Name	Igor Malkov
Position, Department/Faculty	Professor of the Department of Aircraft and Helicopter Design, Faculty of Aircraft Engineering
Academic Degree, Academic Title	Doctor of Technical Sciences, Professor
Email:	i.malkov@khai.edu
Scopus Author ID:	[ID]
Web of Science ResearcherID:	[ID]
ORCID iD:	https://orcid.org/0009-0002-0976-3293
Google Scholar:	https://scholar.google.com.ua/citations?user=ZbX4n-cAAAAJ&cstart=0&pagesize=400
ResearchGate:	[посилання]

EDUCATION:

Basic education (university, major, year of graduation):
National Aerospace University «Kharkiv Aviation Institute», Aircraft Engineering, 1979

Postgraduate/Doctoral studies:
Professor
Ministry of Education and Science of Ukraine [19/10/2005]
Doctor of Technical Sciences
Ministry of Education and Science of Ukraine [15/05/2003]
Associate professor
Ministry of Higher and Secondary Specialized Education of Ukraine [01/09/1991]
Candidate of Technical Sciences
Ministry of Higher and Secondary Specialized Education of the USSR [23/02/1990]

Additional training, certification programs:
Postgraduate education certificate, 2020

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):
2018 – present time: Professor, Department of Flight and Helicopter Design, National Aerospace University.
2014 – 2017: Leading Technologist, WL Service Limited Liability Company (Kharkiv).
2006 – 2014: Head of the Department of Graphic and Computer Modeling, Volodymyr Dahl East Ukrainian National University.
2003 – 2006: Professor, Department of Project Management and Economic Statistics, Volodymyr Dahl East Ukrainian National University.
1999 – 2003: Associate Professor, Department of Project Management and Economic Statistics, Volodymyr Dahl East Ukrainian National University.
1998 – 1999: Associate Professor, Department of Mechanical Engineering Technology, East Ukrainian

State University.
1995 – 1998: Doctoral student, East Ukrainian State University.
1991 – 1995: Associate Professor, Department of Mechanical Engineering Technology, East Ukrainian State University (Luhansk).
1983 – 1991: Junior, senior, leading researcher, research laboratory «Creation of products from composite materials», department «Strength of materials», Luhansk Machine-Building Institute.
1982 – 1983: Senior foreman, gearbox shop, Luganskteplovoz production association.
1981 – 1982: Senior Engineer, Department of Aircraft Technology, Kharkiv Aviation Institute.
1979 – 1981: Service in the USSR Armed Forces, helicopter regiment, aviation engineer.

Teaching Experience:
Full time teaching airplanes and helicopters design related subjects since 2018. Guarantor of the educational and scientific program for the training of doctors of philosophy, specialty G12 Aerospace Engineering.

Experience in International or National Projects:
Taking part in departments' scientific research projects.

RESEARCH ACTIVITIES:

Main Research Areas:
Conceptual design of aircraft and helicopters made of polymer composite materials.
Systems for designing and modeling structural elements using the automated winding method.
Methods for designing structural elements of aircraft made of polymer composite materials.

Number of Publications (Scopus, WoS, others):
Over 160 scientific publications and patents; multiple conference proceedings and applied research outputs.

Monographs, Textbooks:
Co-author of 2 monographs and 5 textbooks in the field of descriptive geometry and engineering graphics, statistics and aerospace engineering.

Participation in Scientific Conferences:
Participant in numerous international and national scientific conferences on materials science, aerospace engineering and technology (Ukraine, China, Poland, France, Germany, online forums).

TEACHING ACTIVITIES:

Courses Taught:
Design, testing and certification of aerospace engineering objects.
Design and maintenance of a specific type of aircraft and aircraft engine.
Current state and development trends of world aerospace technology.
Design of helicopter units.

Author Courses, Academic Programs:
Design and maintenance of a specific type of aircraft and aircraft engine.

Current state and development trends of world aerospace technology.

Methodological Materials, Textbooks:
Tutorial for completing the course project «Design of helicopter units».
Tutorial «Design and maintenance of a specific type of aircraft and aircraft engine».

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Membership in Professional Associations:
Member of SAMPE (Society for the Advancement of Material and Process Engineering - International Organization of Advanced Materials and Technologies).

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

Grebenikov, A., Dyachenko, Yu., Kollerov, V., Kotsyuba, V., Malkov, I., Urbanovich, V., Voronko, I. ANALYSIS OF DESIGN AND TECHNOLOGICAL FEATURES OF THE MAIN ROTOR BLADES OF HEAVY TRANSPORT HELICOPTERS, Open Information and Computer Integrated Technologies,93,59-103,2021. https://doi.org/10.32620/oikit.2021.93.04

Grebenikov, A., Malkov, I., Svetlichny, S., Moskalenko, I., Krivykh, O. METHOD FOR CONFIRMING THE RESOURCE CHARACTERISTICS OF A HELICOPTER MAIN ROTOR METAL BLADE BASED ON TEST RESULTS, Open Information and Computer Integrated Technologies,96,34-96,2022. https://doi.org/10.32620/oikit.2022.96.03

Grebenikov, A., Malkov, I., Svetlichny, S., Urbanovich, V., Moskalenko, N. METHOD FOR DETERMINING THE CHARACTERISTICS OF THE STRESS-STRAIN STATE OF THE SPAR OF THE REGULAR PART OF THE ROTOR BLADE OF A HELICOPTER USING THE ANSYS SYSTEM, Open Information and Computer Integrated Technologies,94,77-100,2021. https://doi.org/10.32620/oikit.2021.94.07

Grebenikov, A., Malkov, I., Urbanovich, V., Moskalenko, N., Kolodiychik, D. DESIGN AND TECHNOLOGICAL FEATURES TAIL BEAMS MESH TYPE POLYMER COMPOSITE MATERIALS OF TRANSPORT CATEGORY HELICOPTERS, Open Information and Computer Integrated Technologies,88,15-30,2020. https://doi.org/10.32620/oikit.2020.88.02

Grebenikov, A., Voronko, I., Dyachenko, Yu., Kollerov, V., Malkov, I., Urbanovich, V., Moskalenko, N. DESIGN AND TECHNOLOGICAL FEATURES METAL BLADES OF THE MAIN AND TAIL ROTORS OF A HELICOPTER, Open Information and Computer Integrated Technologies,87,5-51,2020. https://doi.org/10.32620/oikit.2020.87.01

Grebenikov, A., Malkov, I., Svetlichny, S., Lolenko, A., Krivobok, A., Urbanovich, V., Moskalenko, N. ANALYSIS OF THE CHARACTERISTICS OF THE STRESS-STRAIN STATE OF THE BUTT PART OF THE MAIN ROTOR BLADE OF A HELICOPTER, Open Information and Computer Integrated Technologies,90,4-32,2020. https://doi.org/10.32620/oikit.2020.90.01

Grebenikov, A., Urbanovich, V., Malkov, I., Chigrin, V., Grayvoronsky, V., Gumenny, A., Lolenko, A., Krivobok, A., Vysochanskaya, Yu., Sobolev, A., Moskalenko, N., Pirogov, L., Vendin, V. ANALYSIS OF THE POSSIBILITY OF UPGRADING A LIGHTWEIGHT SINGLE-ROTOR HELICOPTER BY REPLACING THE TAIL ROTOR CIRCULATION JET SYSTEM, Open Information and Computer Integrated Technologies,85,32-67,2019. https://doi.org/10.32620/oikit.2019.85.02

Grebenikov, A., Urbanovich, V., Malkov, I., Chigrin, V., Grayvoronsky, V., Gumenny, A., Lolenko, A., Krivobok, A., Vysochanskaya, Yu., Sobolev, A., Moskalenko, N., Pirogov, L., Vendin, V.

ANALYSIS OF THE POSSIBILITY OF UPGRADING A LIGHT SINGLE-ROTOR HELICOPTER BY REPLACING THE TAIL ROTOR WITH A FENESTRON, Open Information and Computer Integrated Technologies,84,64-92,2019. https://doi.org/10.32620/oikit.2019.84.03

Grebenikov, A., Dyachenko, Yu., Kollerov, V., Malkov, I., Moskalenko, N., Urbanovich, V. DESIGN AND TECHNOLOGICAL FEATURES OF HELICOPTER LIFTING SURFACES MADE OF POLYMER COMPOSITE MATERIALS, Open Information and Computer Integrated Technologies,84,4-49,2019. https://doi.org/10.32620/oikit.2019.84.01

Books, Chapters in Collective Monographs:

Reznik S.V., Rach V.A., Malkov I.V. and others. Materials and coatings in extreme conditions. A look into the future: in 3 volumes – volume 2. Advanced production technologiesю. - M.: Publishing house of Bauman Moscow State Technical University, 2002. – 296 p.

Rach V.A., Malkov I.V., Mogilny G.A., and others. Technology of production of products from composite materials, plastics, glass and ceramics. Mechanical engineering. Encyclopedia. Vol. III-6 / Under the general editorship of V.S. Bogolyubov. – M.: Mechanical engineering. 2006. – 576 p.

ADDITIONAL INFORMATION:

Language Proficiency:
Ukrainian, German

IT Skills:
Microsoft Office / Microsoft Excel / Social Media / Zoom / Google Drive / Microsoft Powerpoint / Skype / Organizational and planning skills

Social and Community Activities:
Member of SAMPE (Society for the Advancement of Material and Process Engineering - International Organization of Progressive Materials and Technologies).