



Name	Olena Betina
Position, Department/Faculty	Associate Professor, Department of Rocket Design and Engineering /
Academic Degree, Academic Title	Candidate of Technical Sciences (Ph. D.), Associate Professor of the Department of Rocket Design and Engineering
Email:	o.betina@khai.edu
Scopus Author ID:	https://www.scopus.com/authid/detail.uri?authoid=57484899100
Web of Science ResearcherID:	
ORCID iD:	https://orcid.org/0000-0002-0481-375X
Google Scholar:	https://scholar.google.com/citations?user=5lbmz6sAAAAJ&hl=ru
ResearchGate:	

EDUCATION:

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

Master Degree in Aerospace Engineering

National Aerospace University "Kharkov Aviation Institute" [2000 – 2006]

Address: Kharkov, st. Vadym Manko, 17, Ukraine 61070 <https://khai.edu/>

Field(s) of study: Aerospace Engineering

Diploma with Honor

Postgraduate/Doctoral studies:

Diploma of Candidate of Technical Science, Production, design and testing of flying vehicles

National Aerospace University "Kharkov Aviation Institute" [2012]

Address: Kharkov, st. Vadym Manko, 17, Ukraine 61070

<https://khai.edu>

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Associate professor of Department of Rocket Design and Engineering

National Aerospace University "Kharkov Aviation Institute" [2020 – Current]

City: Kharkiv

Country: Ukraine

Senior Lecturer of Department of Rocket Design and Engineering

National Aerospace University "Kharkov Aviation Institute" [2015 – 2020]

City: Kharkiv

Country: Ukraine

Executive Secretary of collection of scientific papers

Issues of Design and Manufacture of Flying Vehicles



(ISSN print 1818-8052. ISSN online 2663-273X. Publisher: Antonov State Company and National Aerospace University "Kharkov Aviation Institute") [2016 – 2019]

City: Kharkiv/Kyiv

Country: Ukraine

Lecturer of Department of Applied Mechanics

National University of Civil Protection of Ukraine [2009 – 2015]

City: Kharkiv

Country: Ukraine

Teaching Experience:

Senior Lecturer [2015 – 2020]; Associate professor [2020 – Current] of Department of Rocket Design and Engineering

National Aerospace University "Kharkov Aviation Institute"

City: Kharkiv

Country: Ukraine

Lecturer of Department of Applied Mechanics

National University of Civil Protection of Ukraine [2009 – 2015]

City: Kharkiv

Country: Ukraine

RESEARCH ACTIVITIES:

Main Research Areas:

Design of free-flying dynamically similar models for studying the flight of aircraft in areas with difficult natural and climatic conditions. Design of air launch systems.

Number of Publications (Scopus, WoS, others):

More than 30

Participation in Scientific Conferences:

ICTM:2021, ICTM:2022, ICTM:2023, ICTM:2024

TEACHING ACTIVITIES:

Courses Taught:

Aircraft Design for Space Exploration,
Rocket Engine Design, Rockets and missiles Design etc.

Author Courses, Academic Programs:

Design of power plants for unmanned aerial vehicles

Methodological Materials, Textbooks:

Aviation launchers and catapult systems for aircraft;
Conceptual design of single-mode solid-propellant propulsion systems





INTERNATIONAL ACTIVITIES:

Internships:

International postgraduate practical internship: Teaching and research in a contemporary university: challenges, solutions, and perspectives.

University of Białystok, Faculty of Education [11.10.2021—19.11.2021]

Address: 15-328 BIAŁYSTOK, ŚWIERKOWA 20, Poland

Erasmus+ staff mobility for training at the International Relation Office of Adana Alparslan Türkeş Science and Technology University in Turkey.

Adana Alparslan Türkeş Science and Technology University, International Relation Office

[30.04.2023—06.05.2023]

Address: Balcalı Mahallesi, ÇatalanCdessi, 01250 Sarıçam/Adana, Turkey

National Aerospace University “Kharkiv Aviation Institute”, Kharkiv, Ukraine

Erasmus + Programme Mobility between programme and partner countries mobility **project** coordinated by Rīga Technical University (RTU), Latvia Staff mobility for teaching (STA)

[14.10.2024—18.10.2024]

Address: Kļipsalas iela 6A, Rīga, LV-1048 Latvia

Erasmus+ Mobility Agreement

Staff Mobility For Teaching Ankara Yıldırım Beyazıt University

[07.04.2025—11.04.2025]

Address: Ayvalı Mah. Gazze Cad. No: 7 06010 Etlik Keçiören Ankara, TÜRKİYE

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Theoretical Foundations of Physical Modeling of the Descent and Landing Process of Controlled Precision Airborne Cargo Landing Systems. Lecture Notes in Networks and Systems , 2023, 657 LNNS, pp. 39–50

2. Parameters and Characteristics of Parachute Systems for Physical Modelling Precision Airborne Cargo Landing. Lecture Notes in Networks and Systems, 2024. LNNS; vol. 996, pp. 247-257.

3. Numerical Modelling in the Problem of Determining the Functional Capabilities of Free Flying Aircraft Models. Lecture Notes in Networks and Systems, 2025. LNNS; vol 1473, pp. 413-422.

ADDITIONAL INFORMATION:

Language Proficiency:

Mother tongue(s): Russian | Ukrainian

Other language(s):

English



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LISTENING B2 READING B2 WRITING B2
SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

IT Skills:

Microsoft Word / Microsoft Excel / Microsoft Office / Microsoft PowerPoint / Facebook / Instagram /
Zoom / Google Meet / Microsoft Teams / Viber / Telegram / WhatsApp / Komnac / SolidWorks /
Mentor.khai / Autodesk Inventor / Canva



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