

Olena H. Shvets,

researcher, Department of Organic and Bioorganic Chemistry, Institute for Functional Materials Chemistry, SSI «Institute for Single Crystals» of NAS of Ukraine

Born

January 25, 1991, Krasnokutsk, Kharkiv region.

Education

2009–2014 – Student of V. N. Karazin Kharkiv National University,

2014–2018 – post-graduate student (V. N. Karazin Kharkiv National University),

2021 – Ph. D. in organic chemistry (scientific adviser – Doc. M. O. Kolosov).

Positions

since 2024 – Researcher, Department of Organic and Bioorganic Chemistry, Institute for Functional Materials, State Scientific Institution «Institute for Single Crystals» of National Academy of Sciences of Ukraine.

2014–2015, since 2019 – Engineer, Department of Organic Chemistry of V. N. Karazin Kharkiv National University.

2015, 2018, 2021 – Researcher of Chemistry Faculty of V. N. Karazin Kharkiv National University.

2021 – Senior Lecturer of the Department of Organic Chemistry of V. N. Karazin Kharkiv National University.

2018–2020 – Secretary of University admission of Chemistry Faculty of V. N. Karazin Kharkiv National University.

Affiliation and contacts

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Research interests

Organic synthesis, gas chromatography – mass spectrometry (GC–MS), liquid chromatography – mass spectrometry (LC–MS), target functionalization, azolo[1,5-*a*]pyrimidines, building blocks and small organic molecules, Biginelli-type reactions.

Publications in English (h-index 6 by SCOPUS)

1. Peculiarities of the 4,5-dinitrofluorescein esters synthesis: formation of reduced species. S. V. Shekhovtsov, E. H. Shvets, M. A. Kolosov, I. V. Omelchenko, A. S. Batrak, N. O. Mchedlov-Petrosyan. **Color. Technol.**, 2022, 138, 2, 192–200. DOI: 10.1111/cote.12582.
2. Effective microwave-assisted approach to 1,2,3-triazolobenzo-diazepinones via tandem Ugi reaction/catalyst-free intramolecular azide–alkyne cycloaddition. M. O. Mazur, O. S. Zhelavskiy, E. M. Zviagin, S. V. Shishkina, V. I. Musatov, M. A. Kolosov, E. H. Shvets, A. Yu. Andryushchenko, V. A. Chebanov. **Beilstein J. Org. Chem.**, 2021, 17, 678–687. DOI: 10.3762/bjoc.17.57.



3. Shvets E. H., Pidvorotnia A. V., Kulyk O. G., Mazepa A. V., Kolosov M. A. A straightforward synthesis of 5-sulfonamidomethyl substituted 4,7-dihydroazolo-[1,5-*a*]pyrimidines. **Synth. Commun.**, 2021, 51, 114–122. DOI: 10.1080/00397911.2020.1821224.
4. Synthesis, study of the structure, and modification of the products of the reaction of 4-aryl-4-oxobut-2-enoic acids with thiourea. N. N. Kolos, N. V. Nazarenko, S. V. Shishkina, A. O. Doroshenko, E. G. Shvets, M. A. Kolosov, F. G. Yaremenko. **Chem. Heterocycl. Compds.**, 2020, 56, 9, 1202–1209. DOI: 10.1007/s10593-020-02798-y.
5. N-ethyl substituted 2-benzimidazolyl-3-hydroxychromone: Atypical to highly fluorescent dyes of flavonol series excited state intramolecular proton transfer to nitrogen. A. Yu. Chumak, Y. O. Denysieva, O. O. Kolomoitsev, V. M. Kotlyar, E. H. Shvets, A. O. Doroshenko. **J. Lumin.**, 2020, 223, 117206. DOI: 10.1016/j.jlumin.2020.117206.
6. A synthesis of 6-functionalized 7-unsubstituted- and 7-methyl[1,2,4]azolo[1,5-*a*]pyrimidine derivatives. M. A. Kolosov, E. H. Shvets, D. A. Manuenkov, O. G. Kulyk, A. V. Mazepa, V. D. Orlov. **Syn. commun.**, 2019, 49(4), 611–615. DOI: 10.1080/00397911.2019.1566476.
7. A synthesis of 6-functionalized 4,7-dihydro[1,2,4]triazolo[1,5-*a*]pyrimidines. M. A. Kolosov, E. H. Shvets, D. A. Manuenkov, S. A. Vlasenko, I. V. Omelchenko, S. V. Shishkina, V. D. Orlov. **Tetrahedron Lett.**, 2017, 58, 1207–1210. DOI: 10.1016/j.tetlet.2017.02.035.
8. Alkylation of 6-C(O)R-7-aryl-5-methyl-4,7-dihydro[1,2,4]triazolo[1,5-*a*]pyrimidines. M. A. Kolosov, E. H. Shvets, O. G. Kulyk, V. D. Orlov. **Chem. Heterocycl. Compds.**, 2015, 51, 11–12, 1052–1056. DOI: 10.1007/s10593-016-1818-6.
9. Synthesis of 5-cinnamoyl-3,4-dihydropyrimidine-2(1*H*)-ones. M. A. Kolosov, O. G. Kulyk, E. G. Shvets, V. D. Orlov. **Syn. commun.**, 2014, 44(11), 1649–1657. DOI: 10.1080/00397911.2013.869341.

Language

Ukrainian (native),

Russian (native),

English (pre-intermediate).

Family status

Married, has child.

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