

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s)	VIACHESLAV TAREL'NYK		
Address(es)	H. Kondratiieva Str., 160, 40021, Sumy, Ukraine		
Telephone(s)	+ 38 0542 787640	Mobile:	+ 38 050 3072572
Fax(es)	+ 38 0542 787640		
E-mail	tarel'nyk@ukr.net	v.tarel'nyk@snau.edu.ua	
Nationality	Ukrainian		
Date of birth	01.05.1952		
Gender	Male		

Current employment / Occupational field **Professor of the Industrial Machinery Engineering Department, Sumy National Agrarian University; Academician of the Ukrainian Technological Academy.**

Work experience

Dates	1985-2002
Occupation or position held	Directors of subsidiaries Research and Production Enterprise "Nikmas - Rotor" in Sumy VNIkompresormash
Main activities and responsibilities	Research and design work on the development of technology renewal and strengthening of machine parts
Name and address of employer	Sumy VNIkompresormash, 6. Kurskiy Avenue, Sumy, 40020, Ukraine
Type of business or sector	Mechanical Engineering
Dates	2002-2003
Occupation or position held	Professor of the Mechanization of production processes Department
Main activities and responsibilities	Education, science and research
Name and address of employer	Sumy National Agrarian University, 160 H.Kondratiieva Str., Sumy, 40021, Ukraine
Type of business or sector	Higher Educational Institution (Mechanical Engineering Sector)
Dates	2003-2006
Occupation or position held	Head of the Mechanization of production processes Department
Main activities and responsibilities	Education, science and research
Name and address of employer	Sumy National Agrarian University, 160 H.Kondratiieva Str., Sumy, 40021, Ukraine
Type of business or sector	Higher Educational Institution (Mechanical Engineering Sector)
Dates	2006 -2024
Occupation or position held	Head of the Technical Service Department
Main activities and responsibilities	Education, science and research
Name and address of employer	Sumy National Agrarian University, 160 H.Kondratiieva Str., Sumy, 40021, Ukraine
Type of business or sector	Higher Educational Institution (Mechanical Engineering Sector)

Dates 2024 -31.08.2026

Occupation or position held Professor of the Technical Service and Industrial Machinery Engineering Department

Main activities and responsibilities Education, science and research

Name and address of employer Sumy National Agrarian University, 160 H.Kondratiieva Str., Sumy, 40021, Ukraine

Type of business or sector Higher Educational Institution (Mechanical Engineering Sector)

Dates 01.09.2026 till now

Occupation or position held Professor of the Industrial Machinery Engineering Department

Main activities and responsibilities Education, science and research

Name and address of employer Sumy National Agrarian University, 160 H.Kondratiieva Str., Sumy, 40021, Ukraine

Type of business or sector Higher Educational Institution (Mechanical Engineering Sector)

Education and training

Dates 1986

Title of qualification awarded Mechanical Engineer

Principal subjects/occupational skills covered Production engineering, machine tools and cutting tools

Name and type of organisation providing education and training Voroshylovgrad Engineering Institute, Ukraine

Level in national or international classification Dipl. Ing. (University)

Dates 1994

Title of qualification awarded Candidate of Technical Sciences

Principal subjects/occupational skills covered Processes and machines for pressure treatment. Processes for mechanical and physical - technical processing machines and tools

Name and type of organisation providing education and training Eastern State University (Lugansk), Ukraine

Level in national or international classification PhD in Engineer Sciences

Dates 2001

Title of qualification awarded Doctor of Technical Sciences

Principal subjects/occupational skills covered Technology of mechanical engineering

Name and type of organisation providing education and training National Technical University "KhPI" (Kharkiv), Ukraine

Level in national or international classification Dr Sc. in Engineer Sciences

Personal skills and competences

Reliability, sociability, energy, purposefulness

Mother tongue(s) **Russian**

Other language(s) **Ukrainian, English**

Self-assessment

European level (*)

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User

Ukrainian

C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user	C2	Proficient user
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(*) [Common European Framework of Reference for Languages](#)

Social skills and competences I can and I am used to work in the team within the framework of international educational and scientific projects. For last 26 years I've been a project coordinator in Ukraine and work within international network team.

Organisational skills and competences I was responsible for the organization about 34 international conferences. For 7 times I organized the visits of the foreign scientists to Ukrainian for with the purpose of experience exchange.

Computer skills and competences Competent with most Microsoft Office programmes

Artistic skills and competences

Driving licence

Additional information:

Scientific Research Topic and Publications **Scientific Research Topic:** research and design development of new combined technologies for strengthening metal cutting and stamping tools, restoration and strengthening of machine parts. Developed and put into production new technological processes based on combined electroerosion alloying technologies, which are used for coating pulsed end seals of high-speed turbopump units of liquid rocket engines.

- Main publications for 2026-2025**
1. Haponova O., Tarelnyk V., Laponog G., Garbiec D., Mościcki T., Formation of nanostructured electrospark-alloyed coatings on the working surfaces of impulse face seals, *Nature Research*, 2026, Vol. 16, Issue 1, p. 27739. <https://doi.org/10.1038/s41598-026-56726-9> (SCOPUS, Q1)
 2. Tarelnyk V.B., Haponova O.P., Konoplianchenko Ie.V., Tarelnyk N.V., Bondarev S.G., and Mikulin M.O., Improving the Quality Parameters of Steel Surfaces by Combined Electrospark Carburizing Technologies. Pt. 2. Mathematical Models for Controlling the Properties of Metal Surfaces, *Progress in Physics of Metals*, 27, No. 3: 496–543 (2026); <https://doi.org/10.15407/ufm.27.03.494> (SCOPUS, Q2)
 3. Tarelnyk V.B., Haponova O.P., Tarelnyk N.V., Konoplianchenko Ie.V., Mikulina M. A., and Postolatii V.V., Improving the Quality Parameters of Steel Surfaces by Combined Electrospark Carburizing Technologies. Pt. 1. Properties of Metal Surfaces, *Progress in Physics of Metals*, 27, No. 2: 304–346 (2026). <https://doi.org/10.15407/ufm.27.02.304> (SCOPUS, Q2)
 4. Tarelnyk V.B., Haponova O.P., Konoplianchenko Ie.V., Tarelnyk N.V., Radionov O.V., Kolosiuk A.G Hybrid surface engineering of impulse face seals for nuclear power equipment, *Problems of Atomic Science and Technology*. 2026. №4(164), pp.190-197; <https://doi.org/10.46813/2026-164-190> (SCOPUS Q3)
 5. Tarelnyk V.B., Haponova O.P., Tarelnyk N.V., Improvement of surface layer quality parameters of steel parts after nitrocarburizing by electrospark alloying method. Part 2. Development of a mathematical model for controlling the steel part surface layer quality parameters, *Problems of Atomic Science and Technology*. 2026. №2(162), pp.130-138 <https://doi.org/10.46813/2026-162-130> (SCOPUS, Q3)
 6. Haponova O. P., Tarelnyk N. V., and Semernya O. V., Research on the Influence of Productivity on the Structure Formation of Surface Layers of Steel Parts during Nitriding by the Electrospark Alloying (ESA) Method. II. Development of a Mathematical Model for Controlling the Quality Parameters of Steel-Parts' Surface Layers during Nitriding by the ESA Method, *Metallfiz. Noveishie Tekhnol.*, vol. 48, pp. 185–203 (2026); <https://doi.org/10.15407/mfint.48.02.0185> (SCOPUS, Q3)
 7. Tarelnyk V.B., Haponova O.P., Tarelnyk N.V., Volina T.M., Zubko V.M., Dumanchuk M.Yu., Lavrenko O.M., Mikulina M.A., Dotsenko A.O., Bilyi O.Ye., Shevchenko S.S., Bondarev S.G., and Semernya O.V., Research of Influence of Productivity on Structural Formation of Surface Layers of Steel Details during Nitriding by Means of the Electrospark Alloying (ESA) Method. I. Evaluation of the Impact of Productivity on the Quality Parameters of the Surface Layers of Steel Parts during Nitriding by the ESA Method, *Metallfiz. Noveishie Tekhnol.*, 47, No. 10: 1061–1081 (2025) (in Ukrainian). <https://doi.org/10.15407/mfint.47.10.1061> (SCOPUS, Q3)
 8. Haponova O.P., Tarelnyk V.B., Konoplianchenko Ie.V., Tarelnyk N.V., Gerasimenko V.O., Postolatii V.V., Laponog G.P., Study of Antifriction Electrospark Coatings with MoS2 for Face Seal Elements of Nuclear Power Plants. *J. Nano- Electron. Phys.* 17 No 5, 05005 (2025) [https://doi.org/10.21272/jnep.17\(5\).05005](https://doi.org/10.21272/jnep.17(5).05005) (SCOPUS, Q3)

9. Haponova O., Tarelnyk V., Mo'scicki T., Tarelnyk N., Hybrid Surface Treatment Technologies Based on the Electrospark Alloying Method: A Review, *Coatings*, 2025, 15, 721, <https://doi.org/10.3390/coatings15060721> (SCOPUS, Q2)
10. Haponova O., Tarelnyk V., Tarelnyk N., Laponog G. Investigation of Aluminum Electrospark Alloyed Coatings on Steels. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, 2025. Vol. 56, 4204–4229, Springer Boston (United States). <https://doi.org/10.1007/s11661-025-07908-z> (SCOPUS, Q1)
11. Tarelnyk V.B., Haponova O.P., Tarelnyk N.V., and Konoplianchenko Ye.V., Sulphurizing of Metal Surfaces by Electrospark Discharge Alloying. Pt. 2: Tribological Properties of Electrospark Depositing Sulphur Containing Coating, *Progress in Physics of Metals*, 26, No. 2: 383–426 (2025). <https://doi.org/10.15407/ufm.26.02.383> (SCOPUS, Q2)
12. Tarelnyk V. B., Haponova O. P., Tarelnyk N. V., Dumanchuk M. Yu., Maifat M. M., Mikulina M. A., and Kozin V. M., Surface Properties of High-Strength Cast Iron Parts with Wear-Resistant Composite Coatings Synthesized by Electrospark Alloying Method. Pt. 2. Investigation of the Structure and Microhardness of the Treated Cast-Iron Surfaces, *Metallofiz. Noveishie Tekhnol.*, vol. 47, pp. 717-736 (2025). <https://doi.org/10.15407/mfint.47.07.0717> (SCOPUS, Q3)
13. V. B. Tarelnyk, O. P. Haponova, N. V. Tarelnyk, M. Yu. Dumanchuk, M. M. Maifat, V. O. Gerasimenko, M. O. Mikulina, A. D. Polyvanyi, V. O. Ohrimenko, O. V. Semernya, M. Yu. Vasylenko, and V. M. Kozin, Surface Properties of High-Strength Cast-Iron Parts with Wear-Resistant Composite Coatings Synthesized by Electrospark Alloying Method. Pt. 1. Specific Aspects of Mass Transfer; Geometric, Topographic, and Mechanical Characteristic Features of Strengthened Surfaces, *Metallofiz. Noveishie Tekhnol.*, vol. 47, pp. 427-451 (2025). <https://doi.org/10.15407/mfint.47.04.0427> (SCOPUS, Q3)
14. V.B. Tarelnyk, O.P. Haponova, N.V. Tarelnyk, and Ye.V. Konoplianchenko, Sulphurizing of Metal Surfaces by Electrospark-Discharge Alloying. Pt. 1: Structural–Phase State of Sulphur-Containing Coatings on Constructional Steels, *Progress in Physics of Metals*, 26, No. 1: 146–200 (2025). <https://doi.org/10.15407/ufm.26.01.151> (SCOPUS, Q2)
15. Tarelnyk, V.B., Haponova, O.P., Tarelnyk, N.V., Rogovskii, I.L. Improvement of Surface Layer Quality Parameters of Steel Parts After Nitrocarburizing by Electrospark Alloying Method. Part 1. Features of the Structural State and Topography of Steel Surfaces After Nitrocarburizing. *Problems of Atomic Science and Technology*, 2025 (2), pp. 131-137 (2025). <https://doi.org/10.46813/2025-156-131> (SCOPUS, Q3)

Projects Experience:

- 2002 – till now – coordinator of the international project of scientific cooperation between the Sumy National Agrarian University and the Kielce University of Technology (Poland)
- 2003 – till now – Academician of the Ukrainian Technological Academy
- 2016-2017 "Development of energy-saving technologies to ensure the operational properties of the working surfaces of parts" - 0116U002756
- 2020 – 2022 - Project. Analysis of the impact of hydrodynamic forces acting in narrow gaps of seals and supports on increasing energy efficiency and reducing harmful emissions and vibrations of centrifugal machines - 0120U102004
- 2021-2023 - Project. Responsible Investigator; state budget project of the Ministry of Education and Science of Ukraine: «Development of new methods for surface nanostructuring of steel surfaces with predictable quality parameters based on the method of electrospark alloying» (SBP № 0122u000771).
- 2024-2026 – Project. Responsible Investigator; state budget project of the Ministry of Education and Science of Ukraine: «Development of environmentally friendly technologies for surface modification of power plant equipment parts using combined methods based on electrospark alloying», (SBP №00124U000539).

HONOURS AND AWARDS

- 2006-2009 Awarded the Rector's Certificate of Honor, the Ministry of Education and Science of Ukraine's Certificate of Honor, the diploma "The Best Scientist of the Institute of Engineering and Technology
- 2009 Awarded the thanks of the director of the department, the certificate of honor of the head of the Sumy regional state administration
- 2007 Awarded the Jubilee Order of the Ukrainian Academy of Technology
- 2009 Awarded the title of "Honored technologist of the highest category" by the decision of the Presidium of the Ukrainian Academy of Technology with the presentation of a silver gilded badge

2010 Awarded the Badge of Honor of the Ministry of Agrarian Policy and Food of Ukraine
 2012 Awarded the "Golden Star of Fame" order
 2017 Awarded the "Excellence in Education" badge
 2021 Became a laureate of the Prize of the Cabinet of Ministers of Ukraine for the development and implementation of innovative technologies
 2023 Awarded the Badge of Honor "For Scientific and Educational Achievements" by the Ministry of Education and Science of Ukraine. Order No. 121 dated April 21, 2023.

INTERNSHIPS

«TRIZ POLAND Spoika z o.o.», №TPS – 2024/003, Bytom, 27 listopada - 19 stycznia 2024 r.

Annexes

ORCID: <http://orcid.org/0000-0003-2005-5861>
 Scopus ID: [56436591000](https://scopus.com/authorid/56436591000)
 Web of Science ID: T-5103-2018
 Scholar Google: <https://scholar.google.com.ua/citations?user=fVup2EgAAAAJ&hl=ua>