

CURRICULUM VITAE

Eugene S. Gladkov

Date and place of birth	18.04.1976, Kharkiv, Ukraine
Contact information	<i>Nauky ave. 60, Kharkiv, 61072, Ukraine Department of Organic and Bioorganic Chemistry Institute of Functional Materials Chemistry SSI "Institute for Single Crystals" of NAS of Ukraine</i> <i>4 Svobody Sq., Kharkiv, 61022. Department of physical organic chemistry, Research Institute of Chemistry at V.N.Karazin Kharkiv National University</i> <i>+38 067 7597162 eugenegladkov@gmail.com</i>
Personal profiles in scientometric databases	<i>ORCID https://orcid.org/0000-0003-3271-5062, Scopus https://www.scopus.com/authid/detail.uri?authorId=6701336723 Google Scholar https://scholar.google.com.ua/citations?user=PjurkpQAAAAJ&hl=uk</i>
h-index (Scopus):	9
Education	<i>2024: Senior Staff Scientist, V.N.Karazin Kharkiv National University 1998-2002: Ph.D. student, department of organic Chemistry, V.N.Karazin Kharkiv National University 1994-1998: M.S. degree in Chemistry, Kharkiv State University</i>
Degree	<i>Candidate of chemical sciences, organic chemistry (Ph.D.), V.N.Karazin Kharkiv National University, 2002</i>
Academic status	<i>Senior Staff Scientist, 2024</i>
Professional work experience	<i>Since 2018 – to present, Senior Researcher, department of physical organic chemistry, Research Institute of Chemistry at V.N.Karazin Kharkiv National University 2003 – to present, Researcher, Department of Organic and</i>

	<i>Bioorganic Chemistry, ISC "Institute of Single Crystals" of the National Academy of Sciences of Ukraine, Kharkiv</i> <i>2013 - TBD Biodiscovery, Tartu, Estonia</i> <i>10/09 – 12/09 - Guest Researcher, Short studying at Konstanz University, Prof. Ulrich Groth's scientific group, Konstanz, Germany</i> <i>09/05 - 03/06 - Guest Researcher, Christian Doppler Laboratory for Microwave Chemistry and Institute of Chemistry, Karl-Franzens-University Graz, Austria</i> <i>05/04 – 07/04 - Guest Researcher, Short studying at Johannes Gutenberg Universitat Mainz, Institute of Organic Chemistry, Mainz, Germany</i> <i>2002-2003 Junior researcher; Institute for Single Crystals, Kharkiv, Ukraine</i>
Awards, grants and scholarships	<i>1994: Personal scholarship of Kharkiv National University</i> <i>2004: DAAD scholarship for short studying Johannes Gutenberg University Mainz, Institute of Organic Chemistry, Germany</i> <i>2005: OeAD scholarship for postdoctoral study at Karl-Franzens University of Graz, Austria</i> <i>2009: DAAD scholarship for short studying at Konstanz University, Germany</i>
Research interests	<i>Partially hydrogenated nitrogen- and sulfur-containing heterocycles, fluorine chemistry, physiologically active compounds, microwave- and ultrasound-assisted methods in organic synthesis, spectral methods in organic chemistry, optical and fluorescence spectroscopy, fluorescent markers, probes and sensors</i>
Main research activity	
Participation in collective research projects <i>(in the last 10 years)</i>	<i>- Investigator, "Functionalized fluorescent organogels for the detection, accumulation and monitoring of radionuclides and ecotoxic metals", National Research Fund of Ukraine No. 2023.03/0083, 2024-2026.</i> <i>- Investigator, "Indicators based on chromone derivatives for fluorescent determination of β-glucosidases activity", All-Ukrainian project, National Research Fund of Ukraine No. 0120U105227, 2020-2023.</i> <i>- Investigator, "Nanoparticles of precious metals functionalized with stimulus-sensitive ligands and fluorescent dyes for the needs of targeted delivery and monitoring", all-Ukrainian, Ministry of Education and Culture of Ukraine, state registration number 0122U001388, 2022-2024.</i> <i>- Investigator, "Fluorescent heterocyclic ligands for binding, analysis and accumulation of radioactive isotopes of divalent metal ions", all-Ukrainian, Ministry of Education and Science of Ukraine. State registration number 0122U001387, 2022-2024.</i>
Main scientific achievements	

Published scientific works

1. Onipko O.V., Stoianova V., Buravov O.V., Chebanov V.A., Kyrychenko A., Gladkov E.S. Synthesis of Novel Derivatives of 4,6-Diarylpyrimidines and Dihydro-Pyrimidin-4-one and In Silico Screening of Their Anticancer Activity // *Curr. Org. Synth.* - 2025. - Vol. 22. - 4. - P. 556 – 567. DOI: 10.2174/0115701794356958241024082646 (Q3)
2. Shypov R.G., Buravov O.V., Gladkov E.S., Chepeleva L.V., Kyrychenko A.V. Synthesis, spectral-fluorescence properties and td-dft calculations of 4-cyanotryptophan and its derivatives // *Functional Materials.* – 2024. - Vol. 31. - №3. - P. 405 - 412. DOI: 10.15407/fm31.03.405 (Q4).
3. A.P. Krasnopyorova; R.Y. Iliashenko; G.D. Yukhno; N.V. Efimova; E.S. Gladkov; L.V. Chepeleva; A.D. Roshal, Disulfo-NOPON—A new chelator for complexometric analysis and liquid-liquid extraction of stable isotopes and radionuclides of metal ions // *Journal of Molecular Structure*, - 2024, - Vol. 1302, - P. 137459, DOI: 10.1016/j.molstruc.2023.137459 (Q2)
4. L.V. Chepeleva, D.O. Tarasenko, A.Y. Chumak, O.O. Demidov, A.D. Snizhko, O.O. Kolomoitsev, V.M. Kotlyar, E.S. Gladkov, A.L. Tatarets, A.V. Kyrychenko, A. D. Roshal, 4'-Benzyloxyflavonol Glucoside as fluorescent indicator for b-glucosidase activity // *Funct. Mater.* – 2023, - 30, - 4, - P. 494-505, DOI: 10.15407/fm30.04.494 (Q4)
5. L. V. Chepeleva, O. O. Demidov, A. D. Snizhko, D. O. Tarasenko, A. Y. Chumak, O. O. Kolomoitsev, V. M. Kotliar, E. S. Gladkov, A. Kyrychenko, A. D. Roshal, Binding interactions of hydrophobically-modified flavonols with b-glucosidase: fluorescence spectroscopy and molecular modelling study // *RSC Adv.*, - 2023, - 13, - P. 34107–34121, DOI: 10.1039/d3ra06276g (Q2)
6. H. Y. Zahrychuk, E. S. Gladkov, A. V. Kyrychenko, D. O. Poliovyi, O. M. Zahrychuk, T. V. Kucher, L. S. Logoyda, Structure-Based Rational Design and Virtual Screening of Valsartan Drug Analogs towards Developing Novel Inhibitors of Angiotensin II Type 1 Receptor // *Biointerface Research in Applied Chemistry*, - 2023, - 13. – 5. - P. 440, DOI: 10.33263/BRIAC135.440 (Q4)
7. O.O. Demidov, E.S. Gladkov, A.V. Kyrychenko, A.D. Roshal. Synthetic and natural flavonols as promising fluorescence probes for β -glucosidase activity screening // *Functional Materials*, - 2022. -29(2). - P.252–262. DOI: 10.15407/fm29.02.252 (Q4)
8. A.D. Snizhko, A.V. Kyrychenko, E.S. Gladkov. Synthesis of Novel Derivatives of 5,6,7,8-Tetrahydroquinazolines Using α -Aminoamidines and In Silico Screening of Their Biological Activity // *International Journal of Molecular Sciences*, - 2022. - 23(7). - P. 3781. DOI:10.3390/ijms23073781 (Q1)
9. R. S. Khodzhaieva, E. S. Gladkov, A. Kyrychenko, A. D. Roshal. Progress and Achievements in Glycosylation of Flavonoids // *Frontiers in Chemistry* – 2021. - 9. - P. 637994, DOI: 10.3389/fchem.2021.637994 (Q1)
10. O.O. Kolomoitsev, E.S. Gladkov, V.M. Kotlyar, P.I. Pedan, O.V. Onipko, O.V. Buravov, V.A. Chebanov. Efficient

- synthesis of imidazole and pyrimidine derivatives // *Chemistry of Heterocyclic Compounds* – 2020. -56(10). - P.1329-1334, DOI: 10.1007/s10593-020-02818-x (Q3)
11. I.G. Tkachenko, S.A. Komykhov, E.S. Gladkov, V.I. Musatov, V.A. Chebanov, S.M. Desenko. Acetic aldehyde in multicomponent synthesis of azolopyrimidine derivatives in water // *Chemistry of Heterocyclic Compounds* – 2019. - 55(4/5). – P. 392–396, DOI: 10.1007/s10593-019-02470-0 (Q3)
 12. E.S. Gladkov, S.M. Sirko, V.I. Musatov, S.V. Shishkina, I.G. Tkachenko, S.A. Komykhov, S.M. Desenko. New spiro derivative of dihydro-1,2,3-triazolo[1,5-a]pyrimidine as a product of multicomponent reaction // *Chemistry of Heterocyclic Compounds* – 2018. -54(12). - P.1139–1144, DOI: 10.1007/s10593-019-02405-9 (Q3)
 13. Gladkov E., Desenko S., Konovalova I. Groth U. Shishkin O., Vashchenko E. Chebanov V. Microwave-Assisted and Ultrasonic-Assisted Three-Component Heterocyclization of 4-Amino-5-carboxamido-1,2,3-triazole, Thiopyran-3-one-1,1-dioxide, and Aromatic Aldehydes // *Journal of Heterocyclic Chemistry* - 2013. - Vol. 50. - P. E189-192. DOI: 10.1002/jhet.1503 (Q3)
 14. Gladkov E., Gura K., Sirko S., Desenko S., Groth U., Chebanov V. Features of the behavior of 4-amino-5-carboxamido-1,2,3-triazole in multicomponent heterocyclizations with carbonyl compounds // *Beilstein Journal of Organic Chemistry* - 2012. - № 8. - P. 2100-2105. DOI: 10.3762/bjoc.8.236 (Q1)
 15. Gladkov E.S., Sirko S.N., Shishkina S.V., Shishkin O.V., Knyazeva I.V., Desenko S.M., Chebanov V.A. Efficient multicomponent synthesis of highly substituted[1,2,3]triazolo[1,5-a]pyrimidines // *Monatshefte für Chemie*. - 2010. - Vol. 141. - P. 773 –779. DOI: 10.1007/s00706-010-0326-0 (Q3)
 16. Gladkov E.S., Chebanov V.A., Desenko S.M., Dallinger D., Kappe C.O. Multicomponent cyclocondensations of β -ketosulfones with aldehydes and aminoazole building blocks // *Heterocycles*. – 2007. – Vol. 73(C). P. 469–480. DOI: 10.3987/COM-07-S(U)19
 17. Desenko, S.M., Gladkov, E.S., Shishkina, S.V., Orlov, V.D., Meier, H. Synthesis and tautomerization of 6,7-dihydro-(1,2,3)-triazolo[1,5-a] pyrimidines // *Journal of Heterocyclic Chemistry* – 2006. - 43(6). - P. 1563–1567. DOI: 10.1002/jhet.5570430620
 18. Desenko, S.M., Gladkov, E.S., Nenaidenko, V.G., Shishkin, O.V., Shishkina, S.V. Trifluoromethyl-substituted DI- and tetrahydroazolopyrimidines // *Chemistry of Heterocyclic Compounds* – 2004. – Vol. 40(1). – P. 65–69. DOI: 10.1023/B:COHC.0000023769.66759.7d
 19. Desenko, S.M., Gladkov, E.S., Komykhov, S.A., Shishkin, O.V., Orlov, V.D. Partially hydrogenated aromatic substituted tetrazolo[1,5-a]pyrimidines // *Chemistry of Heterocyclic Compounds* – 2001. – Vol. 37(6). - P. 747–754. DOI: 10.1023/A:1011925631511 (Q4)
 20. Desenko, S.M., Gladkov, E.S., Getmanskii, N.V., Zemlin,

	I.M., Orlov, V.D. Imine-enamine tautomerism of dihydroazolopyrimidines. 6. Synthesis and tautomerism of thienyl derivatives of dihydro-1,2,4-triazolo[1,5-a]pyrimidines // Chemistry of Heterocyclic Compounds – 1999. – Vol. 35(5). - P. 608–612. DOI: 10.1007/BF02324647 (Q4)
Other significant scientific achievements (in the last 10 years)	1. Patent of Ukraine No. 128195 for the invention “Substituted derivatives of 2-(4,6-diphenylpyrimidin-2-yl)propan-2-amine and the method of their preparation”, publication 01.05.2024, Bull. No. 18/2024 (https://sis.nipo.gov.ua/uk/search/detail/1797590/) 2. Utility model patent No. 150472 "Method of obtaining substituted 2-(3,4-dihydroxyphenyl)-3-hydroxy-4H-chromen-4-ones", publication 02/23/2022, Bull. No. 8 (https://base.uipv.org/searchINV/search.php?action=viewdetails&IdClaim=280635) 3. Patent of Ukraine No. 124608 for the invention "N-substituted derivatives of 2-methyl-4-aryl-8-arylidene-5,6,7,8-tetrahydroquinazolines and their preparation method", publication 13.10.2021, Bull. No. 41 (https://base.uipv.org/searchINV/search.php?action=viewdetails&IdClaim=278412) 4. Patent of Ukraine No. 110005 for the invention "Method of obtaining 5-[4-(hydroxy)phenyl]-1,3-cyclohexanone", co-author, publication 10/26/2015, bull. No. 3 (https://base.uipv.org/searchINV/search.php?action=viewdetails&IdClaim=216944) 5. Patent of Ukraine No. 107549 for the invention "Derivatives of 4,7-dihydro-5-amino-3-carboxamido-6-cyano[1,2,3]triazolo[1,5-a]pyrimidine and the method of their preparation", co-author , publication 12.01.2015, Bull. No. 1 (https://base.uipv.org/searchINV/search.php?action=viewdetails&IdClaim=208048) 6. Patent of Ukraine No. 105549 for the invention "Derivatives of 8-substituted-3-carboxamido-5,6-trimethylene-4,7-dihydro-1,2,3-triazolo[1,5-a]pyrimidines and the method of their preparation" , co-author, publication 05/26/2014, Bull. No. 10 (https://base.uipv.org/searchINV/search.php?action=viewdetails&IdClaim=200591)
Presentation of scientific results	
Reports at scientific conferences (seminars, symposia, etc.) (in the last 10 years)	1. Synthesis and Spectral Properties of New Long-Alkyl-Chain-Modified Flavonols as Fluorescent Probes for Nanostructured Materials. IEEE 14th International Conference “Nanomaterials: Applications & Properties” (IEEE NAP-2024), September 8–13, 2024. Book of Abstracts. Riga, Latvia, 2024. ID# 1020 (Poster) 2. Use of α-aminoamidines in the synthesis of new biologically active heterocyclic compounds. XXVI Ukrainian Conference on Organic and Bioorganic Chemistry, September 16–

20, 2024, Uzhgorod, Ukraine, D-77 (Oral)

3. Binding interaction of hydrophobically-modified flavonols with β -glucosidase: fluorescence spectroscopy and molecular docking study. Ukrainian Conference with International Participation "Chemistry, physics and Technology of surface" October 11-12, 2023, Kyiv, Ukraine, P-38 (<https://isc.gov.ua/index.php/en/konferentsiji/470-konferentsiya-2023-en>) (Poster)

4. Study of protein-fluorophore interactions: study of flavonols by fluorescence titration, XIX scientific conference "Lviv Chemical Readings - 2023", May 29-31, 2023, Lviv, Ukraine, S-U47 (<http://conferences.lnu.edu.ua/index.php/lcr2023/>) (Poster)

5. Synthesis, study of protolytic properties of 3,4-dibenzoyloxyflavonol. All-Ukrainian Conference of Scientific Researchers. Section "All-Ukrainian Symposium on Organic and Medical Chemistry, Dedicated to the 80th Anniversary of Prof. V.D. Orlova", September 19-25, 2021, Lviv, Ukraine, S-69 (Poster)

6. Synthesis of new chromone derivatives and their use for analytical determination of metal ions. Kyiv Conference on Analytical Chemistry "Current Trends 2020". 21-23.10.20, Kyiv, Ukraine, R. 117 (Poster)

7. Synthesis of new building blocks based on 2-amino-4-methylthiazoles. XVIII Scientific Conference "Lviv Chemical Readings - 2019" June 2-5, 2019, Lviv, Ukraine, O-21 (Poster)

8. New dihydro-1,2,3-triazolo[1,5-a]pyrimidine derivatives based on cyclic ketones and ketosulfones. XXV Ukrainian Conference on Organic and Bioorganic Chemistry. 16-20.09.19, Lutsk, Ukraine, C-24 (<https://sites.google.com/view/ukrorgconference/>) (Poster)