



Name	Oleksiy Pavlenko
Position, Department/Faculty	Associate Professor of Technology of Aircraft Manufacturing Department, National Aerospace University "Kharkiv Aviation Institute"
Academic Degree, Academic Title	PhD Associate Professor of the Technology of Aircraft Manufacturing Department
Email:	alexey.pavlenko@khai.edu
Scopus Author ID:	57220201408
Web of Science ResearcherID:	-
ORCID iD:	0000-0002-1628-2239
Google Scholar:	https://scholar.google.com.ua/citations?hl=uk&user=YI9fXt8AAAAJ
ResearchGate:	-

EDUCATION:

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

Kharkov Aviation Institute, Aircraft Engineering, Mechanical Engineer, 1988.

Postgraduate/Doctoral studies:

Postgraduate studies, Ph.D., Specialty 05.03.05 - "Processes and machines of metal forming", (1991-1993), Kharkov Aviation Institute named after H. Ye. Zhukovsky

Additional training, certification programs:

SolidWorks Associate. Certificate ID C-TRYS5P5SW5

English B2 Level Certificate № KJ-A Nr. 23/05/122, Wyższa Szkoła Lingwistyczna w Częstochowie, May 20, 2023

On Being a Scientist Course. European Academy of Sciences and Research. Hamburg, Germany. 2021/ Certificate XI-12-190296846-20

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

1988-1990: Engineer of the Research Department of the Technology of Aircraft Manufacturing Department

1994-2000: Research scientist of the Research Department of the Technology of Aircraft Manufacturing Department

2000-2004: Assistant Professor of the Technology of Aircraft Manufacturing Department

2004-2022: Senior Lecturer of the Department of Technology of Aircraft Manufacturing Department

2022- to the present: Associate Professor of the Technology of Aircraft Manufacturing Department

Teaching Experience:

For students:

Lecturer

Instructor for practical classes



Instructor of laboratory work
Supervisor for industrial practice
Advisor for bachelor's final thesis

PART 66:

Theoretical training instructor
Practical training instructor
Examiner

Experience in International or National Projects:

1. "Technological systems for the production and repair of military equipment components provided by foreign partners or captured resources, aimed at addressing import substitution and strengthening Ukraine's defense capabilities," all-Ukrainian project, M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2023-2025, Ministry of Education and Science of Ukraine, <https://nrat.ukrintei.ua/searchdoc/0123U102001/>
2. "Development of software and hardware support for digital twins of the processes involved in processing aircraft parts with detonating gas mixtures," all-Ukrainian project, M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2021-2022, Ministry of Education and Science of Ukraine, <https://nrat.ukrintei.ua/searchdoc/0223U000869/>
3. "Development and debugging of processing procedures on CNC equipment. Creation of software control systems for technological equipment. Production of non-standard products," economic contract, M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2015-2017, Ministry of Education and Science of Ukraine, reference number 104-7/2015
4. "Development of mathematical and physical models for processes and equipment in technological systems for producing aerospace and automotive equipment," M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2013-2014, Ministry of Education and Science of Ukraine, reference number DR 0113U001004
5. "Improvement of pulse technological systems for the production of aerospace equipment and automotive parts," M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2011-2012, Ministry of Education and Science of Ukraine, reference number DR 0111U001073
6. "Modeling and development of elements for technological systems used in the production of aviation and automotive equipment," M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2009-2010, Ministry of Education and Science of Ukraine, reference number DR 0106U001044
7. "Development of methods to intensify technological processes in production systems of science-intensive branches of mechanical engineering," M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2006-2008, Ministry of Education and Science of Ukraine, reference number DR 0109U001115
8. "Scientific principles for creating modern technological systems in the aerospace industry," M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2003-2005, Ministry of Education and Science of Ukraine, reference number DR 0103U004094
9. "Methodology of system analysis and synthesis of modern integrated technologies for precisely shaping surfaces of complex geometries using solid body impact and high-density energy flows," M. E. Zhukovsky National Aerospace University "Kharkiv Aviation Institute," 2000-2002, Ministry of Education and Science of Ukraine, reference number DR 0100U003448

RESEARCH ACTIVITIES:

Main Research Areas:

The scientific foundations of precision materials processing involve the use of intense heat fluxes generated by the combustion of detonating gases in closed chambers. A comprehensive study of gas dynamics and heat exchange processes, an examination of the electrical parameters of the developed high-energy ignition system, an analysis of material strength under thermal pulse loads, and finite element simulations of gas mixtures combustion in various regimes

Technological processes and machinery for the recycling of metalworking waste through pulse





briquetting

Forming complex-shaped parts from sheet metal by high-speed stamping with elastic media

Number of Publications (Scopus, WoS, others):

20

Participation in Scientific Conferences:

10

TEACHING ACTIVITIES:

Courses Taught:

Fundamentals of 3D Modelling

Integrated Computer Aided Technologies

CAD of technological tooling

Technologies of Aircraft Manufacturing

Technologies of Protective Coatings

Author Courses, Academic Programs:

Author Courses:

Fundamentals of 3D Modelling

Integrated Computer Aided Technologies

CAD of technological tooling

Technologies of Aircraft Manufacturing

Technologies of Protective Coatings

Specialty G12 «AEROSPACE ENGINEERING» Bachelor Degree Academic Program “Design, production and certification of aircraft” – workgroup member

Specialty G12 «AEROSPACE ENGINEERING» Master Degree Academic Program “Design, production and certification of aircraft” – workgroup member

Methodological Materials, Textbooks:

20

GRANTS AND PROJECTS:

Participation in International and National Projects:

2024-2025: Project funded by the National Research Foundation of Ukraine

2000-2025: Projects funded by the Ministry of Education and Science of Ukraine

2007-2009: Project funded by the Science & Technology Center in Ukraine together with the Ford Motor Company, USA

Grants, Scholarships, Academic Mobility Programs:

EWENT – East-West European Network of higher Technical Education. Erasmus Mundus Action 2 Lot 8. Staff Mobility Training at Faculty of Mechanical Engineering, Czech Technical University (ČVUT), Prague, Czech Republic. 01.11.2014 – 24.12.2014

PROFESSIONAL ACHIEVEMENTS AND AWARDS:



NATIONAL AEROSPACE UNIVERSITY
«KHARKIV AVIATION INSTITUTE»





Distinctions, Awards, Prizes:

Gratitude from the Mayor of Kharkiv, 2022

INTERNATIONAL ACTIVITIES:

Internships:

"Scientific perspectives and innovations in education: experience of the Czech Republic",
International Economic Institute s.r.o., Jesenice, Czech Republic. Certificate N CZ 162/12-2023

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Шипуль, О.В. Числове та експериментальне дослідження наповнення резервуару компонентом газової суміші [Текст] / О.В. Шипуль, С.О. Заклінський, В.В. Комбаров, О.А. Павленко, В.О. Гарін // *Авіаційно-космічна техніка і технологія*. – 2021. – № 4 (172). – С. 63 – 72. <https://doi.org/10.32620/aktt.2021.4.09>
2. Павленко, О.А. Модульний автономний автоматичний реєстратор параметрів термоімпульсного оброблення / О.А. Павленко, Є.О. Аксьонов, О.В. Шипуль, С.О. Заклінський // *Авіаційно-космічна техніка і технологія*. – 2022. – № 4. – С. 68 – 78. <https://doi.org/10.32620/aktt.2022.4.08>
3. Lupkin, B. Experience and effectiveness of the no-loft linking shape and dimension method using laser optical systems in aircraft production. *Technology Audit and roduction Reserves*, 3(1(77)), 19–26. DOI: 10.15587/2706-5448.2024.307330
4. Павленко, О. А. Створення концептуальної моделі газодетонаційного розміновувача / О. А. Павленко, О. В. Шипуль, В. Б. Минтюк, Д. А. Ткаченко, Д. А. Брега, В. О. Гарін // *Авіаційно-космічна техніка і технологія*. – 2024. – № 6 (200). – С. 70 – 79. <https://doi.org/10.32620/aktt.2024.6.07>
5. Шипуль, О.В. Дослідження розповсюдження тріщини в зонах концентраторів напружень під дією термоімпульсного навантаження в деталях з ливарними дефектами / О. В. Шипуль, В. Б. Минтюк, Д. А. Ткаченко, О.А. Павленко, Д. А. Брега, Є. В. Цегельник // *Авіаційно-космічна техніка і технологія*. – 2025. – № 2 (202). – С. 55 – 67. DOI: 10.32620/aktt.2025.2.06

Links to Citation Database Profiles:

<https://www.scopus.com/authid/detail.uri?authorId=57220201408&eid=2-s2.0-85097242560>

<https://scholar.google.com.ua/citations?hl=uk&user=YI9fXt8AAAAJ>

ADDITIONAL INFORMATION:

Language Proficiency:

English – Upper Intermediate Level (B2)

IT Skills:

MS Office, SolidWorks, Catia, Geomagic Design X, KOMPAS 3D, Adobe Photoshop, CorelDRAW etc.



NATIONAL AEROSPACE UNIVERSITY
«KHARKIV AVIATION INSTITUTE»



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Social and Community Activities:

Passionate and qualified, capable of analytical reasoning, and highly motivated. Good negotiator, organiser. Able to prioritise and set goals, plan projects, and delegate tasks. Leader with strong communication skills, conflict management, adaptable, resourceful and a good team player.