



<b>Name</b>	Yuliia Voloshyn
<b>Position, Department/Faculty</b>	Associate Professor, Department of Radioelectronic and Biomedical Computerized Means and Technologies / Faculty of Radio Electronics, Computer Systems and Infocommunications
<b>Academic Degree, Academic Title</b>	PhD
<b>Email:</b>	y.voloshyn@khai.edu
<b>Scopus Author ID:</b>	57219056789
<b>ORCID iD:</b>	0000-0003-4138-6731
<b>Google Scholar:</b>	<a href="https://scholar.google.com/citations?user=JBK BtTMAAAAJ&amp;hl=uk">https://scholar.google.com/citations?user=JBK BtTMAAAAJ&amp;hl=uk</a>

## EDUCATION:

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

National Aerospace University «Kharkiv Aviation Institute»	
2011 – 2015	Bachelor, specialty "Radioelectronic devices".
2015 – 2017	Master, specialty "Radioelectronic devices and facilities".

### Postgraduate/Doctoral studies:

National Aerospace University «Kharkiv Aviation Institute»	
2017 – 2024	PhD in the technical sciences, specialty "Telecommunication and radio electronics "

### Additional training, certification programs:

2021	English level B2, International Test of English Proficiency, iTEP International (Kharkiv, Ukraine).
------	---

## WORK EXPERIENCE:

### Professional Career (Workplace, Years, Position):

2018 – 2022	Assistant, Department of Radioelectronic and Biomedical Computerized Means and Technologies, National Aerospace University «Kharkiv Aviation Institute»
2022 – present	Assistant professor, Department of Radioelectronic and Biomedical Computerized Means and Technologies, National Aerospace University «Kharkiv Aviation Institute»

### Teaching Experience:

My teaching activities include conducting practical classes in a range of subjects, such as Artificial Organs and Implants, Comprehensive Course Project in Electronics and Circuit Design, Hardware Methods of Biomedical Research, Methods of Biomedical Research, Biophysics and Biomechanics, Nanotechnologies in Radioelectronics, Biology, and Medicine, Examination and Certification of Biomedical Devices, Sensors and Measurement Transducers, Mathematical-Technical Elective:

Probability Theory in Medicine, and Hardware Tools for Biomedical Research (Course Project).

**Experience in International or National Projects:**

-

**RESEARCH ACTIVITIES:**

**Main Research Areas:**

- Information-wave technologies in biology and medicine
- Methods, models, and tools for the generation of electromagnetic fields in the radio frequency range

**Number of Publications (Scopus, WoS, others):**

Over the past five years, she has published 43 scientific works, including 4 articles indexed in Scopus, 7 articles in peer-reviewed professional journals and scientific collections, 32 publications in conference proceedings (abstracts and presentations), 1 utility model patent, as well as 4 educational and methodological manuals in co-authorship.

**Monographs, Textbooks:**

-

**Participation in Scientific Conferences:**

Participated in numerous national and international scientific conferences over the past five years, where presented research findings in the fields of information-wave technologies, biomedical engineering, and electromagnetic field applications. Basic contributions include oral presentations and abstracts published in conference proceedings, reflecting the results of own research and in collaboration with academic colleagues.

**TEACHING ACTIVITIES:**

**Courses Taught:**

Conducted practical classes in Course Project in Electronics and Circuit Design, focusing on principles of electronics and applied circuit theory. Taught Biometry, covering methods of biomedical measurement, data interpretation, and application in research.

Delivered lectures and supervised practical classes in Examination and Certification of Biomedical Devices, emphasizing regulatory requirements, safety standards, and quality assurance procedures.

**Author Courses, Academic Programs:**

There is « Examination and Certification of Biomedical Devices».

**Methodological Materials, Textbooks:**

Sensors and Measurement Transducers in Radioelectronics: A laboratory practical manual / S.M. Kulish, Y.A. Voloshyn. – Kharkiv: National Aerospace University named after M.E. Zhukovsky “Kharkiv Aviation Institute”, 2021. – 40 p.

Methods of Biomedical Research [Electronic resource]: A manual for practical work / V.P. Oliynyk, Y.A. Voloshyn. – Kharkiv: National Aerospace University named after M.E. Zhukovsky “Kharkiv Aviation Institute”, 2024. – 78 p.

Artificial Organs and Implants [Electronic resource]: A manual for practical work / S.M. Kulish, Y.A. Voloshyn. – Kharkiv: National Aerospace University named after M.E. Zhukovsky “Kharkiv Aviation Institute”, 2024. – 61 p.

Fundamentals of Technology and Design of Biomedical Devices: A manual for practical work / V.M.



Oliylyk, S.M. Kulish, V.P. Oliylyk, Y.A. Voloshyn [et al.]; Ministry of Education and Science of Ukraine, National Aerospace University named after M.E. Zhukovsky “Kharkiv Aviation Institute”. – Kharkiv: National Aerospace University named after M.E. Zhukovsky “Kharkiv Aviation Institute”, 2023. – 152 p. – <http://library.khai.edu/library/fulltexts/metod/>

Fundamentals of Technology and Design of Biomedical Devices: A manual for performing the comprehensive course project / M.F. Babakov, Y.A. Voloshyn, O.M. Zinchenko, S.M. Kulish [et al.]; Ministry of Education and Science of Ukraine, National Aerospace University named after M.E. Zhukovsky “Kharkiv Aviation Institute”. – Kharkiv: National Aerospace University named after M.E. Zhukovsky “Kharkiv Aviation Institute”, 2023. – 79 p. – <http://library.khai.edu/library/fulltexts/metod/>

## **GRANTS AND PROJECTS:**

### **Participation in International and National Projects:**

-

### **Grants, Scholarships, Academic Mobility Programs:**

-

## **PROFESSIONAL ACHIEVEMENTS AND AWARDS:**

### **Honorary Titles:**

-

### **Distinctions, Awards, Prizes:**

-

### **Membership in Professional Associations:**

Member of the public organization «All-Ukrainian Association of Biomedical Engineers and Technologists».

## **INTERNATIONAL ACTIVITIES:**

### **Internships:**

Completed international scientific internships, including a Certificate of Completion of an International Internship lasting 180 hours (NR 4346/MSAP/2023, issued on 30.10.2023) on the topic “New and Innovative Teaching Methods” at the Malopolska School of Public Administration, Krakow University of Economics (Krakow, Poland).

Received a Certificate of International Professional Development lasting 180 hours on “Internationalization of Education. New and Innovative Teaching Methods. Implementation of International Educational Projects within the EU Financial Perspective”, issued on 01.12.2023.

### **Cooperation with Foreign Universities:**

-

### **Teaching/Lecturing Abroad:**

-

## **SELECTED PUBLICATIONS:**

- 1) Assessment of the parameters of the spark discharge generator for compliance with sanitary



standards /Yu. A. Voloshyn, S. M. Kulish// Telecommunications and Radio Engineering, Volume 79, 2020 Number 12. – P. 1095-1107.

2) Voloshyn, Y., Kulish, S., Oliinyk, V., & Frolov, A. (2021). Study of the effects of ultra-low intensity electromagnetic fields on biological objects. Technology Audit and Production Reserves, 6(1(62), 19–26. <https://doi.org/10.15587/2706-5448.2021.244643>

3 Kuznetsova K., Eremenko Z., Kulish S., Voloshyn Y., Metasurface design for determination of protein concentration in enzymatic reaction mixture. Biomedical Engineering and Technology. Issue10(2), 2023 23-10. <https://doi.org/10.20535/2617-8974.2023.10.282202>

4) Олійник В., Теличко Д., Волошин Ю., Куліш С., Гібридна система енергоживлення апарату «ШТУЧНЕ СЕРЦЕ» Biomedical Engineering and Technology. Issue10(2), 2023-09-28. DOI: <https://doi.org/10.20535/2617-8974.2023.11>

5) Oliinyk, V. P., Voloshyn, Y. A., Zinchenko, O. M, Kulish, S. M, Oliinyk, V. M. (2023). Utilization of gas discharge in alternating current for the detection and stimulation of biologically active points. Biomedical Engineering and Technology Issue 11(3), 2023. 45–55. doi:<https://doi.org/10.20535/2617-8974.2023.11.288113>

6) Chugai, O. M., Oliinyk, S. V., Voloshyn, Yu. A., Kulish, S. M., Luniov, I. V., & Poluboiarov, O. O. (2025). Effect of microwave radiation on the dielectric properties of Cd<sub>1-x</sub>Zn<sub>x</sub>Te crystals. Low Temperature Physics, 51(11), 1472–1477.

#### **Books, Chapters in Collective Monographs:**

Y. A. Voloshyn, S. M. Kulish, Assessment of the parameters of the spark discharge generator for compliance with health standards (chapter 9) Scientific thought development: Economics, Management and Marketing, History, Art History and Culture, Medicine, Biology and Ecology. Monographic series «European Science». Book 31. Part 4. 2024. pp 119-131

#### **Links to Citation Database Profiles:**

<https://library.khai.edu/ua/authors/voloshin-yulyyaya-andryayavna>

#### **ADDITIONAL INFORMATION:**

##### **Language Proficiency:**

<b>LANGUAGE SKILLS</b>	
English	Intermediate of written and oral proficiency
Ukrainian	Mother's tongues

##### **IT Skills:**

Microsoft Office / Microsoft Excel / Social Media / Zoom / Google Drive / Microsoft Powerpoint / Skype / Programming languages (C++, Python)

##### **Social and Community Activities:**

I am the curator of academic groups for full-time study.

