



# Curriculum Vitae

Panyuta O. O.

## PERSONAL INFORMATION



**Panyuta Olga Oleksandrivna**

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Account (profile) in scientific databases: ORCID 0000-0001-9847-8990

Sex female | Date of birth 11/07/1966 | Citizenship Ukraine

Scientific degrees (specialization)	PhD degree in Plant Physiology
Academic rank	Associate Professor
Position	Associate Professor
Department	Plant biology
Faculty/Institute	Educational and Scientific Center "Institute of Biology and Medicine"
Part-time position	–

## EDUCATIONAL DISCIPLINES IN WHICH WAS INVOLVED:

Current year	<ol style="list-style-type: none"><li>1. Lectures and Practical course "Plant Biology" for BSc students, the 1-st year.</li><li>2. Lectures and Practical course "Botany" for BSc students, the 1-st year.</li><li>3. Lectures and Practical course "Ornamental plants grow indoors and fundamentals of biotechnology" for BSc students, the 4-th year.</li><li>4. Lectures and Practical course "Green spaces protection" for BSc students, the 4-th year.</li><li>5. Lectures and Practical course "Phytopathology" for BSc students, the 3-d year.</li></ol>
Previous years	<ol style="list-style-type: none"><li>1. "Plant Biology" for BSc students, the 1-st year.</li><li>2. "Plant Anatomy" for BSc students, the 1-st year.</li><li>3. "Botany" for BSc students, the 1-st year.</li><li>4. "Plant Physiology" for BSc students, the 2-nd year.</li><li>5. "Plant Physiology and Biochemistry" for BSc students, the 3-d year.</li><li>6. "Forest phytopathology and entomology" for BSc students, the 3-d year.</li><li>7. "Phytopathology" for BSc students, the 3-d year.</li><li>8. "Plant biotechnology" for BSc students, the 3-d year.</li><li>9. "Green spaces protection" for BSc students, the 4-th year.</li><li>10. "Plant growth and development" for BSc students, the 4-th year.</li><li>11. "Phytoimmunology" for BSc students, the 4-th year.</li><li>12. "Plant immunity" for BSc students, the 4-th year.</li><li>13. Practical course "Laboratory Workshop on Plant Physiology" for BSc students, the 4-th year.</li><li>14. "Phytobiotechnology" for MSc students, the 1-st year.</li><li>15. "Plant Biotechnology and Genetic Engineering" for MSc students, the 1-st year.</li></ol>

## SCIENTIFIC AND PEDAGOGICAL EXPERIENCE

Period (starting from last)	Description
Since 02.02.2017 till now	Associate Professor of Plant Biology Chair Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . <b>Area of activity:</b> Education
01.09.2000 – 01.02.2017	Associate Professor of Plant Physiology and Ecology Chair Taras Shevchenko National University of Kyiv; 64/13, Volodymyrska Street, City of Kyiv, Ukraine, 01601; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . <b>Area of activity:</b> Education
10.01.1995 – 31.08.2000	Assistant Professor of Plant Physiology and Ecology Chair Taras Shevchenko National University of Kyiv; 60, Volodymyrska Street, City of Kyiv, Ukraine, 01033; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . <b>Area of activity:</b> Education
16.11.1992 – 09.01.1995	Junior Researcher at the Research Laboratory "Physiological bases of plant productivity" of Biological Department Taras Shevchenko University of Kyiv; 60, Volodymyrska Street, City of Kyiv, Ukraine, 01033; <a href="http://www.knu.ua/">http://www.knu.ua/</a> . <b>Area of activity:</b> Science
01.08.1989 – 14.10.1989	Engineer of the Department of Cytophysiology and Cell Engineering, Department of Cell Biology and Engineering M.G. Kholodny Institute of Botany NAS of USSR 2, Tereshchenkivska st., 01601, Kyiv, Ukraine; <a href="http://www.botany.kiev.ua/">http://www.botany.kiev.ua/</a> . <b>Area of activity:</b> Science

## EDUCATION AND TRAINING

Period (starting from last)	Description
04.10.2021 – 18.10.2021	Training course "Google digital tools for higher education, professional higher education".
31.05.2021-07.06.2021	Course "KNU TEACH WEEK".
11.01.2021-22.01.2021	Training course on mastering modern tools and programs for interactive visualization of data design of educational materials and graphic design, etc. for use in the educational process.
15.10.2020-15.11.2020	Internship M.G. Kholodny Institute of Botany NAS of Ukraine
01.10.2015 – 01.11.2015	Internship M.G. Kholodny Institute of Botany NAS of Ukraine Master the method of the lipoxygenase activity determining in plant material.
01.02.2002 – 31.03.2002	Internship Institute of Plant Protection AAS of Ukraine Article "Agglutinating proteins of Solanum tuberosum L. fractioned from tubers on different phases of development"
15.10.1989 – 16.10.1992	PhD student Kyiv State T.G. Shevchenko University Title of PhD thesis "In vitro production of potato forms resistant to imidazolinone herbicide Pursuit"
01.09.1984 – 30.06.1989	Student Kyiv State T.G. Shevchenko University Title of Master's thesis "Radiation mutagenesis of potato in vitro for selection for resistance to herbicide"

## PERSONAL SKILLS

Name	Level (description)
Native language	Ukrainian
Foreign language 1	English, level B <sub>2</sub>
Foreign language 2	Russian

Communicative competence	The skills of cultivating plant cells, tissues and organs <i>in vitro</i> were obtained at Institute of Cell Biology and Genetic Engineering of the National Academy of Sciences of Ukraine. Mastered biochemical methods of plants investigation in the Research Laboratory "Physiological bases of plant productivity" of Taras Shevchenko National University of Kyiv.
Organizational / management competence	Supervisor of practices, course works and Master's thesis. Member of the jury of the student's scientific works competition, student's olympiad, competition INTEL ECO Ukraine. Member of SMC ESC "Institute of Biology and Medicine". Curator.
Other computer skills	Use the software to create presentations, posters, statistical processing of scientific research results, to edit pictures and photos.
Professional skills (not mentioned above)	Methods of obtaining and cultivation plants, callus and suspension cultures <i>in vitro</i> , estimation of plant growth <i>in vitro</i> . Microfungi cultivation methods. Methods of assessing the plants response to the stressors action.
Fields of professional interests	Sick plant anatomy and physiology, mechanisms of interaction in a plant-pathogen system.

#### ADDITIONAL INFORMATION

Item	Titles of publications, projects, conferences, awards and prizes, memberships in academies and societies etc.
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## Publications

- Olkhovych O., Taran N., Hrechishkina S., Voitsekhivska O., Panuta O., Voitsekhivskyi V., Belava V. Evaluation of Hyper-Tolerance of Aquatic Plants to Metal Nanoparticles // Journal of Ecological Engineering 2022, 23(8), 249–259
- Hrechyshkina S. V., Olkhovych O. P., Musienko M. M., Panyuta O. O., Taran N. Yu. Evaluation of physiological parameters of resistance and perspectivity of *Salvinia natans* use for extraction of colloid metal nanoparticles // Hydrobiological Journal Volume 58, Issue 3, 2022, pp. 46-53.
- Olkhovych O. P., Hrechyshkina S. V., Panyuta O. O., Taran Nataliya Yu., Ivannikov R. V. Secondary metabolites of pleustophytes as markers of resistance to metal nanoparticles // Hydrobiological Journal Volume 58, Issue 2, 2022, pp. 44-50.
- Savchuk M.V., Lisovyy M.M., Taran O.P., Voitsekhivska O.V., Belava V.N., Panyuta O.O., Tkachyk S.O., Demyanyuk O.S., Klymchuk I.M. Impact of SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, and ZnO nanomaterials on the physiological parameters of winter rape // Ukrainian Journal of Ecology. – 2021. – Vol. 11, N3. – P. 305-311.
- Olkhovych O.O., Taran N.Yu., Karaushu O.V., & Panyuta O.O. Biochemical Characteristics of *Spirulina platensis* Biomass Obtained by Different Modes of Cultivation // International Journal on Algae. – 2020. – Vol. 22, N2. – P. 179–190.
- Olkhovych O.O., Taran N.Yu., Karaushu O.V., Panyuta O.O. Biochemical characteristics of *Spirulina platensis* biomass obtained by different modes of cultivation // Algologia 2020, 30(2): 148–159.
- Boboshko O., Emelyanov V., Panyuta O., Taran N. Constitutional and Induced Accumulation of Callose and Phenol Compounds as Elements of Systemic Resistance in Winter Wheat Sprouts // Cytology and Genetics. – 2019. – Vol. 53, №5. – P. 375–383. DOI: [10.3103/S0095452719050049](https://doi.org/10.3103/S0095452719050049)
- Panyuta O.O., Belava V.N., Olkhovych O.P., Taran N.Yu. Effect of phosphate-mobilized microbial preparations and pathogenesis on protective reactions and photosynthetic apparatus of winter wheat seedlings // Microbiologichny Z. – 2018. – Vol. 80, №6. – P. 66-78.
- Boboshko O.P., Panyuta O.O., Artemenko O.Y., Taran N. Y., Emelyanov V.I. Pathogen-Induced Callose and Phenol Compounds Accumulation in Winter Wheat Seedlings // Bulletin of Taras Shevchenko National University of Kyiv. Biology. – 2018. – Vol. 76, №2. – P. 66-71.
- Pysmenna Y.M., Panyuta O.O., Taran N.Yu. The effect of pre-sowing seed treatment with nonionic colloidal solutions of silver and copper metal nanoparticles on growth and water-retaining ability of winter wheat seedlings // Chornomors'k. bot. z. – 2018. - Vol. 14, №1. – P. 26-31.
- Belava V.N., Panyuta O.O., Yakovleva G.M., Pysmenna Y.M., Volkogon M.V. The Effect of Silver and Copper Nanoparticles on the Wheat – *Pseudocercospora herpotrichoides* Pathosystem // Nanoscale Research Letters. – 2017. – 12:250.
- Boboshko O.P., Panyuta O.O., Artemenko O.Y., Emelyanov V.I., Taran N. Y. Time-course of pathogen induced accumulation of callose as mechanical protective barrier in wheat seedlings // Cytology and Genetics. – 2017. – Vol. 51, №1. – P. 26-31.
- Pysmenna Y. M., Panyuta O. O., Taran N. Yu. Lectin activity of different cell fractions of winter wheat seedlings under pathogenesis // Journal of Stress Physiology & Biochemistry. – 2017. – Vol. 13, N1. – P. 44-51.
- Panyuta O., Belava V., Fomaidi S., Kalinichenko O., Volkogon M., Taran N. The Effect of Pre-sowing Seed Treatment with Metal Nanoparticles on the Formation of the Defensive Reaction of Wheat Seedlings Infected with the Eyespot Causal Agent // Nanoscale Research Letters. – 2016. – P. 92-97.
- Panyuta O.O., Belava V.N., Taran N.Yu. // Infection method for assessing the level of resistance of winter wheat to the eyespot causal agent. Patent UA 89969 U. 2014.
- Belava V.N., Zeleniy S.B., Panyuta O.O., Taran N.Yu., Pogribniy P.V. Expression of lectin and defensin genes in Mironovskaya 808 and Roazon wheat cultivars infected with *Pseudocercospora herpotrichoides* // Biopolymers and Cell. – 2010. – V.26, N1. – P. 45-50.
- Paniuta O.O., Shabliy V.A., Belava V.N. Jasmonic acid and its participation in defence reactions of plant organism // The Ukrainian biochemical journal. – 2009. – Vol. 81, №2. – P. 14-26.
- Belava V., Panyuta O., Taran N. Biochemical markers of wheat eyespot resistance // Zemdirbyste-Agriculture. – 2008. – V. 95, N3. – P. 298-303.

Conferences	<p>International Scientific Conference Current problems of plant physiology and genetics. – Kyiv, 2021.</p> <p>International PhD Student Symposium and Career Fair for Life Sciences «16th Horizons in Molecular Biology». – Göttingen, Germany, 2019.</p> <p>Joint CzechoSlovak Virology Conference 2019. - Bratislava, Slovakia, 2019.</p> <p>XV International scientific conference "Youth and Progress of Biology". – Lviv, 2019.</p> <p>11<sup>th</sup> International Conference Plant Functions Under Enviromental Stress. – Cracow, 2018.</p> <p>III International Scientific Conference Microbiology and Immunology – the development outlook in the 21st century. – Kyiv, 2018.</p> <p>International and practice conference "Nanotechnology and nanomaterials (NANO-2017)". – Chernivtsi, 2017.</p> <p>XV International Scientific Conference "Shevchenkivska vesna: bioscience advances". – Kyiv, 2017.</p> <p>XIII International scientific conference "Youth and Progress of Biology". – Lviv, 2017.</p> <p>International research and practice conference "Nanotechnology and nanomaterials" (NANO-2016) – Lviv, 2016.</p> <p>II International Scientific Conference Microbiology and Immunology – the development outlook in the 21st century. – Kyiv, 2016.</p> <p>International research and practice conference "Nanotechnology and nanomaterials" (NANO-2014) – Lviv, 2014.</p> <p>3rd International scientific conference "Plant growth and development control: physiological, biochemical and genetic aspects" – Kharkiv, 2014.</p> <p>XI Ukrainian Biochemical Congress. – Kyiv, 2014.</p> <p>International Scientific Conference "Plant physiology as a theoretical basis for innovative agriculture and phytobiotechnologies" – Kaliningrad, 2014.</p>
Awards and prizes	<p>The gratitude of the Ministry of Education and Science of Ukraine for long-term conscientious work, a significant personal contribution to the training of highly skilled specialists and fruitful scientific and pedagogical activity (2016).</p> <p>Diploma of Taras Shevchenko National University of Kyiv for successes in educational and scientific work (2015).</p> <p>The best teacher of the year (2008).</p>
Membership in academies, professional and scientific associations	<p>Member of Ukrainian Society of Plant Physiologists</p> <p>Member of Ukrainian Biochemical Society</p>

## SUPPLEMENTS

Name	Links
Diplomas	<p>PhD Diploma in Plant Physiology (1993)</p> <p>Associate Degree Certificate (2002)</p>
Publications	<p>Panyuta O.O., Olkhovich O.P., Kosyk O.I. Workbook for the course "Botany" section "Plant Anatomy". – Kyiv, 2020. – 66 p.</p> <p>Panyuta O.O., Olkhovich O.P. Plant anatomy: practical course. – Kyiv, 2019. – 280 p.</p> <p>Panyuta O.O., Olkhovich O.P., Kapustian A.V. Plant anatomy: terms. – Kyiv, 2012. – 110 p.</p> <p>Voitsekhivska O.V., Kapustian A.V., Kosyk O.I., Musiyenko M.M., Olkhovich O.P., Panyuta O.O., Parshikova T.V., Slavnyy P.S. Plant physiology. Practical course. – Lutsk, 2010. – 420 p.</p> <p>Panyuta O.O., Olkhovich O.P. Plant anatomy: textbook. – Kyiv, 2009. – 272 p.</p> <p>Musiyenko M.M., Panyuta O.O. Plant biotechnology. Manual. – Kyiv, 2005. – 114 p.</p>