

CURRICULUM VITAE

Svitlana M. Sirko

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Born: 1974/04/27; Kharkiv, Ukraine

Citizenship Ukraine

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EDUCATION AND ACADEMIC STATUSES:

Specialist (M.Sc.) with honor Higher, specialist, engineer, chemist, technologist.

PhD Kharkiv State Polytechnic University (HDPU), 1999 "

PROFESSIONAL CAREER:

September 1993–
February 1999 **student**, Kharkiv State Polytechnic University

January 2002 - February 2003 **Engineer** of the 2nd category, Department of Photoactive Heterocyclic Compounds, NTC "Institute of Single Crystals" of the National Academy of Sciences of Ukraine, Kharkiv

March 2003 -
December 2003 **Engineer** of the 2nd category, Department of Structural Research of Crystals, NTC "Institute of Single Crystals" of the National Academy of Sciences of Ukraine, Kharkiv

January 2004 -
June 2010 **Engineer** of the 1st category, Department of Photoactive Heterocyclic Compounds, DNU NTK "Institute of Single Crystals", NAS of Ukraine, Kharkiv

July 2010 - May 2023 **Leading engineer**, Department of Photoactive Heterocyclic Compounds of the National Technical University of Ukraine "Institute of Single Crystals" of the National Academy of Sciences of Ukraine, Kharkiv

May 2023 to the present **Junior researcher**, Department of Organic and Bioorganic Chemistry, Institute of Chemistry of Functional Materials, NTC "Institute of Single Crystals" of the National Academy of Sciences of Ukraine, Kharkiv

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RESEARCH INTERESTS:

The main responsibilities of Svitlana Mykolaivna Sirko concern participation in the organization of the process of measuring and processing NMR spectra. Execution of business contracts with various pharmaceutical companies. She is responsible for receiving and issuing precursors in all departments of DNU NTK "Institute of Monocrystals"

EXPERIMENTAL EXPERIENCE:

Different traditional methods of synthesis of nitrogen-containing heterocyclic compounds and their intermediate compounds.

- Microwave and ultrasonic methods of activating processes in organic synthesis.

PUBLICATIONS:

8 articles, 8 patents of Ukraine and 7 theses of conferences

Articles:

1. Desenko, S. M., Gladkov, E. S., **Sirko, S. N.**, and Khanetskii, B. B., Vestn. Kharkiv. Univ., Ser. Khim. 596, 10, 56 (2003).
2. Gladkov E., **Sirko S.**, Khanetskii D., Lukinova E., Desenko S., Multicomponent Facile Synthesis of Novel Dihydroazolopyrimidinyl Carbamides // *Chem. Papers* -2007, 61(2), 146-149
3. **Svetlana M. Sirko**, Nikolay Yu. Gorobets 1, *, Vladimir I. Musatov and Sergey M. Desenko Generation of 500-Member Library of 10-Alkyl-2-R1,3-R2-4,10-Dihydrobenzo[4,5]imidazo[1,2-a]pyrimidin-4-ones *Molecules* 2009, 14, 5223-5234.
4. Eugene S. Gladkov, **Svetlana N. Sirko**, Svetlana V. Shishkina, Oleg V. Shishkin, Irina V. Knyazeva, Sergey M. Desenko and Valentin A. Chebanov, Efficient multicomponent synthesis of highly substituted[1,2,3]triazolo[1,5-a]pyrimidines // *Monatsh Chem.* – 2010. **141**, 773–779
5. Eugene S. Gladkov, Katerina A. Gura, **Svetlana M. Sirko**, Sergey M. Desenko, Ulrich Groth and Valentin A. Chebanov. Features of the behavior of 4-amino-5-carboxamido-1,2,3-triazole in multicomponent heterocyclizations with carbonyl compounds // *Beilstein J. Org. Chem.* – 2012. **8**, 2100–2105.
6. Eugene S. Gladkov, **Svetlana M. Sirko**, , Vladimir I. Musatov, Svetlana V. Shishkina, Irina G. Tkachenko, Sergey A. Komykhov, Sergey M. Desenko New spiro spiro derivative of dihydro-1,2,3-triazolo[1,5-a]pyrimidine as a product of multicomponent reaction *Chem.* – 2018, 6, 1139-1144.
7. Mykola V. Protopopov^{1,2} • Olga V. Ostrynska² • Sergiy A. Starosyla² • Maria A. Vodolazhenko^{3,4} • **Svetlana M. Sirko**³ • Nikolay Yu. Gorobets^{3,5} • Volodymyr Bdzholo² • Sergey M. Desenko^{3,5} • Sergiy M. Yarmoluk² Dihydrobenzo[4,5]imidazo[1,2-a]pyrimidine-4-ones as a new class of CK2 inhibitors // *Molecules Diversity* – 2018, 9, doi.org/10.1007/s11030-018-9836-1
8. Yana I. Sakhno¹, Oleksandr V. Radchenko¹, Elena A. Muravyova¹, **Svitlana M. Sirko**¹, Svitlana V. Shishkina^{1,2}, Vladimir I. Musatov¹, Sergey M. Desenko^{1,2}, Valentyn A. Chebanov^{1,2}. Synthesis of isoxazolylpyrrolones by three-component reaction

Patents:

1. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., Method for obtaining substituted 4-amino-5-carboxamido-1,2,3-triazoles. Stalemate. 38426 Ukraine, IPC C07D 249/00, 12.01.2009
2. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., Substituted 4,7-dihydro-3-arylcarboxamido-1,2,3-triazolo[1,5-a]pyrimidines and the method of their preparation, Pat. Ukraine, 86913 IPC C07D 487/00, 05/25/2009.,
3. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., Method for obtaining substituted 2-methylsulfonyl-1,3-diaryl(heteryl)-prop-2-en-1-ones, Pat. Ukraine, 57633 IPC C07C 317/08, 10.03.2011
4. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., 4,7-dihydro-3-aryl-4,4'-dioxo-9-carbamidothiopyrano-1,2,3-triazolopyrimidines and the method of their preparation, Pat. Ukraine, 94674, IPC C07D 513/16, 05/25/2011
5. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., N-substituted 3-carboxamido-9,9-cyclohexyl-4,5,6,7,8,9-hexahydro-1,2,3-triazolo[3,4-b]quinazolines and the method of their preparation, Stalemate. Ukraine, 97933, IPC C07D 487/04, 26.03.2012
6. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., Derivatives of 7-aryl-5,6,7,11-tetrahydro-7a,8,10,11-tetraazacyclopenta[b]phenanthrene and the method of their preparation, Pat. Ukraine, 99976, IPC C07D 487/04, C07D 491/147, A61K 31/519, 25.10.2012
7. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., N-substituted 5,7-diaryl-6-(methylsulfonyl)-4,7-dihydro[1,2,3]triazolo[1,5-a]pyrimidine-3-carboxamides and the method of their preparation, Pat. Ukraine, 101765, IPC C07D 487/04, 04/25/2013
8. Sirko S.M., Gladkov E.S.; Desenko S.M.; Afanasiadi L. M., 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, Pat. Ukraine, 107549, IPC C07D, 1/2015, 12.01.2015

As a main author and co-author, she participated in scientific conferences, for example:

1. Gladkov Y.S., **Sirko S.M.**, Desenko S.M. Ketosulfones as promising reagents for three-component cyclocondensations // Abstracts, International Symposium on Advanced Science in Organic Chemistry", June, 2006, Sudak, Ukraine, C-036 (Poster)
2. Yevgeniy S. Gladkov, **Svetlana M. Sirko**, Sergey M. Desenko, The study of multicomponent cyclocondensations of aminoazoles with ketosulfones and aldehydes // Abstracts, National conference "Actual problems of synthesis and generation of new biological active compounds and medicines", October 15-18, 2008, Lviv, Ukraine p. 48 (Poster)
3. E.S. Gladkov, S.N. Sirko, V.N. Chernenko, S.M. Desenko, V.A. Chebanov. Directional control of reactions of 4-amino-5-carboxamido-1,2,3-triazole with cyclic carbonyl compounds // International youth conference "Catalysis in organic synthesis", abstracts of reports, Russia, Novochoerkassk, July 4-6, 2012, C .109
4. Gladkov E.S., Sirko S.M., Chereneko V.M., Desenko S.M., Chebanov V.A. New reactions of 4-amino-5-carboxamido-1,2,3-triazole with cyclic carbonyl compounds // 5th All-Ukrainian scientific conference "Dombrovsky chemical readings - 2012", Nizhyn, September 26-28, 2012. WITH. 23 (poster).
5. Eugene S. Gladkov, **Svetlana M. Sirko**, Sergey M. Desenko, Oleg V. Shishkin, Valentin A. Chebanov, Novel cyclocondensation of 4-amino-5-carboxamido-1,2,3-triazole with cyclic ketones // VI International Conference «Chemistry of nitrogen containing heterocycles», Ukraine, Kharkov, 12th to 16th November, 2012, P-187 (poster)

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6. Gladkov E.S., **Sirko S.N.**, Musatov V.I., Shishkina S.V., Bila I.G., Komykhov S.A., Desenko S.M. Spiro Derivatives of Dihydro-1,2,3-triazolo[1,5-a]pyrimidine as a Product of Multicomponent Condensation // VII International Conference Chemistry of Nitrogen Containing Heterocycles (CNCH-2015), 09-13 November 2015, Kharkiv, P. -16 (poster
7. Protopopov M. , Ostrynska O. , Sirko S. , Sparrow M. , Desenko S. , Yarmolyuk S. Protopopov M., Ostrynska O., Sirko S., Gorobets M., Desenko S., Yarmoluk S. Search for SC2 protein kinase inhibitors among dihydrobenzo[4,5]imidazo[1,2-a]pyrimidin-4-one derivatives // XIV International Scientific Conference "Youth and Progress in Biology", Lviv, April 25-27, 2017