

Scientist profile

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Name: Nataliia Khrystynets

Position: Associate Professor of the Department of Computer Engineering and Security

Biographical information: Studied at the Volyn State University named after Lesya Ukrainka. I have been working at the Lutsk National Technical University since 2004. In 2021, she obtained the scientific degree PhD. Now I work as a Associate Professor of the Department of Computer Engineering and Security.



Education:

Organization	Obtained Qualification, Degree, or Diploma
Volyn State University named after Lesya Ukrainka, specialist's degree	Specialist's degree in the specialty «Mathematics»
Lutsk National Technical University, specialist's degree	Specialist's degree in the specialty «Computer systems and networks»
Lutsk National Technical University, postgraduate student	Scientific degree and diploma of PhD in the specialty 05.02.01 «Materials Science»

Scientific interests: Engineering, Computer modeling of dynamic Systems and Technological Complexes; Development of Web-oriented Systems; Development of Multimedia Systems

Scientific and pedagogical activity:

Period	Organization	Position	Type of work
01.09.2004 – 31.08.2019	Lutsk National Technical University	assistant	Teaching and research work
01.09.2019 – 25.01.2023	Lutsk National Technical University	senior lecturer	Teaching and research work
26.01.2023 – until today	Lutsk National Technical University	associate professor	Teaching and research work

Educational disciplines: Protection of operating systems, Computer architecture, System software Development, Development of Multimedia and Gaming Systems, Basics Ergonomics and search engine optimization in web Design

Knowledge of languages: Ukrainian, English, German

SELECTED WORKS:

Publications included in Scopus, Web of Science databases:

Rud, V.D., Khrystynets, N.A., Rud, N.T.: Vibrational Molding of Filtering Materials Using Stainless Steel and Saponite Powders. *Powder Metallurgy and Metal Ceramics*, pp. 623-630, Vol. 58, (2020) <https://doi.org/10.1007/s11106-020-00118-9>

Satsyk V., Mekush O., Lishchyna N., Khrystynets N., Gumeniuk. L., Korobchuk, L. Soil Analysis Software Tool for Smart Control of Agronomic Data. 2022 12th International Conference on Advanced Computer Information Technologies, ACIT 2022, pp.364-368. <https://doi.org/10.1109/ACIT54803.2022.9913133>

Markina, L., Palchevskyi, B., Hrudetskyi, R., Melnychuk, Y., Khrystynets, N. Optimization of Ethanol Production Using State-Space Modeling and Optimal Control Technology. 2023 13th International Conference on Dependable Systems, Services and Technologies, DESSERT 2023, pp.1-7 <https://doi.org/10.1109/DESSERT61349.2023.10416529>

Rud, V.D., Khrystynets, N.A. Simulation Modeling of Forming Processes for Powder Mixtures. *Powder Metallurgy and Metal Ceramics*. 2023. №61(9-10), pp. 514-521 <https://doi.org/10.1007/s11106-020-00118-9>

Khrystynets N., Melnyk K., Lavrenchuk S., Miskevych O., Kostiuchko S. Multiprocessing as a Way to Optimize Queries. *Advances in Transdisciplinary Engineering*, 2024, №48, pp. 455–464 <https://doi.org/10.3233/ATDE231357>

Patents:

1) Patent UA 114401 U Ukraine, MPK B28B 1/08. Installation for vibration forming of powder mixtures / N.A. Khrystynets, A.V. Sylyvoniuk, M.D. Khrystynets; Applicant and patent owner: Lutsk National Technical University, Lutsk; statement 15.08.2016; published 10.03.2017; Bul. №. 5. - 4 p.

2) Patent UA 115375 U Ukraine, MPK B01D 39/20. The method of obtaining filter material / N.A. Khrystynets, V.D. Rud'; Applicant and patent owner: Lutsk National Technical University, Lutsk; statement 18.11.2016; published 10.04.2017; Bul. №. 7. - 4 p.

3) Pekh P. A., Khrystynets N. A. Computer program "C++ Builder project for the analysis of experimental data according to the symmetrical composition plan" // Certificate of copyright registration for the work No. 68872; owner - Lutsk National Technical University.— K.: State Department of Intellectual Property of Ukraine. — Date of registration: 05.12.2016

Other Scientific activities:

Secretary of the scientific journal «Computer-integrated technologies: education, science, production»

LINK PROFILE:

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SCOPUS: <https://www.scopus.com/authid/detail.uri?authorId=57216651665&eid=2-s2.0-85084207507>

WEB OF SCIENCE Researcher ID: <https://publons.com/researcher/1933461/natalia-khrystynets/>

GOOGLE SCHOLAR: <https://scholar.google.com.ua/citations?user=VdM48A0AAAAJ&hl=uk>