

	<p>IVANOVA, Vera A. Associate professor Candidate of Technical Sciences, PhD</p>
<p>Research interests</p>	<ul style="list-style-type: none"> <li>✓ Food microbiology</li> <li>✓ Microbial biotechnology</li> <li>✓ Industrially used microorganisms and microbial starters</li> <li>✓ Search for new microorganisms-producers</li> <li>✓ Antimicrobial activity and antibiotic resistance of microorganisms</li> <li>✓ Biotechnology for processing of microbial biomass</li> <li>✓ Synthesis of microbial and plant-based biologically active substances</li> </ul>
<p>List of the supervisor's research projects (participation/supervision)</p>	<ul style="list-style-type: none"> <li>✓ Russian Science Foundation, 23-26-00134, Development of microbial starter cultures for expand the range of bakery products from non-traditional types of flour, 12/01/2023 – 31/12/2024, leader</li> <li>✓ ITMO University, 423024, Development of biomaterial from mushrooms of the genus Ganoderma, 01/04/2023 – 31/12/2023, participant</li> <li>✓ ITMO University, 620143, Using the biopotential of yeast in the creation of innovative food products, 09/01/2020 - 06/30/2021, participant</li> <li>✓ ITMO University, 218801, Development of seed yeast biomodification technology, 04/27/2018 - 10/15/2018, participant</li> <li>✓ Russian Science Foundation, 14.581.21.0020, Development of technologies for functional food products based on nanoencapsulated complex biologically active ingredients with a scientifically proven preventive effect, 03.10.2017 - 31.12.2019, participant</li> <li>✓ ITMO University, 617027, Resource-saving environmentally friendly biotechnologies of functional and specialized products based on deep processing of food raw materials, 09/01/2017 - 08/31/2020, participant</li> <li>✓ RFBR, 714625, Sol-gel synthesis of functional nanomaterials, 01.01.2014 - 12.31.2020, participant</li> </ul>
<p>List of potential thesis topics</p>	<ul style="list-style-type: none"> <li>✓ Use of alternative yeast species in food technology</li> </ul>

	<ul style="list-style-type: none"> <li>✓ Biotechnology for obtaining and using fuco-oligosaccharides in the technology of functional additives</li> <li>✓ Antimicrobial agents of natural origin and their use to extend shelf life of food products</li> </ul>
Publications in the last five years	10 (Scopus / Web of Science / RSCI)
Key publications	<p>1. L. A. Nadtochii, D. A. Baranenko, W. Lu, A. V. Safronova, A. I. Lepeshkin, и V. A. Ivanova, «Rheological and physical-chemical properties of yogurt with oat-chia seeds composites», <i>Agron. Res.</i>, v. 18, Special Issue 3, pp. 1816–1828, 2020, doi: 10.15159/AR.20.142</p> <p>2. Milyuhina A.K., Kyzdarbek U., Ivanova V.A., Zabodalova L.A., Baranenko D.A. Comparative evaluation of the antimicrobial properties of plant extracts // <i>IOP Conference Series: Earth and Environmental Science - 2020, Vol. 613, No. 1</i>, pp. 012079, doi: 10.1088/1755-1315/613/1/012079</p> <p>3. Davydenko S.G., Meledina T.V., Ivanova V.A. New Foresight Methodology for Toxicity Assessment // <i>Scientific Study and Research: Chemistry and Chemical Engineering, Biotechnology, Food Industry [Studii si Cercetari Stiintifice Chimie si Inginerie Chimica, Biotehnologii, Industrie Alimentara]</i> - 2020, Vol. 21, No. 3, pp. 333-342</p> <p>4. Harbah R., Agembo E., Meledina T.V., Kritchenkov A.S., Ivanova V.A. Extraction of crude Mannan oligosaccharides from yeast and their uses [Экстракция олигосахаридов маннана из дрожжей и их применение] // <i>Вестник Международной академии холода</i> - 2020, No. 1(74), pp. 46-51, doi: 10.17586/1606-4313-2020-19-1-46-51</p> <p>5. Меледина Т.В., Маньшин Д.В., Головинская О.В., Харба Р., Иванова В.А., Морозов А.А. Факторы, влияющие на поверхностный электрический заряд дрожжевых клеток <i>Saccharomyces cerevisiae</i> // <i>Хранение и переработка сельхозсырья</i> - 2020. - № 2. - С. 73-84, doi: 10.36107/spfp.2020.246</p>
Key IPs	<ul style="list-style-type: none"> <li>✓ A microbial starter culture has been developed for bakery products with buckwheat grain flour, untreated hydrothermically (Russian Science Foundation project №23-26-00134, <i>E3S Web of Conferences</i> - 2023, Vol. 420, pp. 01010, academic dissertation for the PhD in technical sciences Gur'ev S.S. - 2023)</li> <li>✓ Antimicrobial activity of <i>Wickerhamomyces anomalus</i> yeast in wheat dough was studied (Russian Science Foundation project №23-26-00134, <i>E3S Web of Conferences</i> - 2024, Vol. 480, pp. 03018)</li> <li>✓ A dry composition for the production of custard and a method for producing functional flour-based confectionery products with the addition of micro- and nanoencapsulated cholecalciferol and phytosterols have been developed.</li> </ul>

	<p>(patents 2702177, 2729462, Russian Science Foundation project №14.581.21.0020)</p> <ul style="list-style-type: none"> <li>✓ A resource-saving technology for obtaining a beta-glucan-containing concentrate from residual brewer's yeast has been developed (E3S Web of Conferences - 2020, Vol. 164, pp. 06027, academic dissertation for the PhD in technical sciences Ivanova V.A. - 2020)</li> <li>✓ The effect of a beta-glucan-containing preparation on the rheological properties of dough semi-finished products and wheat bread was studied (E3S Web of Conferences - 2020, Vol. 203, pp. 04010)</li> <li>✓ A method for using beta-glucan-containing concentrates from baker's and residual brewer's yeast in marshmallow technology has been developed (ITMO University project, 620143)</li> <li>✓ A method for assessing the toxicity of substances using Saccharomyces yeasts as a model organism has been developed (Scientific Study and Research: Chemistry and Chemical Engineering, Biotechnology, Food Industry - 2020, Vol. 21, No. 3, pp. 333-342)</li> </ul>
Supervisor's specific requirements	<ul style="list-style-type: none"> <li>✓ Basic knowledge in biochemistry, microbiology</li> <li>✓ Basic skills related to microbiological work</li> <li>✓ Proactivity</li> <li>✓ Commitment to research</li> </ul>
Code of the subject area of the PhD program	<p>2.7.1 Biotechnology of Food Products and Medicinal and Biologically Active Substances  4.3.3 Food Systems  4.3.5 Biotechnology of Food Products and Biologically Active Substances</p>