Name	Oleksii Bondarenko
Position, Department/Faculty	Assistant Department of Aircraft Engine Design / Faculty of Aircraft Engines
Academic Degree, Academic Title	PhD
Email:	o.v.bondarenko@khai.edu
Scopus Author ID:	
Web of Science ResearcherID:	
ORCID iD:	[0000-0001-7943-8555]
Google Scholar:	[https://scholar.google.com/citations?hl=ru&user=asjzNcsAAAAJ]
ResearchGate:	

EDUCATION:

Basic education (university, major, year of graduation):
Bachelor degree in the field of aircraft engines and power plants, National aerospace university "Kharkiv aviation institute", Ukraine; diploma, full-time tuition, 2018;
Masters degree in the field of Aircraft engines and power plants, National aerospace university "Kharkiv aviation institute", Ukraine; diploma, full-time tuition, 2019.

Postgraduate/Doctoral studies:
Postgraduate degree in the field of Power Engineering, National aerospace university "Kharkiv aviation institute", Ukraine; diploma, full-time tuition, (2020-2025);

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):
National Aerospace University "Kharkiv aviation institute", Kharkiv, Ukraine, 02/2020 – pres., junior research associate

Teaching Experience:
Assistant, Department of Aircraft Engine Design, 12/2023 – pres.

Experience in International or National Projects:
Engineer/Junior research associate, R&D Laboratory of aircraft engine diagnostics, 2020 – pres.

RESEARCH ACTIVITIES:

Main Research Areas:
Modeling of gas turbine engine process parameters in steady-state and transient operating modes; System identification; Automatic control.

Number of Publications (Scopus, WoS, others):
8 scientific papers were published

Monographs, Textbooks:
1 textbook was written

Participation in Scientific Conferences:
- International congress of propulsion engineering (2020, 2022, 2023, 2024)
- International maritime scientific conference of the ship power plants and technical operation department of Odesa National Maritime University (Marine Power Plants & Operation, MPP&O) (2024)
- The modern problems of engine building, energy and intelligent mechanics (2021)

TEACHING ACTIVITIES:

Courses Taught:
- Modeling and calculation of processes in aerospace;
- Engineering experiment design;
- Maintenance, repair and applying of aircraft engines in ground units;
- Cooling systems for components of aircraft engines and power plants;

Author Courses, Academic Programs:
- Modeling and calculation of processes in aerospace (practical works);
- Engineering experiment design (practical works);

Methodological Materials, Textbooks:
Combustion chambers of gas turbine engines for aviation and ground applications (co-authored)

GRANTS AND PROJECTS:

Participation in International and National Projects:

Performer of research projects on GTE parameter modeling for domestic organizations and enterprises: SE “Ivchenko-Progress”, Ukraine; JSC “Motor Sich”, Ukraine; JSC “FED”, Ukraine; PJSC “AVIACONTROL”, Ukraine;

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Yepifanov, S. Development of turboshaft engine adaptive dynamic model: analysis of estimation errors / S. Yepifanov, **O. Bondarenko** // Transactions on Aerospace Research. – 2022. Vol. 269, No. 4. – P. 31-43. doi: 10.2478/tar-2022-0024.
2. Yepifanov, S. Formation of dynamic models of gas turbine engines for use in automatic control and monitoring systems / S. Yepifanov, **O. Bondarenko** // Aerospace Engineering and Technology. – 2023. – No. 4 (188). – P. 44-55. doi: 10.32620/aktt.2023.4.05.
3. Yepifanov, S. Formation of a mathematical model of a turboshaft engine / S. Yepifanov, **O. Bondarenko** // Aerospace Engineering and Technology. – 2023. – No. 4 sup1 (189). – P. 85-94. doi: 10.32620/aktt.2023.4sup1.12.

4. Yepifanov, S. Accuracy analysis of self-tuning dynamic model of a gas turbine engine / S. Yepifanov, **O. Bondarenko** // Aerospace Engineering and Technology. – 2024. – No. 2 (194). – P. 38-48. doi: 10.32620/aktt.2024.2.04.
5. Bondarenko, O. Identification of dynamic characteristics of a two-spool turbojet engine / **O. Bondarenko** // Aerospace Engineering and Technology. – 2024. – No. 4 sup1 (197). – P. 125-136. doi: 10.32620/aktt.2024.4sup1.17.
6. Yepifanov, S. Accuracy analysis of time constant estimation of a single-shaft gas turbine engine under real conditions / S. Yepifanov, **O. Bondarenko** // Aerospace Engineering and Technology. – 2024. – No. 4 sup2 (198). – P. 69-79. doi: 10.32620/aktt.2024.sup2.09.
7. Yepifanov, S. Method for determining unmeasurable parameters of gas turbine engines taking into account technical condition / S. Yepifanov, **O. Bondarenko** // Aerospace Engineering and Technology. – 2025. – No. 2 (202). – P. 25-37. doi: 10.32620/aktt.2025.2.03.

Links to Citation Database Profiles:
https://scholar.google.com/citations?user=asjzNcsAAAAJ&hl
https://orcid.org/my-orcid?orcid=0000-0001-7943-8555

ADDITIONAL INFORMATION:

Language Proficiency:
Ukrainian – native;

IT Skills:
MatLab, MatLab (Simulink), SolidWorks, Ansys, Microsoft Office, Kompas 3D, VisSim