



Name	Tetiana Bykova
Position, Department/Faculty	Assistant of the Department of Design Information Technologies, Faculty of Aircraft Engineering
Academic Degree, Academic Title	-
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Scopus Author ID:	57486145500
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ResearchGate:	https://www.researchgate.net/profile/Tetiana-Bykova-5/research

EDUCATION:

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

Master's: Education program: "Technologies of Aircraft Manufacturing and Repairing"
National Aerospace University "Kharkiv Aviation Institute" [01/09/2019 – 31/12/2020]

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Assistant Lecturer of the Department of Design Information Technologies
National Aerospace University "Kharkiv Aviation Institute" [2021 – current]

Teaching Experience:

4 years

RESEARCH ACTIVITIES:

Main Research Areas:

UAV, Computational Design & Engineering, CAD/CAM/CAE Integration, Product Lifecycle Management (PLM), Geometric Modeling & Algorithms, Design Automation & Scripting, Data Interoperability, Reverse Engineering & Digital Archiving.

Number of Publications (Scopus, WoS, others):

Scopus – 3
Scholar – 14

Monographs, Textbooks:

2

Participation in Scientific Conferences:

Integrated Computer Technologies in Mechanical Engineering:

Proceedings of the 4th International Scientific and Practical Conference "New Horizons in Scientific Research: Challenges and Solutions" June 30 – July 2, 2025 Marseille, France

TEACHING ACTIVITIES:

Courses Taught:

Engineering systems of computer graphics; Computer geometry

Author Courses, Academic Programs:

Engineering systems of computer graphics; Computer geometry

GRANTS AND PROJECTS:

Participation in International and National Projects:

Executor of the Applied research project "Use of swarms of intelligent unmanned ground vehicles for civil and military applications" [2021-2023]

NATO SPS - G8126 "System of Satellites, Stratospheric Sailplanes, and Drones for Intelligence, Surveillance, and Reconnaissance in Multiple Domains" [2025-2028]

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Distinctions, Awards, Prizes:

Acknowledgement from the Kharkiv Regional Council for many years of work, significant contribution to the development of the university's material, technical, scientific, and educational base, and on the occasion of Ukraine's Independence Day

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Kritskiy, D. N., Plastun, T. A., & Guobadia, E. M. (2021). Development of the remote-controlled hand-like robotic manipulator system. *Open Information and Computer Integrated Technologies*, (92), 140-155.
2. Bykov, A., Plastun, T., Chubukina, O., Yermiyev, M., & Kryshchyna, A. (2021). Design and statistical analysis of the cockpit for the flight simulator. *Open Information and Computer Integrated Technologies*, (94), 122-130.
- Pohudina, O., Plastun, T., Biletskyi, I., & Vasiliev, I. (2021, October). Determination of the Parameters of a Conceptual Quadcopter Model for a Group Outdoor Flights. In *Conference on Integrated Computer Technologies in Mechanical Engineering–Synergetic Engineering* (pp. 887-893). Cham: Springer International Publishing.
3. Pyvovar, M., Kritskiy, D., Plastun, T., Kalashnikova, V., & Popov, O. (2021, October). Takeoff and landing model of an aircraft in the aviation simulator. In *Conference on Integrated Computer Technologies in Mechanical Engineering–Synergetic Engineering* (pp. 364-372). Cham: Springer



International Publishing.

4. Погудін, А. В., Погудіна, О. К., Биков, А. М., & Пластун, Т. А. (2022). SIMULATION OF THE AUTOMATIC FLIGHT OF A SMALL UNMANNED AERIAL VEHICLE OVER A MARKER LINE. Open Information and Computer Integrated Technologies, (95), 71-82.

5. Krytskyi, D., Karatanov, O., Pohudina, O., Shevel, V., Bykov, A., Pyvovar, M., & Plastun, T. (2023). Information Technology for Determining the Flight Performance of a Paraglider Wing. In Information Technologies in the Design of Aerospace Engineering (pp. 1-42). Cham: Springer Nature Switzerland.

Books, Chapters in Collective Monographs:

1. Krytskyi, D., Karatanov, O., Pohudina, O., Shevel, V., Bykov, A., Pyvovar, M., & Plastun, T. (2023). Information Technology for Determining the Flight Performance of a Paraglider Wing. In Information Technologies in the Design of Aerospace Engineering (pp. 1-42). Cham: Springer Nature Switzerland. DOI 10.1007/978-3-031-43579-9_1

2. Kritskiy, D., Pohudina, O., Shevel, V., Bykov, A., Pyvovar, M., Plastun, T. Determination of the performance characteristics of a paraglider wing // monography "Information Technologies in The Design Of Aerospace Engineering" in Springer series book «Studies in Systems, Decision and Control» p. 1 – 60

Links to Citation Database Profiles:

<https://www.scopus.com/authid/detail.uri?authorId=57486145500>

<https://scholar.google.com/citations?user=V6fgtWIAAAAJ&hl=uk>

<https://www.webofscience.com/wos/author/record/OGQ-3831-2025>

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian, English

IT Skills:

CAD Software: 3D Modeling & Design: SOLIDWORKS, Autodesk AutoCAD, CATIA;

Technical Skills: Technical Documentation, Project Management, Scripting/Automation (AutoCAD LISP), Data Exchange;

Soft Skills: Problem-Solving, Attention to Detail, Adaptability.

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