Malakhovska, O.P. Kokhan, P. Kopčanský, T.Y. Babuka, Crystal structure, ion transport and optical properties of new high-conductivity $\text{Ag}_7(\text{Si}_{1-x}\text{Ge}_x)\text{S}_5\text{I}$ solid solutions. *Journal of Materials Science* (2022), 57:6706–6722 DOI: 10.1007/s10853-022-07059-1.
5. A.I. Pogodin, M.M. Luchynets, M.Y. Filep, A.A. Kohutych, T.O. Malakhovska, O.P. Kokhan, M.Yu Sabov, I.P. Studenyak, P.Kúš. Influence of heterovalent substitution on structural, electrical and thermoelectric properties of $\text{Cu}_{7-x}\text{PS}_{6-x}\text{Br}_x$ solid solutions // *Journal of Physics and Chemistry of Solids*, (2021), 150, 109855. <https://doi.org/10.1016/j.jpcs.2020.109855>
6. A.I. Pogodin, M.J. Filep, T.O. Malakhovska, M.Yu. Sabov, V.I. Sidey, O.P. Kokhan, I.P. Studenyak. The copper argyrodites $\text{Cu}_{7-n}\text{PS}_{6-n}\text{Br}_n$: Crystal growth, structures and ionic conductivity. *Solid State Ionics*, (2019), 341, 115023. <https://doi.org/10.1016/j.ssi.2019.115023>
7. M. Piasecki, M.G. Brik, I.E. Barchiy, K. Ozga, I.V. Kityk, A.M. El-Naggar, A.A. Albassam, T.A. Malakhovskaya, G. Lakshminarayana. Band structure, electronic and optical features of Ti_4SnX_3 (X=S, Te) ternary compounds for optoelectronic applications. *Journal of Alloys and Compounds*, (2017), 710, C. 600-607. <https://doi.org/10.1016/j.jallcom.2017.03.280>
8. T.A. Malakhovskaya-Rosokha, M.J. Filep, M.Yu. Sabov, I.E. Barchiy, A.O. Fedorchuk, K.J. Plucinski. IR operation by third harmonic generation of Ti_4PbTe_3 and Ti_4SnS_3 single crystals. *J. Mater. Sci.-Mater. Electron.* (2013), 24, 2410-2413. <https://doi.org/10.1007/s10854-013-1110-9>

GRANTS

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“Effectively thermoelectric energy converters based on compounds in the $\text{Ti}(\text{Pb})\text{–Bi}(\text{Sb})\text{–Se}(\text{Te})$ systems” (2007-2009, state registration number 0107U001173), Research Assistant, Ukraine;

“Midtemperature thermoelectric energy converter based on metals of III-IV groups of periodic table” (2009-2010, state registration number 0109U000884), Research Assistant, Ukraine;

“Complex functional materials in the $\text{A}^{\text{I(III)}}\text{–B}^{\text{III}}\text{–V}\text{–C}^{\text{VI(VII)}}$ systems: physicochemical bases and properties” (2009-2011, state registration number 0109U000874), Research, Ukraine;

“New construction materials for thermoelectric energy converters based on metals chalcogenides of III-IV group of the periodic table” (2011-2012 state registration number 0111U001650), Senior researcher, Ukraine;

«New ferroic and chalcogenide crystals for highly efficient acousto-optical control of optical radiation» / «Growth technology, obtaining and properties of single crystals Ti_3BX_4

Tl₃BX₃ i TlBX₂ (B=As, P, In, X=S, Se)» (2014-2016 state registration number 0114U004324/0114U005093), Senior researcher, Ukraine;

«New functional materials in the A^{I,III}-B^{IV,V}-Se (A^{I,III}-Tl,Cu,Ag,In, B^{IV,V}-Sn,Pb,Sb,Bi) systems: phase diagram, technology, properties» (2017-2019 state registration number 0117U000380), Senior researcher, Ukraine;

«Effectively ecologically safe thermoelectric materials in multicomponent selenide systems» (2020-2022 state registration number 0120U102245), Senior researcher, Ukraine;

"Hybrid organic-inorganic perovskites based on hexahalogenated alumina - new materials for optoelectronics" (2023-2025, state, Senior researcher, Ukraine;

«Thermoelectric materials based on modified thallium(I)- and copper (I)-containing chalcogenides» (2017-2020 state registration number 0117U007146), project manager, Ukraine.

«Applying ecological friendly new gold(silver) inc nanocomposite for alternative energy sources» (2022) National Scholarship Programme of the Slovak Republic [Grant ID 39133], Slovak

AWARDS

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Laureate of the Prize of the President of Ukraine for young scientists (Decree of the President of Ukraine of 17.11.2016 № 509/2016),

"Scholar of the Cabinet of Ministers of Ukraine for young scientists" (2014-2016).

Uzhhorod, 27/04/2023

Tetyana
Malakhovska