

# Tetiana Nikiforova

Date of birth: 19.04.1971

## Address:

Architect Oleh Petrov street, 24a, 49005,

Dnipro, Ukraine

Phone: +38 (050) 363-46-38

E-mail: [nikiforova.tetiana@pdaba.edu.ua](mailto:nikiforova.tetiana@pdaba.edu.ua)

Сайт: <https://pgasa.dp.ua/nikiforovatd/>



## ACADEMIC BACKGROUND

*Prydniprovskaya State Academy of Civil Engineering and Architecture, (PSACEA), Dnipro*

Doctoral thesis on the development scientific bases and methods of calculation of structures of earth sheltered buildings taking into account external influences. Manuscript, 2016. Thesis for the scientific degree of Doctor of Technical Sciences in specialty 05.23.01 «Building constructions, buildings and structures» (19 – Architecture and Civil Engineering).

Ph.D. thesis on the development of calculation method and rational design for thermal rehabilitation projects of large panel residential buildings. Manuscript, 2001. Thesis for the scientific degree of Candidate (Ph.D.) of Technical Sciences in specialty 05.23.01 – «Building constructions, buildings and structures» (19 – Architecture and Civil Engineering).

Full Member of the Academy of Civil Engineering of Ukraine, 2019.

## WORK EXPERIENCE

*Prydniprovskaya State Academy of Civil Engineering and Architecture, (PSACEA), Dnipro*

### Professor

**2020 – present**

*Department of reinforced concrete and masonry structures, PSACEA, Dnipro*

Teaching: fundamentals basics of design of reinforced concrete and stone structures of buildings and structures according to the criteria of sustainable development, design of sustain able buildings, architectural-constructive-technological systems of civil buildings, monitoring of the technical condition of construction structures of buildings and structures, protection of building structures from progressive collapse, modern methods of designing structures buildings and structures, modern building structures for the construction of highly efficient buildings and structures, features of designing buildings and structures in seismic conditions

### Head of Department

**2016 – 2020**

*Department of reinforced concrete and masonry structures, PSACEA, Dnipro*

Teaching: fundamentals basics of design of reinforced concrete and stone structures of buildings and structures according to the criteria of sustainable development, architectural-constructive-technological systems of civil buildings, monitoring of the technical condition of construction structures of buildings and structures, protection of building structures from progressive collapse, modern methods of designing structures of buildings and structures, modern building structures for the construction of highly efficient buildings and structures

### Associate Professor

**2002 – 2016**

*Department of reinforced concrete and masonry structures, PSACEA, Dnipro*

Teaching: fundamentals basics of design of reinforced concrete and stone structures and practical skills in the methods of design the reinforced concrete and masonry structures, applications of the various types of structural members in building systems, CAD systems in reinforced concrete structures design, methods of assessment the technical state and strengthening of reinforced concrete and masonry structures.

### Assistant

**2001 – 2002**

*Department of reinforced concrete and masonry structures, PSACEA, Dnipro*

Teaching: laboratory works on determining physical and mechanical characteristics of concrete and reinforced concrete structures, calculation and design of reinforced concrete structures, computer aided design systems.

## PROFESSIONAL EXPERTISE:

Deputy Chairman of the Specialized Academic Council D 08.085.02 on awarding the scientific degree of Doctor of Sciences in the Prydniprovsk State Academy of Civil Engineering and Architecture (Appendix 1 to the Order of the Ministry of Education and Science of Ukraine dated 06.06.2022 No. 530).

Permanent member of the specialized academic council D 26.004.11 on the awarding of the scientific degree of Doctor of Sciences in the National University of Life and Environmental Sciences of Ukraine (Appendix 1 to the Order of the Ministry of Education and Science of Ukraine dated 06.06.2022 No. 530).

Head of the one-time specialized academic council DF 08.085.001 at the State Higher Education Establishment "Prydniprovsk State Academy of Construction and Architecture" (Order of the Ministry of Education and Science of Ukraine dated 20.01.2021 No. 72).

Member of the editorial board of the scientific and practical journals included in the list of professional publications of Ukraine: "Ukrainian Journal of Construction and Architecture"; "Building structures. Theory and practice"; "Metallurgy and heat treatment of metals" (list of scientific and professional publications of Ukraine as of October 10, 2022; <http://surl.li/dmswja>).

Official opponent for dissertations for obtaining the scientific degree of Doctor of Philosophy and Doctor of Science in the specialty 192 Construction and Civil Engineering.

## PROFESSIONAL INTERNSHIP:

**2020 – present** – Team member Horizon 2020. PRECEPT. A novel decentralized edge-enabled PReCptive and ProacTive framework for increased energy efficiency and well-being in residential buildings». H2020-LC-EEB-07-2020, No 958284 (The EU Framework Programme for Research and Innovation “Horizon 2020”) (2020-2024, <https://cordis.europa.eu/project/id/958284>).

Leading researcher in research projects funded by the Ministry of Education and Ukraine.

The head of the project group for the development of the structural part of the projects of buildings and structures of various purposes.

## SCIENTIFIC EXPERIENCE

### RESEARCH INTERESTS:

Ecological design of buildings and structures

Energy efficiency in construction

Resource-efficient and environmental friendly buildings

Green construction

Sustainable design of buildings and structures

Earth sheltered residential buildings

### PUBLICATIONS:

1. Vitalii Husiev, **Tetiana Nikiforova**. Analysis of STL files as input data for rapid prototyping systems. *Building constructions. Theory and practice*, 2022. № 11. Pages 77-85. DOI: 10.32347/2522-4182.11.2022.77-85. URL: <http://bctp.knuba.edu.ua/article/view/270222>

2. Vitalii Husiev, **Tetiana Nikiforova**. Research of the converting stages for the volume model of the product into the control code for a 3D printer in the context of automated construction of 3D printing technology. *Ukrainian Journal of Construction and Architecture*, 2022. № 4. Pages 38-45. <https://doi.org/10.30838/J.BPSACEA.2312.250822.38.876%20>, <http://uajcea.pgasa.dp.ua/article/view/265901>

3. Savytskyi, Mykola, **Nikiforova, Tetiana**, Nosenko, Oleh, Kotov, Nikolay, Papirnyk, Ruslan. Construction Technology for Affordable Housing with the Use of Space-Braced Concrete-Filled Steel Tubular Framing. *E3S Web of Conferences* 280, 03003 (2021). <https://doi.org/10.1051/e3sconf/202128003003>, URL: <https://ssrn.com/abstract=3955137>

4. S. Shekhorkina, M. Savytskyi, **T. Nikiforova**, K. Shliakhov, A. Myslytska. Calculation of the composite timber reinforced concrete bending elements considering nonlinear behaviour of the connection. *Eastern-European Journal of Enterprise Technologies*, Vol. 5 (107) (2020), Pages 14-21. URL: <https://ssrn.com/abstract=3728327>

5. Shekhorkina S. Yev., Adil Jabbar Abbas, **Nikiforova T. D.** Investigation of the stress-strain state of hybrid timber-reinforced concrete multi-storey buildings. *Bulletin of Prydniprov'ska State Academy of Civil Engineering and Architecture*. Dnipro, 2020. № 5. Pages . 176-181. URL: <http://visnyk.pgasa.dp.ua/article/viewFile/215919/216094>

6. Shekhorkina S., Butska O., **Nikiforova T.**, Makhinko M. Investigating the strength and deformability of the node that connects precast slabs and monolithic joists in a flat precast-monolithic flooring slab. *Eastern-European Journal of Enterprise Technologies*, Vol.4 (2019), № 1(100). Pages 14–25. URL: <https://doi.org/10.15587/1729-4061.2019.174476>

7. AJ Abbas, **TD Nikiforova**, KV Shliakhov, AM Sopilniak. The effect of the seismicity of the construction site on the material consumption of a multi-story building. *Bulletin of Prydniprov'ska State Academy of Civil Engineering and Architecture*. Dnipro, 2019. № 6 (259-260). C. 10-17. <http://visnyk.pgasa.dp.ua/article/view/191816>

8. Svitlana Shekhorkina, Alexander Kesariisky, Mykola Makhinko, **Tetiana Nikiforova**, Oleksandr Savytskyi. Experimental Investigation and FEM Modeling of Glued Timber Connections with Slotted-In Steel Plates. *Slovak Journal of Civil Engineering*, Vol. 27 (2019), Issue 4, Pages 18-23. URL: <https://doi.org/10.2478/sjce-2019-0027>

9. **T. Nikiforova**, O. Gukasian, N. Mahas. Choice Recommendations for Rational Concreting Technology of Steel Reinforced Concrete Structures. *International Journal of Engineering & Technology*, Vol.7 (3.2) (2018), Pages 275-279. URL: <https://www.sciencepubco.com/index.php/ijet/article/view/14419/5848>.

10. **Nikiforova Tetiana**, Sopilniak Artem, Radkevych Anatolii, Shevchenko Tetiana. Simple methods of increasing the energy efficiency of windows in the reconstruction of old buildings. *Sustainable housing and human settlement: Monograp. Dnipro - Bratislava: SHEE "Prydniprov'ska State Academy of Civil Engineering and Architecture" - Slovak University of Technology in Bratislava*, 2018. Pages 94-101. URL: <http://eadnurt.diit.edu.ua/bitstream/123456789/10580/1/Nikiforova.pdf>

11. **Nikiforova Tetiana**, Mykola Savytskyi, Karim Limam, Walter Bosschaerts, Rafik Belarbi. Methods and results of experimental researches of thermal conductivity of soils *Mediterranean Green Energy Forum 2013: Proceedings of an International Conference MGEF-13*. Vol. 42, 2013, Pages 775–783. <https://www.sciencedirect.com/science/article/pii/S187661021301847X>

## **PROFESSIONAL PROFILE**

<https://orcid.org/0000-0002-0688-2759>

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

<https://www.scopus.com/authid/detail.uri?authorId=57215418883>

<https://www.webofscience.com/wos/author/record/1937093>

## **LINGUISTIC COMPETENCIES**

- Ukrainian (native speaker)
- Russian (proficiency)
- English (intermediate)