



Name	Roman Zelenskiy
Position, Department/Faculty	Associate Professor, Department 203/Faculty of Aviation Engines
Academic Degree, Academic Title	PhD in Engineering Science, Associate Professor
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Google Scholar:	https://scholar.google.com/citations?hl=uk&user=ZVrqm1UAAAAJ
ResearchGate:	[посилання]

EDUCATION:

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

National Aerospace University named after M.E. Zhukovsky "KHAU", major: aircraft engines and power plants? 2000

Postgraduate/Doctoral studies:

Master's degree 2001, Postgraduate 2001-2004

WORK EXPERIENCE:

Teaching Experience:

National Aerospace University named after M.E. Zhukovsky "HAI" (postgraduate student, senior lecturer, associate professor), began work in 2004.

Experience in International or National Projects:

Responsible executor of research works commissioned by domestic and foreign organizations and enterprises: Ivchenko-Progress State Enterprise, Zaporizhia, FED Joint Stock Company, Kharkiv, China Machinery Investment Group Ltd., China.

RESEARCH ACTIVITIES:

Main Research Areas:

Modeling of the GTD working process in both steady and transient modes of operation, GTD diagnostics.

Number of Publications (Scopus, WoS, others):

46 scientific papers were published, 7 of them in specialized American and European journals (SCOPUS, WoS)

Monographs, Textbooks:



2 Monographs, 13 textbooks were written

Participation in Scientific Conferences:

- ASME TURBO EXPO (2014,2015,2017,2019,2020)
- International congress of propulsion engineering (2001-2020)

TEACHING ACTIVITIES:

Courses Taught:

- Reliability of Aircraft Engines and Power Plants;
- Automated Aircraft Engines and Power Plants Diagnostic Systems;
- Basic Technical Diagnostics;
- Design of Aircraft Engines and Power Plants;

Author Courses, Academic Programs:

- Reliability of Aircraft Engines and Power Plants;
- Automated Aircraft Engines and Power Plants Diagnostic Systems;
- Basic Technical Diagnostics;

Methodological Materials, Textbooks:

- Automatic engine control system for gas pumping units: laboratory manual;
- Strength calculation for compressor and turbine blades
- Modeling of automatic control systems
- for gas turbine engines and their dynamic elements: textbook for laboratory practical training;
- Automatic control and protection system for stationary gas turbine units with pneumatic-mechanical elements;
- Strength calculation for compressor and turbine discs;
- Basic types and general;
- structure of aircraft engines: textbook for laboratory practical training;
- Calculation of the dynamic frequency of the first phase of bending vibrations of compressor and turbine blades;
- Calculation of the reliability of aircraft gas turbine engine components

GRANTS AND PROJECTS:

Participation in International and National Projects:

Responsible executor of research works commissioned by domestic and foreign organizations and enterprises: Ivchenko-Progress State Enterprise, Zaporizhia, FED Joint Stock Company, Kharkiv, China Machinery Investment Group Ltd., China.

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Membership in Professional Associations:

Member of the NGO INTERNATIONAL EDUCATORS AND SCHOLARS FOUNDATION, IESF)

INTERNATIONAL ACTIVITIES:

Teaching/Lecturing Abroad:



**NATIONAL AEROSPACE UNIVERSITY
«KHARKIV AVIATION INSTITUTE»**





teaching Chinese specialists of Aero Engine Control System Institute (AECSI)

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

- Dynamic Turbine Clearance Simulation Considering the Influence of Temperature on Mechanical Load-Induced Displacements / R. Zelenskyi, S. Yepifanov, Y. Martseniuk, I. Kravchenko, I. Loboda // Journal of Aerospace Engineering. – 2017. – Vol. 30, Issue 5;
- Simulation of pneumatic volumes for a gas turbine transient state analysis / S. Yepifanov, R. Zelenskyi, F. Sirenko, I. Loboda // Turbomachinery Technical Conference and Exposition, GT 2017. – Charlotte; United States; 26 June 2017 до 30 June 2017.– 2017. – Vol. 6. – 16 p.;
- Comparative analysis of two gas turbine diagnosis approaches/ I. Loboda, J. L. Pérez-Ruiz, S. Yepifanov, R. Zelenskyi/ Proceedings of ASME Turbo Expo 2019 Turbomachinery Technical Conference and Ex-position : Phoenix, Arizona, United States, June 17–21, 2019. – [S. l.], 2019. – Vol. 6. – P. V006T05A025-1 – V006T05A025-12. DOI: 10.1115/GT2019-91644;
- Estimation of Performance Parameters of Turbine Engine Components Using Experimental Data in Parametric Uncertainty Conditions/ O. Khustochka, R. Zelenskyi, S. Yepifanov, R. Przysowa/ Aerospace. – 2020. – Vol. 7, № 1. – P. 6.1–6.17. DOI: 10.3390/aerospace7010006;
- Nonlinear Surrogate Models for Gas Turbine Diagnosis/ Igor Loboda, Iván González Castillo, Sergiy Yepifanov, Roman Zelenskyi/ ASME Turbo Expo 2022: Turbomachinery Technical Conference and Exposition, June 13–17, 2022 Rotterdam, Netherlands. Volume 2 - GT2022-83550, V002T05A024; 10 pages. <https://doi.org/10.1115/GT2022-83550>

Books, Chapters in Collective Monographs:

- Advanced Nonlinear Modeling of Gas Turbine Dynamics/ розділ монографії/ Aerospace Engineering / ed by. G. Dekoulis. – London : IntechOpen, 2018. – P. 153 175. DOI: 10.5772/intechopen.82015
- Gas Turbine Simulation Taking into Account Dynamics of Gas Capacities/ розділ монографії/ Gas Turbines-Control, Diagnostics, Simulation, and Measurements. – London : IntechOpen, 2019. – Access mode: <https://www.intechopen.com/online-first/gas-turbine-simulation-taking-into-account-dynamics-of-gas-capacities> DOI:10.5772/intechopen.90490
- Simulation of Aircraft Gas Turbine Automatic Control Systems and Their Elements: tutorial / S. Yepifanov, R. Zelenskyi. Kharkiv: National Aerospace University “Kharkiv Aviation Institute”, 2020. – 64 p.
- Розрахунок надійності деталей авіаційних газотурбінних двигунів/Р.Зеленський. Національний аерокосмічний університет ім. М.Є. Жуковського «Харківський авіаційний інститут», 2024 – 136 с.

Links to Citation Database Profiles:

- <https://orcid.org/0000-0002-6178-0149>
- <https://scholar.google.com/citations?hl=uk&user=ZVrqm1UAAAAJ>
- <https://www.scopus.com/authid/detail.uri?authorId=56380596100>
- <https://www.webofscience.com/wos/author/record/OAJ-4699-2025>

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian – native;



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English – B2

IT Skills:

C++, C#, Python, VisSim, Kompas 3D, Microsoft Office , Fortran, Simulink(Matlab)



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