Name	Svitlana Purhina
Position, Department/Faculty	Associate Professor, Department of Composite Structures and Aviation Materials Science
Academic Degree, Academic Title	Ph.D., Associate Professor
Email:	s.purhina@khai.edu
Scopus Author ID:	57201773229
Web of Science Researcher ID:	ADX-0790-2022
ORCID iD:	0000-0001-6992-5210
Google Scholar:	https://scholar.google.com/citations?user=yBnkVEIAAAAJ&hl

EDUCATION:

Basic education (university, major, year of graduation):
Research engineer for the Design and manufacture of products from composite materials National Aerospace University named after Zhukovsky "Kharkiv Aviation Institute", 2006.

Postgraduate/Doctoral studies:
National Aerospace University named after Zhukovsky "Kharkiv Aviation Institute", Department of Composite Structures and Aviation Materials Science (2006 - 2009).

Ph.D. since 2011 (Specialty is 05.07.02 – Design, manufacturing and testing of aircraft)

The topic of the PhD dissertation is «Design and structural-technological decisions of energy-efficient shape-generating tool with required life time for aircraft composite structures curing».

WORK EXPERIENCE:

Professional Career (Workplace, Years, Position):
2010 – to present

Scientist and lecturer of Department of Composite Structures and Aviation Materials Science (National Aerospace University "Kharkiv Aviation Institute")

Associate Professor of the Department of Composite Structures and Aviation Materials Science since 2021.

Teaching Experience:
2015 – to present

Experience in International or National Projects:
2010 – to present

RESEARCH ACTIVITIES:

Main Research Areas:
- Research on effective methods of polymer composite manufacturing,
- Research into methods of optimizing tooling for composites.

Number of Publications (Scopus, WoS, others):
18

Monographs, Textbooks:
6

Participation in Scientific Conferences:
20

TEACHING ACTIVITIES:

Courses Taught:
- Experimental studies of composites,
- Testing of polymer materials and composite structures,
- Composite manufacturing,
- Computer Aided Design.

Author Courses, Academic Programs:
- Experimental studies of composites,
- Testing of polymer materials and composite structures,
- Composite manufacturing,
- Computer Aided Design.

Methodological Materials, Textbooks:

1. Composites manufacturing technology / O. O. Vambol, S.M. Purhina, I.M. Taranenko, M.A. Shevtsova. – Kh.: Nat. Aerosp. Univer "Khark. Aviat. Inst.", 2023.– Part 1.– 62 p.
2. Системи технічної підготовки виробництва авіаційної та ракетно-космічної техніки. Адитивне виробництво АРКТ / С.М. Пургина, М. А Шевцова. - Харків : ХАІ, 2021. – 83 с.
3. Авіаційне електроматеріалознавство / Д. О. Попов, О. Г. Попова, С. М. Пургіна. - Харків : ХАІ, 2016. – 84 с.
4. Моделирование процесса формования композитных конструкций / А. А. Вамболь, С.М. Пургина, В. Г. Ставиченко, М. А Шевцова. - Харьков : ХАИ, 2016. – 152 с.
5. Оптимизация в технике / С.М. Пургина, В. Г. Ставиченко. - Харків : ХАІ, 2015. – 72 с.
6. Применение композитных материалов в народном хозяйстве / С.М. Пургина, В. Г. Ставиченко, В. В. Самигулин, И. М. Тараненко - Харків : ХАІ, 2015. – 72 с.

GRANTS AND PROJECTS:

Participation in International and National Projects:

- Advanced Sensors and Novel Concepts for Intelligent and Reliable Processing in Bonded Repairs (SENARIO), Grant Agreement No 30982, 2007 - 2010.
- Composite Fuselage Section Wafer Design Approach for Safety Increasing in Worst Case Situations (WASIS), Grant Agreement No 265549, 2011 - 2014.
- Directional Composites through Manufacturing Innovation (DiCoMi), H2020, Grant Agreement No 2018 - 2024.

Grants, Scholarships, Academic Mobility Programs:

1.Internships (within the H2020 European Project DiCoMI, Grant Agreement No 778068):
- «KORDSA TEKNIK TEKSTIL ANONIM SIRKETI», Istanbul (September - October 2018; January - February 2020; November - December 2021, November - December 2023),
- «FIBREX CO SRL», Cluj-Napoca (June-July 2019),
- «Central Metallurgical Research and Development Institute», Cairo (January-February 2022),
- «BIZZCOM s.r.o.» Bučany, Slovenská republica (July – August 2022, October - December 2022).

2.Erasmus+, Adana University of Science and Technology (ATU), Turkey, Adana, June 2023.

PROFESSIONAL ACHIEVEMENTS AND AWARDS:

Membership in Professional Associations:

Member of the Lithuanian Scientific Society, Department of Ukrainian Scientists, 2024.

INTERNATIONAL ACTIVITIES:

Internships:

1.Internships (within the H2020 European Project DiCoMI, Grant Agreement No 778068):
- «KORDSA TEKNIK TEKSTIL ANONIM SIRKETI», Istanbul (September - October 2018; January - February 2020; November - December 2021, November - December 2023),
- «FIBREX CO SRL», Cluj-Napoca (June-July 2019),
- «Central Metallurgical Research and Development Institute», Cairo (January-February 2022),
- «BIZZCOM s.r.o.» Bučany, Slovenská republica (July – August 2022, October - December 2022).

2.Erasmus+, Adana University of Science and Technology (ATU), Turkey, Adana, June 2023.

SELECTED PUBLICATIONS:

Key Articles (Scopus, WoS, others):

1. Kondratiev, A.; Píštěk, V.; Purhina, S.; Shevtsova, M.; Fomina, A.; Kučera, P. Self-Heating Mould for Composite Manufacturing. Polymers 2021, 13, 3074. https://doi.org/10.3390/polym13183074

2. Vambol, O., Kondratiev, A., Purhina, S., & Shevtsova, M. (2021). Determining the parameters for a

3D-printing process using the fused deposition modeling in order to manufacture an article with the required structural parameters . Eastern-European Journal of Enterprise Technologies, 2 (110), 70–80. https://doi.org/10.15587/1729-4061.2021.227075
3. A. Kondratiev, S. Purhina, M. Shevtsova and A. Tsaritsynskyi, "Thermodynamic Model of Self-Heating Mold for the Energy Efficient Composite Manufacturing," 2021 IEEE 2nd KhPI Week on Advanced Technology (KhPIWeek), Kharkiv, Ukraine, 2021, pp. 120-125, https://doi.org/10.1109/KhPIWeek53812.2021.9570105
4. Kondratiev, A., Purhina, S., Tsaritsynskyi, A., Shevtsova, M., Nabokina, T. (2022). Prediction of Remaining Lifetime of the Mold for the Composite Manufacturing. In: Ivanov, V., Trojanowska, J., Pavlenko, I., Rauch, E., Peraković, D. (eds) Advances in Design, Simulation and Manufacturing V. DSMIE 2022. Lecture Notes in Mechanical Engineering. Springer, Cham. https://doi.org/10.1007/978-3-031-06025-0_24

ADDITIONAL INFORMATION:

Language Proficiency:
Native Ukrainian, fluent Russian, intermediate English