Name	Sergii Nyzhnyk
Position, Department/Faculty	Head of the Department of Aircraft Engine Production Technology
Academic Degree, Academic Title	Candidate of Technical Sciences, Associate Professor
Email:	s.nyshnyk@khai.edu
Scopus Author ID:	[57384669200]
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ORCID iD:	[0000-0002-5684-593X]
Google Scholar:	[https://scholar.google.com/citations?view_op=list_works&hl=ru&user=1kan9IsAAAAJ]
ResearchGate:	[https://www.researchgate.net/profile/Serhii-Nyzhnyk?ev=hdr_xprf]

EDUCATION:

Basic education (university, major, year of graduation):
Kharkiv Aviation Institute N.E. Zhukovsky
Aircraft engines and power plants
[1/09/1990 – 22/02/1996]
Postgraduate/Doctoral studies:
Postgraduate studies Kharkiv Aviation Institute N.E. Zhukovsky
[1/09/1996 – 30/06/1999]

Additional training, certification programs:
Official certificate about the training of personnel in the operation and maintenance of the vertical acquisition center HAAS VF-2
official certificate about the training of personnel in the operation and maintenance of the turning center HAAS ST-20
official certificate about the training of personnel in the operation and maintenance of the turning center HAAS ST-30Y

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):
Head of the Department of Aircraft Engine Production Technology
National Aerospace University – Kharkiv Aviation Institute
research activity, work in project teams, teaching
Teaching Experience:
26 years of teaching experience

Experience in International or National Projects:
Participation in the international project Horizon 2020

RESEARCH ACTIVITIES:

Main Research Areas:
Work on the development or creation of new technologies in the field of production and overhaul of aircraft engine parts and their introduction into production

Number of Publications (Scopus, WoS, others):
Over 30 scientific publications, including indexed articles in Scopus and Web of Science databases; conference proceedings and applied research outputs

Monographs, Textbooks:
Co-author of 3 textbooks in the fields of aircraft engine production technology.

Participation in Scientific Conferences:
Participant (over 20) and speaker at international and national scientific conferences on metal cutting theory, parts restoration technology (Ukraine, Poland, online forums)

TEACHING ACTIVITIES:

Courses Taught:
Cutting and cutting tools; Metal cutting machines and CNC machines; Engineering technology

Methodological Materials, Textbooks:

1. Determination of the main technological time of work on metal-cutting machines /A.I. Dolmatov, I.V. Zorik, S.M. Nyzhnyk, K.A. Kleshneva/Teaching manual – Kh.: National Aerospace University named after M. E. Zhukovsky “Kharkiv Aviation Institute”, 2017. – 116 p.
2. Design of technological operations in the environment of CAD TP ASKON “Vertical”/A.I. Dolmatov, I.V. Zorik, S.M. Nyzhnyk, K.A. Kleshneva/Teaching manual – Kh.: National Aerospace University named after M. E. Zhukovsky “Kharkiv Aviation Institute”, 2018. – 78 p.
3. Nyzhnyk, S.M. Cutting tool [Electronic resource]: teaching manual for lab. works / S. M. Nyzhnik, A. V. Onopchenko. – Kharkiv: National Aerospace University named after M. E. Zhukovsky “Kharkiv. Aviation Institute”, 2023. – 112 p. https://library.khai.edu/library/fulltexts/metod/Nizhnik_Rizalnij_Instrument.pdf

GRANTS AND PROJECTS:

Participation in International and National Projects:
Executor of the international grant project "Innovative technologies of electrochemical suppression and electromagnetic decomposition for reducing NOx emissions in aircraft engines (DENOX)" of the European Union Framework Program "Horizon 2020" (grant agreement No. 831848)

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:
Corresponding Member of the Engineering Academy of Ukraine

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Kurin, M., Nyshnyk, S., Dolmatov, A. (2021). The Influence of Grinding Modes on the Quality of the Surface Layer. In: Ivanov, V., Trojanowska, J., Pavlenko, I., Zajac, J., Peraković, D. (eds) Advances in Design, Simulation and Manufacturing IV. DSMIE 2021. Lecture Notes in Mechanical Engineering. Springer, Cham.
2. Kurin, M., Nyshnyk, S., Dolmatov, A. (2020). Investigation of the Grinding Process Considering the Increase of the Active Surface of Abrasive Grains. In: Ivanov, V., Trojanowska, J., Pavlenko, I., Zajac, J., Peraković, D. (eds) Advances in Design, Simulation and Manufacturing III. DSMIE 2020. Lecture Notes in Mechanical Engineering. Springer, Cham. https://doi.org/10.1007/978-3-030-50794-7_39
3. Technology for restoration and repair of aircraft engine parts/S. Nyzhnyk, I. Zorik, K. Danko, J. Nugaras / Aviation. – 2021. – Vol. 25, iss. 4. – P. 262–267.DOI:10.3846/aviation.2021.15924 Scopus
4. Preliminary Abrasive Blasting Surface Layer and Quality Assurance of Detonation Coatings of Aircraft Engine Parts. January 2022. DOI:10.1007/978-3-031-06025-0_28
In book: Advances in Design, Simulation and Manufacturing V /Tetiana Loza, Serhii Nyzhnyk, Anatolii Dolmatov, Oleksandr Skachkov.

ADDITIONAL INFORMATION:

Language Proficiency:
Ukrainian, English

IT Skills:
Microsoft Office / Zoom / Google Drive / SolidWorks / Solid CAM