



Name	Volodimir Dotsenko
Position, Department/Faculty	Professor of Department of Theoretical Mechanics and Engineering
Academic Degree, Academic Title	Doctor of Science Doctor of Science in heat engines of aircraft Professor
Email:	V.Dotsenko@khai.edu
Scopus Author ID:	56168420300
ORCID iD:	0000-0002-4785-4578
Google Scholar:	https://scholar.google.com.ua/citations?hl=uk&user=N7UGXXkAAAAJ

EDUCATION:

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

National Aerospace University – Kharkiv Aviation Institute: Kharkiv, Kharkivs'ka Oblast', UA [01/09/1961 – 31/05/1967] Master of Science in the engines of aircraft

Doctor of Philosophy - aircraft engines

National Aerospace University “Kharkiv Aviation Institute”, Kharkiv, Ukraine
Dissertation title: special theme
26/10/1977.

Doctor of Science in heat engines of aircraft

National Aerospace University “Kharkiv Aviation Institute”, Kharkiv, Ukraine
Dissertation title: "Development of methods for calculating and designing support units for aircraft engines"
13/01/1999.

Professor of Department of Theoretical Mechanics and Engineering National Aerospace University [19/06/2003].

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

Employment

National Aerospace University – Kharkiv Aviation Institute: Kharkiv, Kharkivs'ka Oblast', UA

- Assistant, Department of Details of machines and theory of mechanisms and machines, 1968;
- Senior Lecturer of Department of Details of machines and theory of mechanisms and machines, 1978;
- Associated professor of Department of Department of Theoretical Mechanics and

Engineering, 30/03/1989;

- Professor of Department of Theoretical Mechanics, Engineering and Robotics Systems 2004 – present.

RESEARCH ACTIVITIES:

Scientific leader of the three state budget themes that was financed due to the general fund of the state budget.

1. "Creation of mathematical models and analysis on their basis of the heterogeneous mechanical systems for the objects of air-space technique and equipment for their making" (0112U000332)
2. "Researches of knots and details of aircrafts and their engines by their design as heterogeneous mechanical systems" (0115U001161)
3. Study of the stress-strain state of parts and components of mechanical and biomechanical systems (0117U006804)

Works commissioned by industrial enterprises (scientific supervisor)

1. A designer bureau is "Progress": "Experimental research of gas compressions of speed compressor"
2. Society of shareholders of "FED": "Realization of examination of mathematical model of control system by the wing flaps and slats.

2010-2016 supervised two applicants who received a document on the award of the scientific degree of Doctor of Philosophy

1. S.Nikitin. Prognostication of descriptions of bearing of wobbling with steel μ by ceramic marbles in composition of supporting knots of rotors of turbo-engines" Special.05.05.03-2012r.
2. I. Moskalenko "Increase of technical level of ДВЗ due to perfection of method of planning of piston" Special.05.05.03-2016r.

Scientific consultant of doctoral dissertation

V. Nazin «Dynamics of twin hydrostatodynamic sliding bearings of power plant units» is Special. 05.02.09. -2018p.

Main Research Areas:

Research and design of sliding and rolling bearings of different types

Number of Publications (Scopus, WoS, others):

Over 110 scientific publications, including indexed articles in Scopus databases; multiple conference proceedings and applied research outputs.

Monographs, Textbooks:

Co-author of 2 monographs, 4 textbooks.

Participation in Scientific Conferences:

Regular participant (more 15) and speaker at international and national scientific conferences (Ukraine, Poland, Germany and other)

TEACHING ACTIVITIES:

TEACHING ACTIVITIES:

Courses Taught:

Details of machines and basis of constructing

Methodological Materials, Textbooks:



Co-author of 9 textbooks and teaching aids in the field machine parts, gearboxes.

GRANTS AND PROJECTS:

Scientific leader of the three state budget themes that was financed due to the general fund of the state budget.

1. "Creation of mathematical models and analysis on their basis of the heterogeneous mechanical systems for the objects of air-space technique and equipment for their making" (0112U000332) 2012-2014, Project leader.
2. "Researches of knots and details of aircrafts and their engines by their design as heterogeneous mechanical systems" (0115U001161) 2015-2017, Project Leader
3. Study of the stress-strain state of parts and components of mechanical and biomechanical systems (0117U006804) 2017-2019, Project Leader

Membership in Professional Associations:

«International foundation of scientists and educators» (2024-2025)

SELECTED PUBLICATIONS:

Publications (Scopus, WoS, others):

Key Articles (Scopus, , others):

1. Dotsenko, O. Gnytko, Y. Koveza, A. Kuznetsova, V. Usik, Experience in using ceramics (Si₃N₄) as a material for rolling bearings of high-speed machines, Journal of Achievements in Materials and Manufacturing Engineering 125/1 (2024) 16-24. DOI: <https://doi.org/10.5604/01.3001.0054.7777>

2. Dotsenko, V., Gnytko, O., Koveza, Y., Kuznetsova, A. (2023). Experimental Determination of Power Losses in Steel and Hybrid Rolling Bearings. In: Cioboată, D.D. (eds) International Conference on Reliable Systems Engineering (ICoRSE) - 2023. ICoRSE 2023. Lecture Notes in Networks and Systems, vol 762. Springer, Cham. https://doi.org/10.1007/978-3-031-40628-7_13

3. Dotsenko, V., Gnytko, O., Koveza, Y., Kuznetsova, A. Use of Ceramic and Hybrid Rolling Bearings in Modern Technology and Their Comparative Tests .- 2023. 19th International Scientific Conference on Industrial Systems. IS'23, Serbia, p. 479-485. https://doi.org/10.24867/IS-2023-VP1.1-4_0594

4. Dotsenko V.M., Koveza Yu.V. Influence of operating conditions on the temperature regime of bearings with metal and ceramic balls// Open information and computer integrated technologies: collection of scientific works. National Aerospace University named after N.E. Zhukovsky "Kharkiv Aviation Institute." – Kharkiv, 2023. – Issue 98. – Pp. 69-76.

5. Dotsenko, Yu. Koveza. Sliding Bearing Applications in Aircraft and Space Engineering // Відкриті інформаційні та комп'ютерні інтегровані технології, 2022.-№2.-С.24-33.

6. Analysis of the operation of turbo machine support bearings using environmentally friendly fluids / V.M. Dotsenko, Yu.V. Koveza, V.V. Usik // Aviation and Space Technology and Technology. – 2022. – No. 3. - pp. 37-44.

7. Dotsenko V.N., Likhosherst I.G. Accounting for the influence of misalignment in the gap between the plunger and the sleeve on the amount of leakage in an aviation axial plunger pump//Aviation and Space Technology, 2021. – No. 3. – P. 24-31.

8. Kolomoets, A., Dotsenko, V. Experimental investigation dry gas-dynamic seals used for gas-

compressor unit. Procedia Engineering, 2012, 39, pp. 379–386/

Books, Chapters in Collective Monographs:

1. Hydrostatic bearings for high-speed machine rotors / N. P. Artemenko, A. Chaika, V. N. Dotsenko, F. F. Kuzminov, A. I. Poddubny, V. V. Usik. Kharkiv: Osnova Publishing House at Kharkiv University, 1992. -197 p.
2. Dotsenko V.N., Kolomoets A.E., Kirichenko Yu.N., Biryukov P.A., Krasnoyaruszhsky A.G., Usik V.V. Experimental study of dry gas-dynamic seals for gas pumping units. - pp. 31-38. - Section 1.5 of the monograph “Vibration reliability and tightness of centrifugal machines”: monograph/edited by V.A. Martsynkovsky, Zagorodko. - Sumy: Sumy State University, 2011. - 351 p.

ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian, English

IT Skills:

MathCad, MathLab