



Name	Serhii Kryvenda
Position, Department/Faculty	Associate professor, Department of composite structures and aviation materials science, National Aerospace University "KhAI", Kharkiv (Ukraine)
Academic Degree, Academic Title	Candidate of Science in Engineering
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Scopus Author ID:	56440112300
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Google Scholar:	https://scholar.google.com.ua/citations?user=jirJzLoAAAAJ&hl=ua
ResearchGate:	https://www.researchgate.net/profile/Sergey-Kryvenda?ev=hdr_xprf

EDUCATION:

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

09/1989-03/1995 Mechanical engineer, Kharkiv Aviation Institute (KhAI), Kharkiv (Ukraine)

Specialty: Manufacture of aircraft

Postgraduate/Doctoral studies:

Ph.D. Thesis: Strength calculation of the combined multi-element joints of aircraft parts made of composite materials, Major – Aircraft strength, 2004

Additional training, certification programs:

"Aviation Talks with Boeing 2025", – seminar series: aircraft design, composite materials, payloads, repair technologies, stress analysis, and lean manufacturing.

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):

09/2004-Present Associate professor, Department of composite structures and aviation materials science, National Aerospace University "KhAI", Kharkiv (Ukraine)

09/2002-09/2004 Assistant professor, Department of aviation materials science, National Aerospace University "KhAI", Kharkiv (Ukraine)

05/1998-09/2002 Teaching assistant, Department of aviation materials science, National Aerospace University "KhAI", Kharkiv (Ukraine)

01/1989-06/1989 Electrician for testing and repairing electrical equipment, military unit 13845, Bila Tserkva (Ukraine)

11/1988-01/1989 Radio mechanic for the repair of electronic equipment, military unit 13845, Bila Tserkva (Ukraine)

07/1985-11/1988 Fitter-riveter, military unit 13845, Bila Tserkva (Ukraine)

05/1983-06/1985 Soldier of the Soviet Army, military unit 33652, Starokostiantyniv (Ukraine)

03/1983-04/1983 Unit Repairman, military unit 13845, Bila Tserkva (Ukraine)



07/1982-03/1983 Aircraft Repairman, military unit 13845, Bila Tserkva (Ukraine)

Teaching Experience:

27 years

Experience in International or National Projects:

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RESEARCH ACTIVITIES:

Main Research Areas:

Compliance analysis of the use of composites for assigned tasks. The formulation of the design problem. Tasks-contradictions solving. Solution of the synthesis problem. Detailed design study.

Number of Publications (Scopus, WoS, others):

27

Monographs, Textbooks:

1. Vasilevsky V.E., Dveyrin A.Z., Karpov Ya.S., Kryvenda S.P. System of experimental support for calculating the strength of mechanical connections of composite parts// Open information and computer integrated technologies: collection of scientific papers. – Kh.: National Aerospace University "KhAI", 2010. – Issue 47. – P. 42–52.
2. Dveyrin A.Z., Krivenda S.P. Crushing test of laminated plastics// Issues of design and production of aircraft structures. Collection of scientific papers. National Aerospace University named after N.E. Zhukovsky "KhAI". Issue 1 (65). Kharkov: NAKU, 2011, pp. 20 - 28.
3. Gagauz, F., Stress analysis of adhesive joints based on a one-dimensional discrete model/ F. Gagauz, O. Vambol, S. Kryvenda, V. Pavlenko, S. Purhina // Open Information and Computer Integrated Technologies №103, 2025, ISSN: 2663-2411, pp. 57–69. doi: 10.32620/oikit.2025.103.05 <http://nti.khai.edu/ojs/index.php/oikit/article/view/2833>

Participation in Scientific Conferences:

1. Kryvenda, S., Taranenko, I. Determination of structural parameters of wafer fuselage structure produced by continuous winding Proceedings of the 3rd EASN Association International Workshop on AeroStructures, 9th-11th October 2013, Milan, Italy, Politecnico di Milano, Dipartimento di Meccanica, Dipartimento di Scienze e Tecnologie Aerospaziali
2. Gagauz, F., Kryvenda, S., Shevtsova, M., Smovziuk, L., & Taranenko, I. (2014). Manufacturing and testing of composite wafer components with dual-purpose integrated semi-loop joints. Paper presented at the 16th European Conference on Composite Materials, ECCM 2014. ISBN-10: 84-616-9798-7; ISBN-13: 978-84-616-9798-4
3. Gagauz, F., Kryvenda, S. (2024). Preliminary Design Approach for Lattice Composite Keel Beam. 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. https://doi.org/10.1007/978-3-031-61415-6_26
4. Gagauz F. M., Kryvenda S. P., Taranenko I. M., Vambol O. O. Complex of laboratory works on the mechanics of composite materials // Technical science. Proceedings of the 7th International scientific and practical conference. SPC "Sci-conf.com.ua". Kyiv, Ukraine. 2025. Pp. 98-102. URL: <https://sci-conf.com.ua/vii-mizhnarodna-naukovo-praktichna-konferentsiya-global-trends-in-science-and-education-28-30-07-2025-kiyiv-ukrayina-arhiv/>.



TEACHING ACTIVITIES:

Courses Taught:

Engineering Experiment Planning 2017 (60 hrs); General principles of design in engineering 2021 (48 hrs); Design of aviation equipment elements with KM 2022 (54 hrs); Design and construction of composite products 2024 (80 hrs); Design of ARCT aggregates from composites 2024 (64 hrs)

Author Courses, Academic Programs:

Calculation and design of composite structure joints 2024 (60 hrs)

Methodological Materials, Textbooks:

1. Manufacturing technology of fairings from composite materials/ V.V. Vasilenko, Ya.S. Karpov, S.P. Kryvenda, M.Yu. Rusin, M.A. Shevtsova / Textbook. - Kh: National Aerospace University "Kharkiv Aviation Institute", 2005, 48 p.
2. Kryvenda S.P. Preparation of technical documentation for products made of composite materials / Textbook. manual. - Kh: National Aerospace University "Kharkiv Aviation Institute", 2006, 48 p.
3. Karpov Ya.S., Kryvenda S.P. Design and construction of connections of parts from composite materials / Textbook. manual. Kh: National Aerospace University "Kharkiv Aviation Institute", 2012, 128 p.
4. Design and construction of products from composite materials. Theory and practice / Gagauz P.M., Gagauz F.M., Karpov Ya.S., Kryvenda S.P. / Textbook. Kh.: National Aerospace University "Kharkiv Aviation Institute", 2015, 672 p.
5. Composite structures in aviation and rocket and space technology [Text]: a manual for practical work / F. M. Gagauz, S. P. Kryvenda, O. O. Vambol, I. M. Taranenko, V. M. Pavlenko. – Kharkiv: National Aerospace University "Kharkiv. Aviation Institute", 2025. – 152 p.

GRANTS AND PROJECTS:

Participation in International and National Projects:

1. WASIS - Composite Fuselage Section Wafer Design Approach for Safety Increasing in Worst Case Situations (FP7 Small or Medium-Scale Focused Research Projects) Expiration date: 01/2010-12/2014. Grant Agreement FP7-265549; Technical representative from KhAI
2. 2007 – 2009 P-296 EOARD "Design of Composite Structures Joints", Scientific Researcher

Grants, Scholarships, Academic Mobility Programs:

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PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Honorary Titles:

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Distinctions, Awards, Prizes:

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Membership in Professional Associations:

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INTERNATIONAL ACTIVITIES:

Internships:

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Cooperation with Foreign Universities:

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Teaching/Lecturing Abroad:

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SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

text

Books, Chapters in Collective Monographs:

text

Links to Citation Database Profiles:

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ADDITIONAL INFORMATION:

Language Proficiency:

Ukrainian, B2 level

English B2 level

IT Skills:

Text: MS Office Suite (Word, Excel, PowerPoint)

CAD: Corel Draw, KOMPAS, AUTOCAD, Solid Works

CAE: Wolfram Mathematica, Solid Works Simulation

Social and Community Activities:

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