

	<p>IVANOVA, Vera A. Associate professor Candidate of Technical Sciences, PhD</p>
<p>Research interests</p>	<ul style="list-style-type: none"> ✓ Food microbiology ✓ Microbial biotechnology ✓ Industrially used microorganisms and microbial starters ✓ Search for new microorganisms-producers ✓ Antimicrobial activity and antibiotic resistance of microorganisms ✓ Biotechnology for processing of microbial biomass ✓ Synthesis of microbial and plant-based biologically active substances
<p>List of the supervisor's research projects (participation/supervision)</p>	<ul style="list-style-type: none"> ✓ 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 ✓ ITMO University, 423024, Development of biomaterial from mushrooms of the genus Ganoderma, 01/04/2023 – 31/12/2023, participant ✓ ITMO University, 620143, Using the biopotential of yeast in the creation of innovative food products, 09/01/2020 - 06/30/2021, participant ✓ ITMO University, 218801, Development of seed yeast biomodification technology, 04/27/2018 - 10/15/2018, participant ✓ 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 ✓ 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 ✓ RFBR, 714625, Sol-gel synthesis of functional nanomaterials, 01.01.2014 - 12.31.2020, participant
<p>List of potential thesis topics</p>	<ul style="list-style-type: none"> ✓ Use of alternative yeast species in food technology

	<ul style="list-style-type: none"> ✓ Biotechnology for obtaining and using fuco-oligosaccharides in the technology of functional additives ✓ Antimicrobial agents of natural origin and their use to extend shelf life of food products
Publications in the last five years	10 (Scopus / Web of Science / RSCI)
Key publications	<p>1. Novichenko A., Gur'ev S., Korovyansky V., Ivanova V. Study of antimicrobial activity and fermentability of the yeast <i>Wickerhamomyces anomalus</i> in wheat dough // E3S Web of Conferences - 2024, Vol. 480, pp. 03018</p> <p>2. Vyacheslav S. Korovyansky, Alexander A. Novichenko, Vera A. Ivanova, Sergey S. Gur'ev, Mikhail A. Kondratev, Vladislav A. Gud. Baking and rheological properties of alternative flour types // Processes and Food Production Equipment — 2024. - № 4(62). - Pp. 33-46</p> <p>3. Sergeeva A., Novichenko A., Ivanova V., Gur'ev S., Korovyansky V. Evaluation of breadmaking potential of the yeasts <i>Wickerhamomyces anomalus</i> (CBS S605T) and <i>Torulaspora delbrueckii</i> (YIT3) // E3S Web of Conferences - 2024, Vol. 539, pp. 02037</p> <p>4. Gur'ev S., Ivanova V., Korovyansky V., Novichenko A., Kostin I. Rheological properties of wheat dough with the addition of green buckwheat flour // E3S Web of Conferences - 2023, Vol. 420, pp. 01010</p> <p>5. Meledina T.V., Ivanova V.A., Golovinskaia O.V., Harba R. Yeast. Morphology and Physiology: Study Guide / Saint-Petersburg: ITMO University, 2021. - Pp. 69</p>
Key IPs	<ul style="list-style-type: none"> ✓ A microbial starter culture has been developed for bakery products with buckwheat grain flour, untreated hydrothermically (Russian Science Foundation project №23-26-00134, E3S Web of Conferences - 2023, Vol. 420, pp. 01010, academic dissertation for the PhD in technical sciences Gur'ev S.S. - 2023) ✓ Antimicrobial activity of <i>Wickerhamomyces anomalus</i> yeast in wheat dough was studied (Russian Science Foundation project №23-26-00134, E3S Web of Conferences - 2024, Vol. 480, pp. 03018) ✓ 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. (patents 2702177, 2729462, Russian Science Foundation project №14.581.21.0020) ✓ 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)

	<ul style="list-style-type: none"> ✓ 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) ✓ 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) ✓ A method for assessing the toxicity of substances using <i>Saccharomyces</i> 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)
Supervisor's specific requirements	<ul style="list-style-type: none"> ✓ Basic knowledge in biochemistry, microbiology ✓ Basic skills related to microbiological work ✓ Proactivity ✓ Commitment to research
Code of the subject area of the PhD program	<p>2.7.1 Biotechnology of Food Products and Medicinal and Biologically Active Substances</p> <p>4.3.3 Food Systems</p> <p>4.3.5 Biotechnology of Food Products and Biologically Active Substances</p>