Name	Vitalii Zabolotnyi
Department/Faculty Position,	Associate professor of the Intellectual Instrumentation Systems and Quality Management department
Academic Degree, Academic Title	Candidate of engineering sciences, Associate professor
Email:	v.zabolotnyi@khai.edu
Scopus Author ID:	57201256660
Web of Science ResearcherID:	
ORCID iD:	0000-0001-9203-5080
Google Scholar:	https://scholar.google.com/citations?hl=ru&user=ry8Aj4sAAAAJ
ResearchGate:	

EDUCATION:

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

Kharkiv Aviation Institute, specialty in aviation instrument engineering, [01.09.1963 – 12.03.1969]

Postgraduate/Doctoral studies:

Additional training, certification programs:

National Aerospace University “Kharkiv Aviation Institute”, certificate of professional development PK 02066769/001152-25, comprehensive professional development, order No. 260 dated 12.06.2025, 6 ECTS credits. Topics: Terminological and methodological support for Ukrainian-language academic activities; Quality management system for the provision of educational services; Current trends in the technology of manufacturing measuring equipment; Topical issues of information and measurement technologies and quality engineering; Compliance with Ukrainian national standards in the design and development of measuring equipment manufacturing technology; Designing training courses for distance and blended

learning systems; Fundamentals of computer-aided design of scientific and methodological literature and electronic presentations.

National Aerospace University “Kharkiv Aviation Institute”, certificate of advanced training PK 02066769/000202-17, registration number 1073 dated 26.12.2017, 6 ECTS credits. Topics: Metrological examination of technical documentation; Pedagogical skills; Moral and aesthetic foundations of communication; Modern Internet technologies in educational and scientific activities and scientometrics; Ukrainian language for professional purposes; Modern teaching technologies: traditions and innovations.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

National Aerospace University «Kharkiv Aviation Institute», [01.04.1994 - Current], Associate Professor, Department of Aviation Devices and Measurements department, Associate Professor, Department of Intellectual Instrumentation Systems and Quality Management department.
Kharkiv Aviation Institute, [04.02.1993 – 31.03.1994], Senior Lecturer, Department of Aircraft Instruments.
Kharkiv Aviation Institute, [27.09.1979 – 03.02.1993], Assistant Professor, Department of Aircraft Instruments.
Kharkiv Aviation Institute**,** [01.03.1975 – 26.09.1979], Senior Engineer, Department of Aircraft Instruments.
Kharkiv Aviation Institute, [01.07.1971 – 28.02.1975], Engineer, Department of Aircraft Instruments.
Military forces of USSR, [01.04.1969 – 24.04.1971], lieutenant – engineer responsible for servicing onboard aviation equipment.

RESEARCH ACTIVITIES:

Development of equipment for precision non-contact measurement of temperatures above 3000 K.
Measurement of moisture content in dielectric materials.
Departmental research topics for 2021-2023: “Development of measuring transducers with digital output.”

Departmental research topics for 2024-2026: “Development of modern measuring transducers for physical quantities.”

TEACHING ACTIVITIES:

Courses Taught:

Technology of manufacturing measuring equipment;
Technology of manufacturing avionics devices;
Modern technologies of manufacturing avionics systems;
Fundamentals of standardization.

Author Courses, Academic Programs:

Modern technologies of manufacturing avionics systems;
Technology of manufacturing measuring equipment;
Technology of manufacturing avionics devices;

Methodological Materials, Textbooks:

1. Zabolotnyi V. A., Zabolotnyi O. V. Pidhotovchi ta skladalni roboty pry vyhotovlenni vymiriuvalnoi tekhniky i system keruvannia : navch. posib. do lab. praktykumu. Kharkiv: Nats. aerokosm. un-t im. M.Ye. Zhukovskoho «Kharkiv. aviats. in-t», 2025. – 56 s.
2. Analiz konstruktsii, skladannia ta vyprobuvannia elektronnykh blokiv vymiriuvalnoi tekhniky i system keruvannia : metod. rek. do vykonannia laboratornykh robit / uklad.: V.A. Zabolotnyi, O.V. Zabolotnyi. Kharkiv: KhAI, 2024. – 52 s.
3. Tekhnolohiia vyhotovlennia zasobiv vymiriuvalnoi tekhniky (mikroelektronika): metod. rek. do vykonannia prakt. robit / uklad.: V.A. Zabolotnyi, O.V. Zabolotnyi. Kharkiv: KhAI, 2021. – 64 s.
4. Zabolotnyi V. A., Zabolotnyi O. V. Otsiniuvannia yakosti poverkhon detalei ta analiz tochnosti tekhnolohichnykh protsesiv vyhotovlennia detalei i skladannia vuzliv: navch. posib. do lab. praktykumu. Kharkiv: Nats. aerokosm. un-t im. M.Ye. Zhukovskoho «Kharkiv. aviats. in-t», 2018. 52 s.
5. Zabolotnyi V.A. Zabolotnyi O.V., Knysh V.O. Proiektuvannia tekhnolohichnykh protsesiv skladannia elektronnoi aparatury : navch. posibnyk. Kharkiv: Nats. aerokosm. un-t «Khark. aviats. in-t», 2008. – 64 s.
6. Zabolotnyi V.A. Proiektuvannia tekhnolohichnykh protsesiv skladannia elektronnykh prystroiv pryladiv i system keruvannia litalnykh aparativ: navch. posibnyk do kursovoho proiektuvannia. Kharkiv: KhAI, 1997. – 45 s.

GRANTS AND PROJECTS:

Participation in International and National Projects:

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:

Distinctions, Awards, Prizes:

Membership in Professional Associations:

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. O. Zabolotnyi, V. Zabolotnyi and V. Siroklyn, "Investigation of the Possibility to Provide the Capacitive Moisture Sensing, Invariant to the Composition of a Bulk Substance or Dispresive Medium," 2024 IEEE 42nd International Conference on Electronics and Nanotechnology (ELNANO), Kyiv, Ukraine, 2024, pp. 482-487, doi: 10.1109/ELNANO63394.2024.10756910.
2. Zabolotnyi, O.V., Zabolotnyi, V.A., Koshevoy, N.D. (2024). Two Factor Dispersion Analysis of the Capacitive Grain Moisture Meters' Transfer Function. In: Nechyporuk, M., Pavlikov, V., Krytskyi, D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2023. ICTM 2023. Lecture Notes in Networks and Systems, vol 1008. Springer, Cham. pp 513–524 https://doi.org/10.1007/978-3-031-61415-6_44 **(Scopus).**
3. *Zabolotnyi, O.; Zabolotnyi, V.; Koshevoy, N.* Grain moisture measurement system with robust transfer function, invariant to the change of a grain matrix composition. INMATEH - Agricultural Engineering 2023, 69(1), Pp. 389-398. https://doi.org/10.35633/inmateh-69-36. **(Scopus).**
4. Zabolotnyi, O.; Zabolotnyi, V.; Koshevoy, N. Capacitive Water-Cut Meter with Robust Near-Linear Transfer Function. Computation 2022, 10, 115. https://doi.org/10.3390/computation10070115 **(Scopus, Web of Science).**
5. Zabolotnyi, O.V., Zabolotnyi, V.A., Koshevoy, N.D. (2022). Method of Grain Moisture Measurement with Application of Testing Influences on a Substance Under Research. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2021. ICTM 2021. Lecture Notes in Networks and Systems, vol 367. Springer, Cham. https://doi.org/10.1007/978-3-030-94259-5_21 **(Scopus)**

6.Koshevoy, N., Zabolotnyi, O., Potylchak, O., Siroklyn, V. (2022). Development and Modeling of a Device for Measuring the Moisture of Oil Products. In: Nechyporuk, M., Pavlikov, V., Kritskiy, D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2021. ICTM 2021. Lecture Notes in Networks and Systems, vol 367. Springer, Cham. https://doi.org/10.1007/978-3-030-94259-5_20 **(Scopus)**
7. O. Zabolotnyi, V. Zabolotnyi and N. Koshevoy, "Adequacy and Robustness Analysis of the Capacitive Moisture Meters' Static Function," 2022 IEEE 41st International Conference on Electronics and Nanotechnology (ELNANO), 2022, pp. 506-511, doi: 10.1109/ELNANO54667.2022.9927011. **(Scopus)**
8. Zabolotnyi O., Zabolotnyi V., Koshevoy N. (2021) Oil Products Moisture Measurement Using Adaptive Capacitive Instrument Measuring Transducers. In: Nechyporuk M., Pavlikov V., Kritskiy D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2020. ICTM 2020. Lecture Notes in Networks and Systems, vol 188. Springer, Cham. https://doi.org/10.1007/978-3-030-66717-7_7 **(Scopus)**
9. Zabolotnyi, O., Zabolotnyi, V., Koshevoi, M. (2020). Primary measuring transducer of moisture content for grain quality control. Ukrainian Metrological Journal. No. 3, pp. 42-49. https://doi.org/10.24027/2306-7039.3.2020.216844. (**Web of Science**)
10. Zabolotnyi O. Synthesis of a linear static function for grain moisture meter with capacitive sensors / O.Zabolotnyi, V.Zabolotnyi, N. Koshevoy // Український метрологічний журнал. – Харків: ННЦ "Інститут метрології". – 2021. - № 2. – С. 22 – 28. https://doi.org/10.24027/2306-7039.2.2021.236098 **(Web of Science)**

Books, Chapters in Collective Monographs:
Книги, розділи у колективних монографіях:

1. Naukovo-osvitni shkoly Natsionalnoho aerokosmichnoho universytetu im. M. Ye. Zhukovskoho «Kharkivskyi aviatsiinyi instytut» [Tekst]: monohrafiia/ [M.F. Babakov, O.O. Baranov, I.V. Bychkov, V.A. Zabolotnyi ta in.]; za zah. red. M.V. Nechyporuka. – Kharkiv: Nats. aerokosm. un-t im. M.Ye. Zhukovskoho «Kharkiv. avia. in.-t», 2020. – S 172-178. Rozdil «Naukova shkola 303».
2. Zabolotnyi, O. V. Alhorytmichni metody pidvyshchennia tochnosti vymiriuvannia vmistu volohy rechovyn dielektrychnoi pryrody [Tekst]: monohrafiia / O.V. Zabolotnyi, V. A. Zabolotnyi, M. D. Koshovyi. – Kharkiv : KhAI, 2023. – 352 s.

ADDITIONAL INFORMATION:
ДОДАТКОВА ІНФОРМАЦІЯ:

Language Proficiency:

Ukrainian

IT Skills:

Microsoft Office / Zoom / Microsoft teams / Google meet / AutoCad /

Social and Community Activities:

Secretary of the Academic Council of the Faculty
Labor union representative of the department
Charity during the full-scale invasion of russia.