



Name	Olena Vysotska
Position, Department/Faculty	Head of the Department of Radioelectronic and Biomedical Computerized Means and Technologies (502) / Faculty of Radio Electronics, Computer Systems and Infocommunications
Academic Degree, Academic Title	Doctor of Technical Sciences, Professor
Email:	o.vysotska@khai.edu
Scopus Author ID:	ID: 57193325956
Web of Science ResearcherID:	ResearcherID: V-3345-2017
ORCID iD:	ID: 0000-0003-3723-9771
Google Scholar:	https://scholar.google.com.ua/citations?hl=ru&user=xO5xCg8AAAAJ
ResearchGate:	

EDUCATION:

Basic education (university, major, year of graduation):

National Aerospace University «Kharkiv Aviation Institute»	
1982-1988pp.	Specialty - automated control systems, qualification - engineer - systems technician, honours degree

Postgraduate/Doctoral studies:

Kharkiv Institute of Radio Electronics	
1996	Candidate of Technical Sciences, specialty: 05.13.02 - mathematical modeling in scientific research.
Institute of Information Technologies and Systems of the National Academy of Sciences of Ukraine	
2015	Doctor of Technical Sciences, specialty: 05.13.09 - medical and biological informatics and cybernetics.

Additional training, certification programs:

2014	GlobalLogic, Certificate from the advanced training program «.NET/MVC Base Camp»
2016	Wyższa Szkoła Humanitas w Sosnowcu, Poland, advanced training course «Information system in medicine and healthcare management», Certificate №41/BWZZ/2016, Information system in medicine and health care management, issued 02.10.2016
2019	Expert in accreditation of educational programs: online training. Certificate № a877c75a902b48cda802dc188d1be36a, issued 08.10.2019 p.
2021	Advanced training at the National Aerospace University "Kharkiv Aviation Institute", Certificate of advanced training ПК 02066769 / 000824 – 21, Department of Postgraduate Education of the National Aerospace University "Kharkiv Aviation Institute".
2023	"Corruption-off: How to Combat Corruption Risks in Higher Education." Certificate №95b6915c-c3b9-4430-bb62-a2011d870221, issued

	22.10.2023
2024	Academic Integrity: An Online Course for Teachers. Certificate № a175736cb0984dde994e6c9484ab19f2, issued 13.04.2024
2024	Biorisk Management in the Laboratory. Certificate № e54a9ac22f234acdb90afdfa0a2c5bb1, issued 01.10.2024 p.
2024	Fundamentals of Bioinformatics. Certificate № 04ad791tc1234461a7b2388866078e93, issued 27.09.2024 p.
2024	Expert in accreditation of educational programs: online training and "How to write a quality report on the results of the accreditation examination of an educational program", Certificate № dd742a6bb2904230b7f68f6953b1f5f2, issued 27.09.2024 p.
2025	Critical Thinking for Educators. Certificate № a9d3fc04b909468cbff7aeefebe56a58, issued 31.01.2025 p.
2025	Logical-structural approach to project application development. Certificate № ac289b4383214a2d837caa4ea48877be , issued 01.02.2025 p.
2025	Medical Enterprise Management. Certificate № 4aafefb5c1a7444c883c05f52924d246 , issued 01.02.2025 p.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Scientific Research Institute of Radioengineering Measurements	
1989 - 1997	Software engineer, research associate
Kharkiv University of Radio Electronics	
1998 - 2011	Senior Lecturer, Associate Professor, Department of Biomedical Engineering
Kharkiv National Medical University	
2009 – 2012	Associate Professor, Part-time Professor of the Department of Medical and Biological Physics and Medical Informatics
Kharkiv University of Radio Electronics	
2012 -2017	Professor of the Department of Biomedical Engineering
2017 – 2019	Professor of the Department of Information Management Systems
National Aerospace University «Kharkiv Aviation Institute»	
2019 - present	Head of the Department of Radioelectronic and Biomedical Computerized Means and Technologies (502)
Ministry of Education and Science of Ukraine	
2020	Deputy Head of the MES expert group for evaluation in the scientific direction "Technical Sciences" (order No. 1111 of September 7, 2020).
National Agency for Higher Education Quality Assurance	
2019 -2024	Member of the Industry Expert Council for specialty 163 "Biomedical Engineering"
2024 - present	Expert in specialties 122 "Computer Science" and 163 "Biomedical Engineering".
National Research Foundation of Ukraine	
2021 - present	expert
L.T.Mala Therapy National Institute of the National Academy of Medical Sciences of Ukraine	



2022 - present	Senior Research Fellow, part-time, Department of Scientific and Organizational Work and Medical Information with the Library
-----------------------	--

Teaching Experience:

26 years.

Experience in International or National Projects:

Kharkiv University of Radio Electronics	
2007-2009	№ 0107U001541, UA, "Research on theoretical and technical principles of human condition assessment, prevention, treatment and rehabilitation", performer of individual sections of the research project
2009-2010	№ 010U007614, UA, "Hardware and software complex for determining molecular mechanisms of development of pathology of the human body and optimizing the treatment process of cardiological diseases of various etiologies", performer of separate sections of the research project
2010-2012	№ 0110U002532, UA, "Research into the theoretical and technical principles of diagnostics, assessment and correction of the medical and social condition of a person", performer of individual sections of the research project
2013-2014	№ 0112U007750, 0113U000359, UA, "Development of a database of diffuse and potential parameters of the formation of toxicity sources in large areas of hard-to-reach areas", executor of individual sections of the research project
2013-2015	№0113U000362, UA, "Theoretical justification and creation of the concept of diagnostics and prediction of the functional state of a person using information technologies", executor of the research section
2015-2016	№0115U002437, UA, "Development of information technology for identifying systemic adaptive capabilities of adolescents with cardiac pathology", responsible executor of the research project
2017-2019	№0117U002527 "Development of technology for remote registration of threats to the biosafety of drinking and other types of water use in extreme situations", head of research

RESEARCH ACTIVITIES:

Main Research Areas:

Medical cybernetics, decision-making in medicine, medical statistics, medical information technologies and systems.

Number of Publications (Scopus, WoS, others):

Over 500 publications, 55 patents and copyright certificates.

Monographs, Textbooks:

1. Forecasting the state of a biological object using information technologies: monograph / O. V. Vysotska, A. I. Pecherska, A. P. Porvan; National Aerospace University named after M. Ye. Zhukovsky "Kharkiv. Aviation Institute". - Kharkov: Madrid Printing House, 2019. – 150 p. – ISBN 978-617-7683-78-9
2. Bioproduction Processes Analysis & Epidemiological Threats Forecasting: monography / Olena Vysotska, Anna Pecherska, Lyubov Rysovana, Andrii Porvan; LAP LAMBERT Academic Publishing,





2019. – 208 p. – ISBN 978-620-0-23192-5

Participation in Scientific Conferences:

1. Visotska O., Porvan A., Kovtun O. Determination of Public Health Status of the Population. Materials of the International Scientific Internet Conference “Information Society: Technological, Economic and Technical Aspects of Formation” WSZIA w Opolu, Opole, Poland, May 14-15, 2024 / editors: O. Patryak et al. NGO “Scientific Community”, WSZIA w Opolu., Ternopil: FO-P Shpak V.B.. P.141-143.
2. Kyzyllov I. R., Vysotska O. V., Porvan A. P. Method of integral assessment of the quality of human life Electric power, electromechanics and technologies in the agricultural sector: [Electronic resource]: materials of the International Scientific and Practical Conference, November 6, 2024 / State Biotechnological Univ. – Kharkiv, 2024. –p. 206 – 207.– Electronic text data.
3. Vysotska O. In Modern information technologies in the professional activity of a psychologist. Electrical power engineering, electromechanics and technologies in the agricultural and industrial complex: [Electronic resource]: materials of the International Scientific and Practical Conference, November 6, 2024 / State Biotechnological University – Kharkiv, 2024. –p.184-185 – Electronic text data.
4. Yu. Bespalov , O. Vysotska , A. Trunova , I. Kyzyllov Assessing the risk of the animals numbers outbreak by system parameters of their protective colors. Current issues of biotechnology, ecology and nature management, 2024. Kharkiv: DBTU, pp. 59-61.
5. O. Vysotska, A.Porvan, V.r Babiyuk Development of the method for determining the composition of the human body. Materials of the International Scientific Internet Conference “Information Society: Technological, Economic and Technical Aspects of Formation” (issue 85): (Ternopil, Ukraine, Opole, Poland, February 15-16, 2024)/ed.: O. Patryak et al. NGO “Scientific Community”, WSZIA w Opolu. Ternopil: FO-P Shpak VB pp. 82-85.
6. Vysotska O. V., Trunova A. I., Fomin E. S. Method of analyzing the occlusion of human teeth. Electric power, electromechanics and technologies in the agricultural and industrial complex: [Electronic resource] : materials of the International Scientific and Practical Conference, November 6, 2024 / State Biotechnological Univ. – Kharkiv, 2024. –p.186-187
7. Trunova A.I., Vysotska O.V., Biletska S.E. Development of a software tool for diagnosing organic brain damage in post-traumatic stress disorders in combatants. State, achievements and prospects of information systems and technologies / Materials of the XXIV All-Ukrainian Scientific and Technical Conference of Young Scientists, Postgraduate Students and Students. Odesa, April 18-19, 2024 - Odesa, ONTU Publishing House, p. 475-477.
8. Vysotska O. V., Porvan A. P., Boldyrev V. I., Kharkiv. Automation of the process of determining chronic heart failure. XXII International Scientific and Practical Conference Information Technologies: Science, Engineering, Technology, Education, Health MicroCAD-2024 p.234-235.

TEACHING ACTIVITIES:

Courses Taught:

Medical information systems, Systems analysis and decision-making in medicine, Biomedical ethics and professional terminology, Fundamentals of scientific research, Ergonomics of biomedical devices, Evolutionary bioinformatics, Introduction to the profession.

Author Courses, Academic Programs:

-



Methodological Materials, Textbooks:

1. Bioethics and professional terminology: a textbook / O. V. Vysotska, A. I. Trunova. Kharkiv: National Aerospace University named after M. E. Zhukovsky "Kharkiv. Aviation Institute", 2021. 88 p.
2. Vysotska, O. V., Trunova A. I. Biosafety and biosafety of medical hardware research [Text]: a textbook for practical work / O. V. Vysotska, A. I. Trunova. – Kharkiv: National Aerospace University named after M. E. Zhukovsky "Kharkiv. Aviation Institute", 2024. – 106 p.
3. Radzishavska E. B., Vysotska O. V. Medical information systems: world experience: a textbook for students of higher medical education. Kharkiv: KhNMU, 2024. 100 p.

GRANTS AND PROJECTS:

Participation in International and National Projects:

Kharkiv University of Radio Electronics	
2007-2009	№ 0107U001541, UA, "Research on theoretical and technical principles of human condition assessment, prevention, treatment and rehabilitation", performer of individual sections of the research project
2009-2010	№ 010U007614, UA, "Hardware and software complex for determining molecular mechanisms of development of pathology of the human body and optimizing the treatment process of cardiological diseases of various etiologies", performer of separate sections of the research project
2010-2012	№ 0110U002532, UA, "Research into the theoretical and technical principles of diagnostics, assessment and correction of the medical and social condition of a person", performer of individual sections of the research project
2013-2014	№ 0112U007750, 0113U000359, UA, "Development of a database of diffuse and potential parameters of the formation of toxicity sources in large areas of hard-to-reach areas", executor of individual sections of the research project
2013-2015	№0113U000362, UA, "Theoretical justification and creation of the concept of diagnostics and prediction of the functional state of a person using information technologies", executor of the research section
2015-2016	№0115U002437, UA, "Development of information technology for identifying systemic adaptive capabilities of adolescents with cardiac pathology", responsible executor of the research project
2017-2019	№0117U002527 "Development of technology for remote registration of threats to the biosafety of drinking and other types of water use in extreme situations", head of research

Grants, Scholarships, Academic Mobility Programs:

-

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:

Corresponding Member of the Academy of Sciences of Applied Radio Electronics.

Distinctions, Awards, Prizes:

2010	Diploma of the Ministry of Education and Science of Ukraine to the scientific
-------------	---

	supervisor of the winners of the All-Ukrainian competition of student scientific works in natural sciences, engineering and humanities 2009/2010 academic year.
2010	Gratitude from the Kharkiv City Council Department for Family and Youth Affairs for assistance in preparing scientific work for the XV city competition of student works and education of young scientists.
2015	Diploma of the Chairman of the Kharkiv Regional Council of the Society of Inventors and Rationalizers for active inventive activity, high level of professional skill and education of young innovators.
2017	Diploma of the Khmelnytskyi National University for assistance in conducting an all-Ukrainian competition in the format of openness and transparency of the SNR evaluation and active participation in the work of the expert committee for reviewing works
2018	Gratitude from the Ministry of Education and Science of Ukraine for many years of conscientious work, significant personal contribution to the training of highly qualified specialists, and fruitful scientific and pedagogical activities.
2018	Diploma of Honor from the Kharkiv National University of Radio Electronics for a significant contribution to the development of scientific and innovative activities of the university
2018	Diploma of the Kharkiv National University of Radio Electronics "For high professionalism and active participation in the work of the expert commission for independent evaluation of student works of the 2nd round of the All-Ukrainian competition on "Information Systems and Technologies"
2019	Winner of the "Icarus Khai" professional skills competition in the "Best Scientist" nomination.
2019	Diploma of Honor from the Kharkiv State Administration for significant personal contribution to the implementation of the tasks of modern state policy in the field of education.
2019	Diploma of Honor from the Kharkiv National University of Radio Electronics for a significant contribution to the development of the university's scientific and innovative activities.
2020	Winner of the professional skills competition "Icarus Khai" in the nomination "Best teacher of fundamental and humanitarian disciplines"
2020	Diploma of the Ministry of Education and Science of Ukraine for conscientious work, significant personal contribution to the training of highly qualified specialists and fruitful scientific and pedagogical activity
2021	Diploma of the Khmelnytskyi National University "For the high level of preparation of the winners of the 2nd round of the All-Ukrainian Competition of Student Scientific Papers"
2024	Gratitude from the National Agency for Quality Assurance in Higher Education for significant contribution to the development of the quality system of higher education in Ukraine as a member of the Sectoral Expert Council in the field of knowledge 16 Chemical Engineering and Bioengineering
2024	Winner of the professional skills competition "Icarus Khai" in the nomination

	"Best Head of Department"
2024	Diploma of the Kharkiv Regional Council for many years of work and personal contribution to the development of the material, technical, scientific and educational base of the National Aerospace University "Kharkiv Aviation Institute"
2025	Diploma of the Honor of the Kharkiv Regional State Administration for significant personal contribution to the implementation of the tasks of modern state policy in the field of education, conscientious work and a high level of professional skills

Membership in Professional Associations:

Member of the Coordinating Council of the Ukrainian Association of Biomedical Engineers and Technologists.

INTERNATIONAL ACTIVITIES:

Internships:

2016	« International internship «Information system in medicine and healthcare management», Wyższa Szkoła Humanitas w Sosnowcu, Poland.
-------------	--

Cooperation with Foreign Universities:

Wildau-Kharkiv IT Bridge II, Wildau Technical University of Applied Sciences, Germany.

Teaching/Lecturing Abroad:

Guest Professor in the DAAD programme "Digital Ukraine: Ensuring academic success in times of crisis (2023)", elective course "Medical Informatics Systems" 6 CP, in summer semester 2023, Wildau-Kharkiv IT Bridge II, Wildau Technical University of Applied Sciences, Germany.

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Vysotska, O., Falova, O., Rysovana, L., Platyniuk, O., Bazhenov, O. (2024). Woman's self-realization in the system and structure of family relations. *Wiadomości Lekarskie*, 77 (12), 2394–2402.
2. Georgiyants, M. A., Vysotska, O. V., Posternak, H. I., Yurchenko, O. M., Liashok, A. L., Strashnenko, H. M., Bohuslavskaya, N. M. (2023). The rationale for the choice of preventive intraoperative anesthesia for uterine curettage in patients with individual intolerance to amide anesthetics. *EMERGENCY MEDICINE*, 19 (5), 332–338.
3. Podavalenko, A. P., Georgiyants, M. A., Vysotska, O. V., Korzh, O. M., Porvan, A. P., Maslova, V. S. et al. (2023). The influence of air pollutants on COVID-19 severity in the administrative and industrial city of Kharkiv. *EMERGENCY MEDICINE*, 19 (6), 427–436.
4. Georgiyants, M. A., Vysotska, O. V., Posternak, H. I., Yurchenko, O. M., Liashok, A. L., Strashnenko, H. M., Bohuslavskaya, N. M. (2023). The rationale for the choice of preventive intraoperative anesthesia for uterine curettage in patients with individual intolerance to amide anesthetics. *EMERGENCY MEDICINE*, 19 (5), 332–338.
5. Nosov, K. V., Bepalov, Y. G., Klochko, T. O., Vysotska, O. V. (2023). Modeling the Structure of an Aggregation of Toxic Cyanobacteria When Planning Their Elimination from the Air. *Lecture Notes in Networks and Systems*, 313–322.
6. Kolesnikova, O., Vysotska, O., Potapenko, A., Radchenko, A., Trunova, A., Virstyuk, N. et al.



(2023). Cardiometabolic risk prediction in patients with non-alcoholic fatty liver disease combined with subclinical hypothyroidism. *Informatyka, Automatyka, Pomiary w Gospodarce i Ochronie Środowiska*, 13 (2), 64–68.

7. Dudar, T., Titarenko, O., Nekos, A., Vysotska, O., & Porvan, A. (2021). Some aspects of environmental hazard due to uranium mining in Ukraine. *Journal of Geology, Geography and Geoecology*, 30(1), 34-42. <https://doi.org/https://doi.org/10.15421/112104>.

8. T. Dudar, O. Titarenko, A. Nekos, & O. Vysotska, Porvan . (2020). Geospatial Modeling of Radon-Prone Areas. *Nuclear and Radiation Safety*, 3 (87), 28-37. doi: 10.32918/nrs.2020.3(87).04.

Books, Chapters in Collective Monographs:

1. Forecasting the state of a biological object using information technologies: monograph / O. V. Vysotska, A. I. Pecherska, A. P. Porvan. Kharkiv: "Madrid Printing House", 2019. 149 p.

2. Bioproduction processes analysing and epidemiological threats forecasting / O. Vysotska, A. Porvan, A. Pecherska, Y. Bespalov, O. Dovnar, L. Rysovana. // Lap Lambert Academic Publishing, 2019. 208 p. ISBN-13: 978-620-0-23192-5.

Links to Citation Database Profiles:

https://scholar.google.com/citations?hl=ru&user=xO5xCg8AAAAJ&utm_source=chatgpt.com

<https://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=57193325956&zone=>

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian

IT Skills:

I have experience in using modern information technologies in scientific research.

Social and Community Activities:

1. Youth work, mentoring.

2. Member of the organizing committee for the implementation of rounds of the Program for interlaboratory comparisons of measurement results in determining biochemical indicators and hemoglobin.

3. Member of the editorial board of the scientific publication "Information Processing Systems", Ivan Kozhedub Kharkiv National Air Force University, Kharkiv, Ukraine ISSN: 1681-7710.

4. Member of the editorial board of the scientific publication "Eastern-European Journal of Enterprise Technologies", indexed in world scientometric databases and systems, including Scopus.

5. Member of the editorial board of the scientific publication "Radioelectronic and Computer Systems".

6. Member of the editorial board of the scientific publication "Biomedical Engineering and Technology".

