



Name	Yuriy Vorobyov
Position, Department/Faculty	Professor, Department of Aircraft Manufacturing Technology / Faculty of Aircraft Engineering
Academic Degree, Academic Title	Doctor of Engineering Sciences, Professor
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Scopus Author ID:	[57205383504]
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ORCID ID:	[0000-0001-6401-7790]
Google Scholar:	[https://scholar.google.com.ua/citations?hl=r&user=ooXT1Z0AAAAJ]
ResearchGate:	[https://www.researchgate.net/profile/Iurii-Vorobiov-2]

EDUCATION:

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

1986: Kharkiv Aviation Institute, specialty "Aircraft Manufacturing Technology".

Qualification: Mechanical Engineer.

Diploma with honors Г-II No. 040257, issued on February 11, 1986, by the Kharkiv Aviation Institute.

Postgraduate/Doctoral studies:

1988 – 1991: Postgraduate studies at the Department of Aircraft Manufacturing Technology.

2004: Defense of the Candidate of Sciences dissertation a thesis on specialty "Aircraft Manufacturing Technology"

Candidate of Sciences Diploma ДК No. 023737, issued on May 12, 2004, by the Higher Attestation Commission Ukraine.

2021: Defense of the Doctor of Engineering Sciences dissertation a thesis on specialty "Flying Vehicles Design, Production Technology and System Testing"

Doctor of Sciences Diploma ДД No. 010896, issued on February 09, 2021, by the Ministry of Education and Science of Ukraine.

Academic title of Associate Professor of the Department of Aircraft Manufacturing Technology, Certificate 02ДЦ No. 013016, issued on June 15, 2006, by the Ministry of Education and Science of Ukraine.

Academic title of Professor of the Department of Aircraft Manufacturing Technology, Certificate АП No. 005740, issued on December 20, 2023, by the Ministry of Education and Science of Ukraine.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Department of Aircraft Manufacturing Technology, 1986-1988, Engineer, Senior Engineer.



Department of Aircraft Manufacturing Technology, 1988-1991, postgraduate Student.
Department of Aircraft Manufacturing Technology, 1992-1996, Head of the educational laboratory.
Kharkiv Aviation Institute, 1996-2001, Chef Engineer.
Department of Aircraft Manufacturing Technology, 2001-2004, Senior Lecturer.
Department of Aircraft Manufacturing Technology, 2004-2013, Associate Professor.
Department of Aircraft Manufacturing Technology, 2013-2014, Professor.
Department of Automobiles and Transport Infrastructure, 2014-2018, Professor.
Ukrainian Research Institute of Aviation Technologies, 2016-2018, Leading Researcher.
National Aerospace University "Kharkiv Aviation Institute", 2015-2016, Dean of Aircraft Engineering Faculty.
National Aerospace University "Kharkiv Aviation Institute", 2018-2021, Vice-Rector.
Department of Aircraft Manufacturing Technology, 2021-present, Professor.

Teaching Experience:

Total academic and teaching experience: 28 years.

Experience in International or National Projects:

2006-2007. Phantom Works, Boeing Company, Topic: "Composite Laminates Titanium Riveting Technology Development with Process Parameters Optimization". Function: Project manager

2010. Flight Design GmbH. Topic: "Laboratory testing of primer and paint adhesion on aluminum alloy D16AT and 2024T3 samples". Position: Project Manager

2012-2015. FP7 Project No. 294311. Topic: "Integrating the National Aerospace University "KhAI" into ERA." Position: Project Manager.

2015. Motor Sich AG, Zaporozhe (Engine Plant). Topic: "Production of composite helicopter rotor blades". Position: Project Manager and Scientific Advisor.

2015-2016. Ministry of Education and Research of Ukraine. Topic: "Development of a scientific basis for the development of manufacturing systems for the production of highly stressed joints in transportation vehicles". Position: Project Manager.

PJSC "Kharkov Vehicle Manufacturing Plant", Kharkov. Topic: "Certification of Products and Services". Position: Project Manager and Scientific Advisor.

2019-2021. Antonov Company. Topic: "Lean Production in Aircraft Construction". Position: Project Manager.

2023-2024. Ministry of Education and Research of Ukraine. Topic: "Development of a digital model of a two-seater light aircraft and a corresponding flight demonstrator for primary pilot training". Position: Project Manager.

2025-2027. Ministry of Education and Research of Ukraine. Topic: "Cataloging digital mock-ups and UAV doubles of the aggressor country for ontological engineering of aviation complexes and intelligence systems". Position: Project Manager.



RESEARCH ACTIVITIES:

Main Research Areas:

Assembly and installation work in aircraft manufacturing, technical preparation of aircraft production, simulation of production processes, ontological systems of decision-making support.

Number of Publications (Scopus, WoS, others):

1. Vorobyov, Yu. Development of Ontological Decision Making System of the Negotiation Process on Cooperation Production in Aircraft / Yu. Vorobyov, I. Shostak, S. Kryvova, A. Zubanyov // Сучасний стан наукових досліджень та технологій в промисловості. / ХНУРЕ – Харків, 2021. – № 3(17). – С. 5–12. DOI: <https://doi.org/10.30837/ITSSI.2021.17.005>.
2. Maiorova, K., Vorobiov, I., Boiko, M., Suponina, V., Komisarov, O. (2021). Implementation of reengineering technology to ensure the given geometric accuracy of the light aircraft keel. Eastern-European Journal of Enterprise Technologies, 6 (1 (114)), 6–12. doi: <https://doi.org/10.15587/1729-4061.2021.246414>.
3. Vorobiov, I., Maiorova, K., Voronko, I., Boiko, M., Komisarov, O. (2022). Creation and Improvement Principles of the Pneumatic Manual Impulse Devices. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical Engineering – 2021. ICTM 2021. Lecture Notes in Networks and Systems, vol 367. Springer, Cham. pp. 178–191. https://doi.org/10.1007/978-3-030-94259-5_17.
4. Maiorova, K., Vorobiov, I., Andrieiev, O., Lupkin, B., & Sikulskiy, V. (2022). Forming the geometric accuracy and roughness of holes when drilling aircraft structures made from polymeric composite materials. Eastern-European Journal of Enterprise Technologies, 2/1 (116), 71–80. <https://doi.org/10.15587/1729-4061.2022.254555>.
5. V. Sikulskiy, K. Maiorova, Iu. Vorobiov, P. Fomichev, S. Myronova. Convergence technology of vehicle parts surface finishing. Transport problems 2022. XIV International Scientific Conference, Katowice – Silesia, 29 June – 1 July 2022, Katowice, Vol. 18, is. 1, 2023, pp. 117–127. DOI: 10.20858/tp.2023.18.1.10.
6. Sikulskiy, V., Maiorova, K., Vorobiov, I., Boiko, M., & Komisarov, O. (2022). Implementation of reengineering technology to reduce the terms of the technical preparation of manufacturing of aviation technology assemblies. Eastern-European Journal of Enterprise Technologies, 3(1 (117), 25–32. <https://doi.org/10.15587/1729-4061.2022.258550> (Категорія А, SCOPUS, квартиль Q2, SNIP 0,667).
7. Формування вимог до інформаційного супроводу виробництва аерокосмічних виробів для забезпечення їх якості / І. В. Бичков, А. С. Селезньова, К. В. Майорова, Ю. А. Воробйов, В. Т. Сікульський // Авіаційно-космічна техніка і технологія. – 2022. – № 4 (180). – С. 22–35. doi: 10.32620/aktt.2022.4.03. <http://nti.khai.edu/ojs/index.php/aktt/article/view/aktt.2022.4.03/1845>.
8. Lupkin, B., Maiorova, K., Vorobiov, I., Nikichanov, V., Sikulskiy, V. (2023). Study of Drilling Cutting Modes Impact on Shrinkage and Surface Roughness of Holes in Composite Materials. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical Engineering – 2022. ICTM 2022. Lecture Notes in Networks and Systems, vol 657. Springer, Cham. pp. 88–98. DOI: https://link.springer.com/chapter/10.1007/978-3-031-36201-9_8 SCOPUS.



9. Maiorova, K., Sikulskyi, V., Vorobiov, I., Kapinus, O., Knyr, A. (2023). Study of a Geometry Accuracy of the Bracket-Type Parts using Reverse Engineering and additive Manufacturing Technologies. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical Engineering – 2022. ICTM 2022. Lecture Notes in Networks and Systems, vol 657. Springer, Cham, pp. 146–158.
10. Аналіз трибологічних наноматеріалів для підвищення зносостійкості і довговічності механічних контактуючих поверхонь деталей машин і механізмів на основі онтологічної системи підтримки прийняття рішень / В. Т. Сікульський, К. В. Майорова, Ю. А. Воробйов, О. М. Застела, В. В. Агарков // Відкриті інформаційні та комп'ютерні інтегровані технології : зб. наук. пр. / М-во освіти і науки України, Нац. аерокосм. ун-т ім. М. Є. Жуковського «ХАІ». – Х., 2022. – Вип. 96. – С. 97–117.
11. Сікульський В. Т., Майорова К. В., Воробйов Ю. А., Бойко М. М., Комісаров О. Л. (2022). Розробка алгоритмів процесів формоутворення для виготовлення авіаційної техніки при технологічній підготовці виробництва. Авіаційно-космічна техніка і технологія, № 2 (178), с. 64–73. DOI: 10.32620/aktt.2022.2.08
<http://nti.khai.edu/ojs/index.php/aktt/article/view/aktt.2022.2.08/1803/>
12. Огляд механічних властивостей нанокompозитів на предмет їх використання у парах ковзання механізмів авіатехніки / В. Т. Сікульський, К. В. Майорова, О. К. Горлов, Ю. А. Воробйов, В. Л. Малашенко, В. В. Агарков // Відкриті інформаційні та комп'ютерні інтегровані технології : зб. наук. пр. / М-во освіти і науки України, Нац. аерокосм. ун-т ім. М. Є. Жуковського «ХАІ». – Х., 2023. – Вип. 97. – С. 57–79.
13. Аналіз розвитку термоімпульсного методу видалення задирок / О. В. Лосєв, В. Т. Сікульський, А. С. Селезньова, І. В. Бичков, Ю. А. Воробйов, // Авіаційно-космічна техніка і технологія. – 2023. – № 5 (191). – С. 78–86. doi: <https://10.32620/aktt.2023.5.06>.
14. Vorobiov, I., Maiorova, K., Voronko, I., Skyba, O., Komisarov, O. (2024). Mathematical models creation for calculating dimensional accuracy at the construction stages of an analytical standard using the chain method. Technology Audit and Production Reserves, 1/1 (75), 26–34. doi: <https://doi.org/10.15587/2706-5448.2024.297732>.
15. Безплазовий метод конструкторської підготовки виробництва літаків авіації загального призначення / Ю. А. Воробйов, А. М. Гуменний, О. А. Богач // Авіаційно-космічна техніка і технологія. – 2024. – № 5 (199). – С. 53–63. doi: <https://10.32620/aktt.2024.5.06/>

Monographs, Textbooks:

1. Науково-освітні школи Національного аерокосмічного університету ім. М. Є. Жуковського «Харківський авіаційний інститут» [Текст] : монографія / [М. Ф. Бабаков, О. О. Баранов, І. В. Бичков та ін.] ; за заг. ред. М. В. Нечипорука. – Харків : Нац. аерокосм. ун-т ім. М. Є. Жуковського «Харків. авіац. ін-т», 2020. – 400 с.
2. Випускники та співробітники Національного аерокосмічного університету ім. М. Є. Жуковського «Харківський авіаційний інститут» 1930–2020 рр. [Текст] : наук.-попул. видання / [Ю. Г. Андренко, С. А. Арасланов, М. Ф. Бабаков та ін.] ; за заг. ред. М. В. Нечипорука. – Харків : Нац. аерокосм. ун-т ім. М. Є. Жуковського «Харків. авіац. ін-т», 2020. – 1000 с.



Participation in Scientific Conferences:

1. Воробйов, Ю. А. Моделювання процесу безматричного пробивання отворів у трубопровідних системах літаків / Ю. А. Воробйов, К. В. Майорова // Débats scientifiques et orientations prospectives du développement scientifique : collection de papiers scientifiques «ΛΟΓΟΣ» avec des matériaux de la I conférence scientifique et pratique internationale (Vol. 3), Paris, 5 février 2021. Vinnytsia-Paris: Plateforme scientifique européenne & La Fedeltà, 2021. – P. 90–97. DOI 10.36074/logos-05.02.2021.v3.
2. Воробйов, Ю. А. Аналіз тенденцій вітчизняного авіаційного виробництва / Ю. А. Воробйов, І. В. Бичков, К. В. Майорова, О. Л. Комісаров, С. М. Рябіков // Scientific Collection «InterConf», (90): with the Proceedings of the 4 th International Scientific and Practical Conference «Current Issues and Prospects for the Development of Scientific Research» (December 7-8, 2021). Orléans, France: Epi, 2021. – P. 329–333. DOI 10.51582/interconf.7-8.12.2021.038.
3. V. Sikulskiy, K. Maiorova, Iu. Vorobiov, P. Fomichev, S. Myronova. Convergence technology of vehicle parts surface finishing. Transport problems 2022. XIV International Scientific Conference, Katowice – Silesia, 29 June – 1 July 2022, Katowice, 2022, pp. 78–83.
4. Синтез алгоритму формоутворення деталей локальним деформуванням і контролю результатів в реальному часу / А. А. Ребрін, Ю. А. Воробйов // Scientific Practice: Modern and classical Research Methods: VI міжнародна науково-практична конференція (19 липня 2024). Boston, USA, 2024. – P. 329–333. DOI 10.51582/interconf.7-8.12.2021.038.
5. Технічна підготовка виробництва легкого літака / Ю. А. Воробйов, О. А. Богач // Інформаційне суспільство: технологічні, економічні та технічні аспекти становлення (випуск 92): матеріали Міжнародної наукової інтернет-конференції, (м. Тернопіль, Україна, м. Ополе, Польща, 8-9 жовтня 2024 р.) / редкол. : О. Патряк та ін. ГО «Наукова спільнота», WSZIA w Opolu. Тернопіль : ФОП Шпак В. Б., 2024. – P. 56–63. Інтернет-адреса публікації на сайті: <http://www.konferenciaonline.org.ua/ua/article/id-1919/> ISSN 2522-932X.

TEACHING ACTIVITIES:

Courses Taught:

Assembly and installation technology; Aircraft and helicopter production technology (assembly); Fundamentals of aircraft production and repair technology; Modern technologies for aircraft production and repair; Systems of technical training for the production of aviation and rocket and space technology.

Author Courses, Academic Programs:

Assembly and installation technology; Aircraft and helicopter production technology (assembly); Fundamentals of aircraft production and repair technology; Modern technologies for aircraft production and repair; Systems of technical training for the production of aviation and rocket and space technology.

Methodological Materials, Textbooks:

Working, study programs, syllabi, presentations, lecture notes on disciplines “Assembly and installation technology”; “Aircraft and helicopter production technology (assembly)”; “Fundamentals of aircraft production and repair technology”; “Modern technologies for aircraft production and repair”;



“Systems of technical training for the production of aviation and rocket and space technology”.

GRANTS AND PROJECTS:

Participation in International and National Projects:

2006-2007. Phantom Works, Boeing Company, Topic: “Composite Laminates Titanium Riveting Technology Development with Process Parameters Optimization”. Function: Project manager

2010. Flight Design GmbH. Topic: “Laboratory testing of primer and paint adhesion on aluminum alloy D16AT and 2024T3 samples”. Position: Project Manager

2012-2015. FP7 Project No. 294311. Topic: "Integrating the National Aerospace University "KhAI" into ERA." Position: Project Manager.

2015. Motor Sich AG, Zaporozhe (Engine Plant). Topic: “Production of composite helicopter rotor blades”. Position: Project Manager and Scientific Advisor.

2015-2016. Ministry of Education and Research of Ukraine. Topic: “Development of a scientific basis for the development of manufacturing systems for the production of highly stressed joints in transportation vehicles”. Position: Project Manager.

PJSC “Kharkov Vehicle Manufacturing Plant”, Kharkov. Topic: “Certification of Products and Services”. Position: Project Manager and Scientific Advisor.

2019-2021. Antonov Company. Topic: “Lean Production in Aircraft Construction”. Position: Project Manager.

2023-2024. Ministry of Education and Research of Ukraine. Topic: “Development of a digital model of a two-seater light aircraft and a corresponding flight demonstrator for primary pilot training”. Position: Project Manager.

2025-2027. Ministry of Education and Research of Ukraine. Topic: “Cataloging digital mock-ups and UAV doubles of the aggressor country for ontological engineering of aviation complexes and intelligence systems”. Position: Project Manager.

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Distinctions, Awards, Prizes:

He was twice a laureate of the “Icarus of KhAI” professional skills competition. In 2010, he was awarded the Gratitude of the Head of the Kharkiv Regional State Administration, in 2018 – the Certificate of Honor of the Kharkiv City Council, in 2019 – the Certificate of Honor of the Ministry of Education and Science of Ukraine, in 2024 – the Certificate of Honor of the Kharkiv Regional State Administration.





INTERNATIONAL ACTIVITIES:

Internships:

2012-2013. Visiting Scientist, Fraunhofer Institute for Factory Operation and Automation Magdeburg, Germany. Topics: “Development and Design of a Robotic System for Impulse Riveting for Assembly”, “Development of Manufacturing Processes for the Assembly of Aircraft Components Using Impulse Hand Tools”

Cooperation with Foreign Universities:

Universität Stuttgart, Germany; Fraunhofer Institute for Factory Operation and Automation Magdeburg, Germany; TU Dresden, Germany; TU Braunschweig, Germany; Otto-von-Guericke Uni Magdeburg, Germany.

Teaching/Lecturing Abroad:

TU Braunschweig, Germany; UniBWM University, Germany; Flight Design general aviation GmbH, Germany.

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Vorobyov, Yu. Development of Ontological Decision Making System of the Negotiation Process on Cooperation Production in Aircraft / Yu. Vorobyov, I. Shostak, S. Kryvova, A. Zubanyov // Сучасний стан наукових досліджень та технологій в промисловості. / ХНУРЕ – Харків, 2021. – № 3(17). – С. 5–12. DOI: <https://doi.org/10.30837/ITSSI.2021.17.005>.
2. Maiorova, K., Vorobiov, I., Boiko, M., Suponina, V., Komisarov, O. (2021). Implementation of reengineering technology to ensure the given geometric accuracy of the light aircraft keel. Eastern-European Journal of Enterprise Technologies, 6 (1 (114)), 6–12. doi: <https://doi.org/10.15587/1729-4061.2021.246414>.
3. Vorobiov, I., Maiorova, K., Voronko, I., Boiko, M., Komisarov, O. (2022). Creation and Improvement Principles of the Pneumatic Manual Impulse Devices. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical Engineering – 2021. ICTM 2021. Lecture Notes in Networks and Systems, vol 367. Springer, Cham. pp. 178–191. https://doi.org/10.1007/978-3-030-94259-5_17.
4. Maiorova, K., Vorobiov, I., Andrieiev, O., Lupkin, B., & Sikulskiy, V. (2022). Forming the geometric accuracy and roughness of holes when drilling aircraft structures made from polymeric composite materials. Eastern-European Journal of Enterprise Technologies, 2/1 (116), 71–80. <https://doi.org/10.15587/1729-4061.2022.254555>.
5. V. Sikulskiy, K. Maiorova, Iu. Vorobiov, P. Fomichev, S. Myronova. Convergence technology of vehicle parts surface finishing. Transport problems 2022. XIV International Scientific Conference, Katowice – Silesia, 29 June – 1 July 2022, Katowice, Vol. 18, is. 1, 2023, pp. 117–127. DOI: 10.20858/tp.2023.18.1.10.
6. Sikulskiy, V., Maiorova, K., Vorobiov, I., Boiko, M., & Komisarov, O. (2022). Implementation of reengineering technology to reduce the terms of the technical preparation of manufacturing of aviation technology assemblies. Eastern-European Journal of Enterprise Technologies, 3(1 (117), 25–32. <https://doi.org/10.15587/1729-4061.2022.258550> (Катеропія А, SCOPUS, квартиль Q2, SNIP 0,667).
7. Lupkin, B., Maiorova, K., Vorobiov, I., Nikichanov, V., Sikulskiy, V. (2023). Study of Drilling Cutting Modes Impact on Shrinkage and Surface Roughness of Holes in Composite Materials. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical



Engineering – 2022. ICTM 2022. Lecture Notes in Networks and Systems, vol 657. Springer, Cham. pp. 88–98. DOI: https://link.springer.com/chapter/10.1007/978-3-031-36201-9_8 SCOPUS.

8. Maiorova, K., Sikulskyi, V., Vorobiov, I., Kapinus, O., Knyr, A. (2023). Study of a Geometry Accuracy of the Bracket-Type Parts using Reverse Engineering and additive Manufacturing Technologies. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical Engineering – 2022. ICTM 2022. Lecture Notes in Networks and Systems, vol 657. Springer, Cham, pp. 146–158.
9. Безпласовий метод конструкторської підготовки виробництва літаків авіації загального призначення / Ю. А. Воробйов, А. М. Гуменний, О. А. Богач // Авіаційно-космічна техніка і технологія. – 2024. – № 5 (199). – С. 53–63. doi: <https://10.32620/aktt.2024.5.06/>

Links to Citation Database Profiles:

<https://www.scopus.com/authid/detail.uri?authorId=57205383504>

<https://www.webofscience.com/wos/author/record/LSI-8916-2024>

<https://scholar.google.com.ua/citations?hl=ru&user=ooXT1Z0AAAAJ>

<https://www.researchgate.net/profile/Iurii-Vorobiov-2>

ADDITIONAL INFORMATION:

Language Proficiency:

English – B2. Certificate Nr. 23/05/121, Issue date 20.05.2023, of Wyższa Szkoła Lingwistyczna in Czestochowa, Republic of Poland.

Germany – B2. Certificate from Goethe-Institut in Staufen, Issue date 23.09.1994, Federal Republic of Germany.

IT Skills:

ANSYS Mechanical, LS-DYNA, MS Office, et al.

Social and Community Activities:

1. Reviewer of the collection of scientific works “Відкриті інформаційні та комп'ютерні інтегровані технології”, National Aerospace University “Kharkiv Aviation Institute”, included in the list of professional publications of Ukraine.

2. Reviewer of the scientific publication “Eastern-European Journal of Enterprise Technologies”, which is indexed in SCOPUS (Category A, quartile Q2, SNIP 0.667).