



Name	Mykhailo Shevchenko
Position,	Associate Professor, Aircraft Engines Theory
Department/Faculty	Department, Faculty of Aviation Engines
Academic Degree,	PhD,
Academic Title	Associate professor
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Scopus Author ID:	[59179934100]
Web of Science ResearcherID:	[I-1215-2018]
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Google Scholar:	[https://scholar.google.com/citations?hl=ru&aut huser=1&user=ZjO4XPoAAAAJ]
ResearchGate:	[https://www.researchgate.net/profile/Mykhailo-Shevchenko?ev=hdr_xprf]

EDUCATION:

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

- 1. Melitopol Industrial and Economics College. Diploma of junior specialist with honors in "Technology of Materials Processing using Machine (Tools) and Automatic Lines" [2012].
- 2. National Aerospace University «Kharkiv Aviation Institute». Bachelor's degree in «Energy Machine Engineering» [2015].

Postgraduate/Doctoral studies:

- 3. National Aerospace University «Kharkiv Aviation Institute». Master's degree with honors in «Power Machinery» [2017].
- 4. National Aerospace University «Kharkiv Aviation Institute». PhD in the field of Power Machinery. PhD thesis topic "Determination Method of the Most Advantageous Composition of Propulsion for a Supersonic Cruising Aircraft" [2023].

Additional training, certification programs:

 Certificate in English (B2), KJ-A 23/05/205, Wyższa Szkoła Lingwistyczna in Częstochowa, 20 May 2023.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

National Aerospace University «Kharkiv Aviation Institute» 14.03.2017-Present

Associate Professor at Aircraft Engines Theory Department

Teaching Experience:

Associate Professor at Aircraft Engines Theory Department:

- scientific researcher;
- organization and conduct of educational and methodical work on all types of training sessions in accordance with the individual work plan of the teacher;
- organization and planning of methodical and technical support of training sessions;
- understanding and application of existing regulations.

Experience in International or National Projects:

I was a key contributor to the following scientific projects: "Mathematical Modeling of Gas-Dynamic Processes and Characteristics of Air-Jet Engines, Gas Turbine Drives, and Their Elements" (State







registration number: 0121U108283) – developed mathematical models of the working processes of gas turbine engines (GTEs), preparation of the final report and overall coordination of the project team. "Methods for Determining the Aerodynamic Parameters of Models of a Supersonic Aircraft with Air Intake Devices" (No. 201-19/2018) – directly developed the methodology for the preliminary design of a supersonic inlet.

RESEARCH ACTIVITIES:

Main Research Areas:

Areas of scientific research: mathematical modelling of air-jet engines; matching aircraft and engine performance; mathematical modelling of supersonic inlets characteristics; the influence of casing treatment on the shape of flow in the gap and general characteristics of the compressor and gas turbine engine.

Number of Publications (Scopus, WoS, others):

Scopus: 3.

Articles in scientific professional publications order of the Ministry of Education and Science of Ukraine: **15**.

Monographs, Textbooks: "-".

Participation in Scientific Conferences: 21.

TEACHING ACTIVITIES:

Courses Taught:

The following disciplines at the university have been being taught by me since 2017: Theory of Heat Engines; Theory and Computation of Impeller Machines; Turboexpanders, Compressors and Compressor Station Equipment; Environmental aspects of gas turbine plant design.

Author Courses, Academic Programs:

- 1. Theory of Heat Engines:
- 2. Turboexpanders, Compressors and Compressor Station Equipment;
- 3. Environmental Aspects of Gas Turbine Plant Design;
- 4. Experimental Methods of Impeller Machines.

Methodological Materials, Textbooks:

- 1. Shevchenko, M. A. Turbodetandery`, kompresory` i obladnannya kompresorny`x stancij : konsp. lekcij [Turboexpanders, Compressors and Compressor Station Equipment : lecture synopsis]. Kharkiv, National Aerospace University «Kharkiv Aviation Institute» Publ., 2023. 128 p. Available at: https://library.khai.edu/library/fulltexts/metod/Shevchenko Turbodet.pdf
- 2. M. V. Ambrozhevich, K. S. Yepifanov, V. O. Sereda, M. A. Shevchenko. Texnichna termody`namika [Technical Thermodynamics]. Kharkiv, National Aerospace University «Kharkiv Aviation Institute» Publ., 2024. 119 p. Available at: https://library.khai.edu/library/fulltexts/metod/Tekhnichna /Termodynamika.pdf
- 3. Shevchenko, M. A. Turbodetandery', kompresory' i obladnannya kompresorny'x stancij : navchal'ny'j posibny'k do laborotrny'x robit [Turboexpanders, Compressors and Compressor Station Equipment : guide to laboratory work]. Kharkiv, National Aerospace University «Kharkiv Aviation







Institute» Publ., 2024. 58 p Available at: https://library.khai.edu/library/fulltexts/metod/Turbodetandery_Kompresory_I_Obladnannya_Kompresorykh_Stantsiy.pdf

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Distinctions, Awards, Prizes:

2nd place of Competition of professional skills "KhAI Icarus" in the nomination "The Best Young Scientific and Pedagogical Worker" in 2023 and 2024.

INTERNATIONAL ACTIVITIES:

Internships:

University of Białystok, Certificate No 6, awarded upon completion of an international postgraduate practical internship, Teaching and research in a contemporary university: challenges, solutions, and perspectives, 15 September 2023, 6 ECTS (180 hours).

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

- 1. Kislov, O., Ambrozhevich, M., Shevchenko, M. (2021). Development of a method to improve the calculation accuracy of specific fuel consumption for performance modeling of airbreathing engines. Eastern-European Journal of Enterprise Technologies, 2 (8 (110)), 23–30. doi: https://doi.org/10.15587/1729-4061.2021.229515
- 2. Kislov, O., Shevchenko, M., Ulitenko Y. Choosing Propulsion System Composition and Parameters for a Supersonic Cruising Aircraft. 25th International Society for Air Breathing Engines Conference Proceedings, 25–30 September 2022 Ottawa, Canada, 17 p., ISABE-2022-253 URL: https://drive.google.com/file/d/1HfwjnIKryUs-xnzVCFq5t68BrxXxnXXZ/view
- 3. Shevcenko, M. A. Aircraft Aerodynamic Characteristics Determination at Supersonic Flight Speeds. Open Information and Computer Integrated Technologies, 2024, no 100, pp. 110-118.

Links to Citation Database Profiles:

Web of Science (Researcher ID) https://www.webofscience.com/wos/author/record/l-1215-2018

Scopus (Author ID) https://www.scopus.com/authid/detail.uri?authorId=59179934100

Google Scholar https://scholar.google.com/citations?hl=ru&authuser=1&user=ZjO4XPoAAAAJ

Orcid <u>https://orcid.org/0000-0002-0806-6632</u>

ADDITIONAL INFORMATION:

Language Proficiency:

English – Advanced; Ukrainian – Native; Russian – Native.





IT Skills:

Python –basic knowledge.

Excellent use of MS Office (Word, Excel, Power Point, Outlook), Adobe Acrobat and Abbyy FineReader Professional Edition, Advanced internet research skills, Professional programs.

