

Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) **Vladyslav Zubko**
Address(es) H. Kondratiieva Str., 158/4, apt. 55, 40010, Sumy, Ukraine
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zubkovladislav@ukr.net
Nationality Ukrainian
Gender Male

Current employment / Occupational field

Acting Dean at the Faculty of Engineering and Technology
Head of the Tractors, Agricultural Machinery and Transport Technologies
Department, Sumy National Agrarian University

Work experience

Dates 09.2008 till now
Occupation or position held Acting Dean (04.2022 – till now) at the Faculty of Engineering and Technology;
Head (09.2016 – till now) of the Tractors and Agricultural Machinery Department;
Assistant professor (06.2010 – 09.2016) at the Engineering-technological Faculty;
University instructor (09.2008 – 05.2010).
Main activities and responsibilities Teaching and scientific activity in the sphere of agricultural machinery maintenance
Name and address of employer Sumy National Agrarian University, 160 H.Kondratiieva Str., Sumy, 40021, Ukraine
Type of business or sector Higher Educational Institution (Agricultural Sector)

Education and training

Dates 04.2021
Title of qualification awarded Doctor of Engineering Sciences
Principal subjects/occupational skills covered Substantiation scientific and methodological bases of quality assurance of mechanized works in crop production by increasing the efficiency of realization of biopotential of agricultural crops on the basis of their needs
Name and type of organisation providing education and training National University of Life and Environmental Sciences of Ukraine
Level in national or international classification Doctor. of Engineering Sciences
Dates 02.2018 – 05.2018

Principal subjects/occupational skills covered	- research methods of the quality of the agricultural operations; - research methods of the strong soil, bunk density, moisture; - methods of the information collection from the agrarian machinery; - methods of modeling the specific zones of the fields and the harvest; - obtaining and analysis of the satellite captures – images of the vegetative period and yields data; - obtaining the scientific results of the research of the agrarian equipment work quality; - methods of the remote fields sensing; - SWs for the management of agrarian companies.																																							
Name and type of organisation providing education and training	Czech University of Life Sciences Prague																																							
Level in national or international classification	Erasmus+																																							
Dates	02.2019 – 05.2019																																							
Principal subjects/occupational skills covered	Precision farming. Applied research and experimental development in the application of Agriculture 4.0.																																							
Name and type of organisation providing education and training	Czech University of Life Sciences Prague																																							
Level in national or international classification	Erasmus+																																							
Dates	09.2018 – 09.2018																																							
Principal subjects/occupational skills covered	Understanding the main points of functioning administration, responsibilities of departments, their role and influence to the efficiency on work university																																							
Name and type of organisation providing education and training	Czech University of Life Sciences Prague																																							
Level in national or international classification	Erasmus+																																							
Dates	11.2005 – 11.2008																																							
Title of qualification awarded	Candidate of Technical Sciences																																							
Principal subjects/occupational skills covered	More efficient use of complex machines																																							
Name and type of organisation providing education and training	National University of Life and Environmental Sciences of Ukraine																																							
Level in national or international classification	PhD in Technical Sciences																																							
Dates	09.2000-06.2005																																							
Title of qualification awarded	Master of Mechanical Engineering																																							
Principal subjects/occupational skills covered	Agricultural Mechanization																																							
Name and type of organisation providing education and training	Sumy Agricultural Institute (meanwhile Sumy National Agrarian University), Ukraine																																							
Level in national or international classification	Dipl. Ing. (University)																																							
Personal skills and competences	Reliability, loyalty, sociability, energy, purposefulness																																							
Mother tongue(s)	Ukrainian																																							
Other language(s)	English, Russian																																							
Self-assessment <i>European level (*)</i>	<table border="1"> <thead> <tr> <th colspan="4">Understanding</th> <th colspan="4">Speaking</th> <th colspan="2">Writing</th> </tr> <tr> <th colspan="2">Listening</th> <th colspan="2">Reading</th> <th colspan="2">Spoken interaction</th> <th colspan="2">Spoken production</th> <th colspan="2"></th> </tr> </thead> <tbody> <tr> <td>B2</td> <td>Basic User</td> <td>B2</td> <td>Basic User</td> <td>B2</td> <td>Basic User</td> <td>B2</td> <td>Basic User</td> <td>B2</td> <td>Basic User</td> </tr> </tbody> </table>										Understanding				Speaking				Writing		Listening		Reading		Spoken interaction		Spoken production				B2	Basic User	B2	Basic User	B2	Basic User	B2	Basic User	B2	Basic User
Understanding				Speaking				Writing																																
Listening		Reading		Spoken interaction		Spoken production																																		
B2	Basic User	B2	Basic User	B2	Basic User	B2	Basic User	B2	Basic User																															
English																																								
Social skills and competences	I can and I am used to work in the team. I'm energetic and enthusiastic about the work I start.																																							

Organisational skills and competences	I was responsible for the organization of various workshops, conferences on the engineering-technological faculty. At the moment I have established a scientific research school.
Computer skills and competences	Competent with the most Microsoft Office programmes
Driving licence	Category A, B, C (car) Category A1, A2 (tractor)
Additional information:	
Scientific Research Topic and Publications	<p>Main field of scientific interests are:</p> <ul style="list-style-type: none"> ○ quality of soil cultivation using the agricultural machines; ○ research of the most preferable conditions for growing plants to increase the yields; ○ research of the work parameters and operating regimes of the agricultural machines in regard to the plants needs; ○ machines analysis to provide all the issues mentioned above; ○ analysis of technical and economic parameters of the machines functioning used for growing a plant; ○ the most efficient use of complex machines and rational complex machines for growing and harvesting of crops.
Annexes	<p>The most recent publications are:</p> <ol style="list-style-type: none"> 1. Zubko, V.M. Investigation of factors influencing the uniformity of tillage during disking. Environmental Engineering. Kharkiv. 2016. Issue. 1 (5). P. 122-130. 2. Barabash, G.I., Zubko, V.M., Barabash, O.G. Influence of buckwheat sowing terms and choice of machine complex for its harvesting. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2016. Issue. 3 (28). P. 88-93. 3. Zubko, V.M. Evaluation of the quality of disking. The Ukrainian Farmer. Kyiv. 2016. Issue. 5 (77). P. 114-116. 4. Zubko, V.M. Machines for sowing scattering. The Ukrainian Farmer. Kyiv. 2016. Issue. 9 (81). P. 118-120. 5. Zubko, V.M., Sirenko, V.F., Kuzina, T.V. Analysis of the design of openers of sowing machines. Environmental Engineering. Kharkiv. 2016. Issue. 1 (5). P. 98-102. 6. Stalemate. 113823 of Ukraine. IPC A01C 7/20 <u>Grain sowing device/ Zubko, V.M., Sirenko, V.F., Plavinsky, V.I., Kuzina, T.V. - u201609567; application. 16/09/2016; publ. 10.02.2017, bul. № 3/2017</u> 7. Stalemate. 113837 Of Ukraine. IPC A01C 7/00 <u>Method of placing winter wheat seeds in soil at sowing/ Zubko, V.M., Sirenko, V.F., Plavinsky, V.I., Kuzina, T.V. - u201609785; application. 11/10/2016; publ. 25.04.2017, bul. № 8/2017. Zubko, V.M. Optimal sowing speed. The Ukrainian Farmer. Kyiv. 2017. Issue. 2 (86). P. 140-142.</u> 8. Zubko, V.M. Research of quality of sowing performance. Bulletin of Kharkiv National Technical University of Agriculture. P. Vasilenko. Kharkiv. 2017. Issue. 180. P. 263-273. 9. Sirenko, V.F., Zubko, V.M., Kuzina, T.V. Mathematical model of shock interaction of grain and steel plate. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2017. Issue. 10 (32). - P. 75-79. 10. Sirenko, V.F., Zubko, V.M., Kuzina, T.V. Development of a geometric model of wheat grain to describe the impact interaction with the working parts of machines. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2018. Issue. 6 (33). P. 59-60. 11. Stalemate. 124168 of Ukraine. IPC A01C 7/20 <u>Grain sowing device/ Zubko, V.M., Sirenko, V.F., Plavinsky, V.I., Kuzina, T.V. - u201609567; application. 16/09/2016; publ. 10.02.2017, bul. № 3/2017</u> 12. Kuzina, T., Sirenko, V., Zubko, V., Chuba, V. Increasing yields of winter wheat by means of sowing orientation of grain. 17th International Scientific Conference Engineering For Rural Development Proceedings. Jelgava, Latvia. May 23-25, 2018. Vol. 17. P. 688-696. (Scopus). 13. Zubko, V.M., Sokolik, S.P. Qualitative indicators of work of the harrow cultivator "Dukat-2,5". All-Ukrainian agrarian magazine Agroelita. Ternopil. 2018. Issue. 4 (63). P. 62-64. 14. Onychko, V., Zubko, V. Ways to increase the accumulation of moisture during tillage. Agro Elite. Ternopil. 2018. Issue. 1 (60). P. 59-60. 15. Zubko, V.M., Saenko, A.V. Improving the methodology for determining the technical and economic indicators of units. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2018. Issue. 6 (33). P. 59-60. 16. Zubko, V.M., Melnyk, V.I., Protsenko, A.M., Commissar, Ye.O. Technical and technological efficiency of a hitch seeder for sowing corn. Electronic scientific professional publication "Scientific reports of NULES of Ukraine". Kyiv. 2018. Vol. 10, № 5-6. DOI: 10.31548/bio2018.05.029

17. **Zubko, V., Rubik, H.,** Zamora, O., Khvorost, T. Analysis and Forecast of Performance Characteristics of Combine Harvesters. Bulletin of the Estonian Agricultural University. 2018. Vol. 16 (5), P. 2282-2302, 2018 DOI: 10.15159/AR.18.212 (**Scopus**).
18. Stalemate. 129772 of Ukraine on a utility model Impact grain shredder/ Serdyuk, V.V. (UA); Plavinsky, V.I. (UA); **Zubko, V.M.** (UA); Balo, P.M. (UA) - u201805385; application. 15/05/2018; publ. 11/12/2018, bldg. № 21/2018
19. Zubko, V.M. Devices, equipment and systems for assessing the quality of grain harvesting. Bulletin of Kharkiv National Technical University of Agriculture. P. Vasilenko. Kharkiv. 2019. Issue. 199. P. 109-122
20. **Zubko, V.M.,** Sokolik, S.P., Shevchenko R.M. Improving the accuracy of measuring the fuel level sensor with a fuel level indicator. Environmental Engineering. Kharkiv. 2019. Vol. №1 (7). P. 6-11.
21. **Zubko, V.,** Khvorost, T., Zamora, O., Onychko, V. (2020): Methods of Maintaining Soil Depth Evenness during Disk Tillage. Scientia Agriculturae Bohemica, 51, 22-30. DOI: 10.2478 / Sat-2020-0004. (**Scopus**).
22. Zubko, V.M. Theoretical bases of substantiation of indicators of quality of performance of mechanized technological processes in crop production. Bulletin of Bioresources and Nature Management. Kyiv. 2020. Vol. 12, № 1-2.
23. Serdyuk, V.V., Rudenko, V.A., **Zubko, V.M.** Energy consumption during the operation of the shock-separation shredder. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2019. Issue 2 (36) P. 29-32.
24. **Zubko, V.M.,** Onychko, V.I., Sokolik S.P. How to prepare the drill for going out into the field? Traktorist.ua. 2020. Mode of access to the resource: <https://traktorist.ua/articles/Yak-pdgotuvati-svalku-dovihodu-v-pole>.
25. Zubko, V.M. Substantiation of placement of crops in the structure of fields and production volumes for mechanized technological operations Machinery & Energetics. Journal of Rural Production Research. Kyiv. Ukraine. 2020. Vol. 11. No. 2. P.107-113.
26. Pastukhov, V.I., **Zubko, V.M.** Determining the quality of technological operation in accordance with the needs of plants. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2019. Issue 3 (37). P. 19-24.
27. Pastukhov, V.I., **Zubko, V.M.** Research of changes in soil and plant properties in different periods of the production process. Bulletin of Agrarian Science of the Black Sea Coast. Bulletin of Agrarian Science of the Black Sea Coast. Mykolaiv. 2020. Issue. 1 (105). P. 94-101.
28. Zubko, V.M. Substantiation and choice of agricultural machinery for selected working bodies. Environmental Engineering, №1 (15), 2020. with. 36 - 43.
29. Zubko, V.M., Commissar, Ye.O. Influence of driving systems of machine units on soil compaction. Technical service of agro-industrial, forest and transport complexes, №21, 2020. with. 63 - 69.
30. **Zubko, V.M.,** Commissar, Ye.O., Shelest, M.S., Khvorost, T.V., Danilov, S.M. Mobile agrometeorological station for sprayers. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2020. Issue 2 (40). P. 3-7.
31. **Zubko, V.,** Sokolik, S., Khvorost, T., Melnyk, V.. Factors affecting quality of tillage with disc harrow. Proceedings of 20th International Scientific Conference Engineering For Rural Development Proceedings. Jelgava, Latvia. May 26-28, 2020. Vol. 20. P. 1193-1199. DOI: 10.22616 / ERDev.2021.20.TF262.
32. **Zubko, V.M.,** Zhigiliy, D.O., Sokolik, S.P., Rudenko, V.A. Modeling of rolling of a rigid cylinder on the soil surface. Bulletin of the SNAU. Series "Mechanization and automation of production processes". Sumy. 2021. Issue 2 (44). P. 8-12
33. Zubko V.M. Investigation of the influence of seed furrow purity on yield during corn cultivation on grain. Bulletin of Sumy National Agrarian University. Series "Mechanization and automation of production processes", issue 4 (46), 2021.- p. 11-17.
34. Zubko V.M. Experimental studies of the effectiveness of the use of unmanned aerial vehicles in the cultivation of crops. Machinery & Energetics. Journal of Rural Production Research. Kyiv. Ukraine. 2021, Vol. 12, No. 2, p. 117-128.
35. Rudenko A.A., Zubko V.M., Khvorost V.F., Lysenko A.A. Experimental and Numerical Study of Pressure Intensity in Detachable Joints of D Series Pumps. Mechanics and Advanced Technologies. 2021. Vol. 5. No. 2. R. 153-164.
36. Zubko, V.M. Rationale and choice of energy resources for aggregation of agricultural machinery. Bulletin of the National Technical University "KhPI". Series: Automobile and tractor construction. Nat. tech. Kharkiv University Polytechnic Inst. Kharkiv: NTU "KhPI". 2021. Vol. № 2. P. 46-53.
37. Hryhoriv, Y., Butenko, A., Nechyporenko, V., Lyshenko, M., Ustik, T., **Zubko, V.,** Makarenko, N., Mushtai, V. Economic efficiency of Camelina sativa growing with nutrition optimization under conditions of precarpathians of Ukraine. Agraarteatus: Journal of Agricultural Science. 2021. Vol. 2 (32). P. 232-238. DOI: 10.15159 / jas.21.33. (**Scopus**).
38. Popov, S., Frolova, L., Rebrov, O., Naumenko, Y., Postupna, O., **Zubko, V.,** Shvets P. Increasing the mechanical properties of structural cast iron for machine-building parts by combined Mn – Al alloying. EUREKA: Physics and Engineering. 2022. Vol. 1. P. 118-130. DOI: 10.21303 / 2461-4262.2022.002243. (**Scopus**).

39. **Zubko, V.**, Sirenko, V., Kuzina, T., Onychko, V., Sokolik, S., Roubik, H., Koszel, M., Shchur, T. Modeling Wheat Grain Flow During Sowing Based on the Model of Grain with Shifted Center of Gravity. *Agricultural Engineering*. 2022, Vol. 26, No.1, P. 25-37. DOI: 10.2478/agriceng-2022-0003. (**Scopus**).
40. Shelest, M., Kalnaguz, A., Datsko, O., Zakharchenko, E., **Zubko, V.** System of pre-sowing seed inoculation *Scientific Horizons*, 2023, 26(7), pp. 140–148. <https://doi.org/10.48077/scihor7.2023.140>. (**Scopus**).
41. Wang, X., Onychko, V., **Zubko, V.**, Wu, Z., Zhao, M. Sustainable production systems of urban agriculture in the future: a case study on the investigation and development countermeasures of the plant factory and vertical farm in China *Frontiers in Sustainable Food Systems*, 2023, 7. <https://doi.org/10.3389/fsufs.2023.973341> WoS.
42. **Zubko, V.**, Khvorost, T., Melnyk, V., Pankova, O., Kovalenko, Yu. Research on the influence of disking conditions on the quality indicator. *Bulletin of Sumy National Agrarian University. Series "Mechanization and automation of production processes"*, issue 1 (51), 2023.- p. 30-36.
43. **Zubko, V.**, Tarellyk, V., Mikulina, M., Khvorost, T., Polyvany A. Change in soil resistance value during agricultural work in crop production. *Bulletin of Sumy National Agrarian University. Series "Mechanization and automation of production processes"*, issue 2 (52), 2023.- p. 28-35.
44. **Zubko, V.**, Khvorost, T., Melnyk, V., Omelchenko, E., Kovalenko, Yu., Teslenko, O. Justification of the need for a fleet of machinery for growing grain and leguminous crops in structural units of the DPTNZ with an area of 300–500 hectares. *Bulletin of Sumy National Agrarian University. Series "Mechanization and automation of production processes"*, issue 3 (53), 2023.- p. 40-47.
45. Loboda, V., **Zubko, V.**, Khursenko, S., Kravchenko, V., Chepizhnyi, A., Sarzhanov, B. Mass Spectrometric Study of the Chemical Composition of the Gas Environment in the Zone of Electrosark Alloying *Journal of Nano- and Electronic Physics*, 2023, Vol. 15 No 2, pp. 02028-1 - 02028-4 DOI: 10.21272/jnep.15(2).02028. (**Scopus**).
46. Shelest, M., Kalnaguz, A., Datsko, O., Zakharchenko, E., & **Zubko, V.** (2023). System of pre-sowing seed inoculation. *Scientific Horizons*, 2023, Vol. 26(7), pp. 140-148. doi: 10.48077/scihor7.2023.140. (**Scopus**).
47. Loboda, V., **Zubko, V.**, Khursenko, S., Kravchenko, V., Chepizhnyi, A. X-Ray Spectral Microanalysis of Copper-Nickel Thin Films Alloys *Journal of Nano- and Electronic Physics*, 2023, Vol. 15 No 5, pp. 05014-1 - 05014-5 doi.org/10.21272/jnep.15(5).05014. (**Scopus**).
48. Tarellyk, V., Gaponova, O., Melnyk, V., **Zubko, V.**, Okhrimenko, V., Tkachenko, A. The Surfaces Properties of Steel Parts with Wear-Resistant Coatings of the 1M and 90% BK6 + 10% 1M Composition Applied by the Method of Electrosark Alloying with the Use of Special Technological Environments. Pt. 1. The Strengthened-Surfaces' Structural State Features (2023) *Metallofizika i Noveishie Tekhnologii* 45(5), c. 663-686.
49. Loboda, V., **Zubko, V.**, Khursenko, S., Kravchenko, V., Chepizhnyi, A. ORBITRON PUMP WITH NITROGEN CRYOPANEL (2024) *Problems of Atomic Science and Technology* 2024(1), p. 38-43. (**Scopus**).
50. **Zubko, V.**, Hovorost, T., Teslenko, O., Barabash, G., Omelchenko, E., Romanovsky, M. Research on the organization and performance of mechanized technological operations in plant growing. *Bulletin of Sumy National Agrarian University. Series "Mechanization and automation of production processes"*, issue 1 (55), 2024.- p. 37-45. <https://doi.org/10.32782/msnau.2024.1.5>
51. Patent Digging working body of a potato harvester: pat. 155856 Ukraine: A01D 17/00 Yu.I. Semirnenko, **V.M. Zubko**, S.L. Semirnenko, T.V. Khvorost — No. u 2023 02620; appl. 05/30/2023; publ. 04/17/2024, Bull. No. 16.
52. **Zubko, V.**, Hovorost, T., Teslenko, O., Romanovsky, M., Guz, O. Effectiveness of the use of drones when using pesticides, herbicides and growth regulators. *Bulletin of Sumy National Agrarian University. Series "Mechanization and automation of production processes"*, issue 2 (56), 2024.- p. 34-42. <https://doi.org/10.32782/msnau.2024.2.5>
53. Chepyzhny, A., **Zubko, V.**, Kovalenko, V., Shutko, V. Determination of the transfer resistance coefficient of modern agricultural machinery on various agro-like agrofons. *Bulletin of Sumy National Agrarian University. Series "Mechanization and automation of production processes"*, issue 3 (57), 2024.- p. 64-73. <https://doi.org/10.32782/msnau.2024.3.9>