

MINISTRY OF SCIENCE AND EDUCATION  
OF THE REPUBLIC OF AZERBAIJAN

BAKU STATE UNIVERSITY



12<sup>th</sup> INTERNATIONAL CONFERENCE

## **ACHIEVEMENTS & CHALLENGES IN BIOLOGY**

DEDICATED TO THE 105<sup>th</sup> ANNIVERSARY  
OF BAKU STATE UNIVERSITY AND  
THE 90<sup>th</sup> ANNIVERSARY OF THE FACULTY OF BIOLOGY

19–20 December, 2024

## **PROGRAMME**



## ORGANIZING COMMITTEE

### **Chairman:**

Afat Mammadova	Dean of the Faculty of Biology, BSU, Azerbaijan
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### **Deputy chairman:**

Saib Gulahmadov	Professor, Chair of Molecular Biology and Biotechnology, BSU, Azerbaijan
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### **Members:**

Rovshan Khalilov	Head of the Chair of Biophysics and Biochemistry, BSU, Azerbaijan
Abulfaz Taghiyev	Head of the Chair of Zoology and Physiology, BSU, Azerbaijan
Sevinj Ismayilova	Associate professor, Chair of Botany and Plant Physiology, BSU, Azerbaijan
Sevinj Humbatova	Associate professor, Chair of Zoology and Physiology, BSU, Azerbaijan
Samira Salayeva	Associate professor, Chair of Genetics, BSU, Azerbaijan
Nazakat Mammadova	PhD, Chair of Zoology and Physiology, BSU, Azerbaijan
Nigar Huseynova	PhD, Chair of Biophysics and Biochemistry, BSU, Azerbaijan

## PROGRAMME COMMITTEE

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BSU, Azerbaijan

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Irada Huseynova     Director-General of the Institute of Molecular  
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Kamila Aliyeva     Head of the Chair of Genetics, BSU, Azerbaijan

Rakhmetkazhy  
Bersimbay     Head of the Chair of General Biology and  
Genomics, Institute of Cell Biology and  
Biotechnology, L.N. Gumilyov Eurasian National  
University, Kazakhstan

Ziyaddin  
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Bunyamin Akgu     Head of the Chair of Molecular Biology and  
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Muhammad Zafar     Professor Emeritus, Quaid-i-Azam University,  
Chair of Plant Sciences, Quaid-i-Azam University,  
Pakistan

Ralphreed  
Hasanov     Head of Bioengineering Research Laboratory, BSU,  
Azerbaijan

Khudaverdi  
Ganbarov     Head of the Scientific Research Laboratory of  
Microbiology and Virology, BSU, Azerbaijan

Aygun Nasibova     Associate Professor, Chair of Biophysics and  
Biochemistry, BSU, Azerbaijan

December 19, Thursday

## OPENING CEREMONY

### Baku Convention Centre

09:00 - 10:00	Registration
10:00 - 11:30	Opening Ceremony /Group photo

## PLENARY SESSION

Chairperson: Huseynova Irada (Azerbaijan)

11:30 – 12:00	<p><b>The role of green taxonomy in innovation of sustainability in medicine, food systems, drug development, and biofuel technology</b></p> <p>Zafar Muhammad <i>Quaid-i-Azam University, Pakistan</i></p>
12:00 - 12:30	<p><b>Development of robust technologies that enabled the development of cost-effective, safe vaccines and therapeutics against COVID-19, malaria, anthrax and other possible infections/diseases, i.e. “Disease X”</b></p> <p>Mammadov Tarlan<sup>1,2</sup></p> <p><sup>1</sup><i>Institute of Molecular Biology and Biotechnologies, Azerbaijan</i> <sup>2</sup><i>Akdeniz University, Türkiye</i></p>
12:40 - 14:00	<b>Lunch</b>

**December 19, Thursday**

**KEYNOTE SPEAKER'S SESSION**

**Chairperson: Zafar Muhammad (Pakistan)**

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**Main Academic Building, Main Hall, Baku State University (BSU)**

<b>14:00 -14:30</b>	<b>Metabolic changes may precede morphological transformations in cancer cell development: outlook from a lipid point of view</b>  Gasimov Oktay <i>Institute of Biophysics, Azerbaijan</i>
<b>14:30 - 15:00</b>	<b>Developments in Plant Biology in the postgenomic era</b>  Turkan Ismayil <i>Yashar University, Türkiye</i>
<b>15:00- 15:30</b>	<b>Light energy conversion into electricity in the purified photosynthetic pigment-protein complexes of photosystem I</b>  Mamedov Mahir <i>Moscow State University, Russian Federation</i>
<b>15:30-16:00</b>	<b>Applications and advances in bioassay methods for ecotoxicological assessment of xenobiotics</b>  Sayim Ferah <i>Ege University, Türkiye</i>
<b>16:00-16:30</b>	<b>Break/Poster session</b>

December 19, Thursday

## KEYNOTE SPEAKER'S SESSION

**Chairperson: Turkan Ismayil (Türkiye)**

**Main Academic Building, Main Hall, BSU**



<b>16:30-17:00</b>	<b>Biomonitoring of environmental pollutants in marine ecosystems by bioluminescent bacteria</b>  Omeroglu Esra Ersoy <i>Ege University, Türkiye</i>
<b>17:00-17:30</b>	<b>Archaea: The third domain of life, initially unnoticed yet as fundamental as the other two (online)</b>  Kublanov Ilya <i>Hebrew University, Israel</i>
<b>17:30-18:00</b>	<b>Free-living amoeba infections: increasing health threats worldwide after the COVID-19 pandemic (online)</b>  Matin Abdul <i>University of Baltistan, Pakistan</i>
<b>18:00-18:30</b>	<b>Biodiversity of the fauna of small mammals in the conditions of transformation of the natural environment of the Southern Aral Sea region</b>  Mambetullaeva Svetlana <i>Karakalpak Research Institute of Natural Sciences, Uzbekistan</i>

December 20, Friday

## PARALLEL SESSIONS

### Session 1: Genetic diversity: issues and solutions

**Chairpersons:** Mamedov Mahir (Russian Federation),  
Gasnov Ralphred (Azerbaijan)

**Academic Building II, 2nd floor, room № 203, BSU**

09:30-09:45	<b>Study of the hawthorn genome and its breeding value for the country's population</b>  Guseynova Nazaket <i>Baku State University, Azerbaijan</i>
09:45-10:00	<b>DJ-1 and sulfiredoxin in oxidative stress management in <i>Drosophila melanogaster</i></b>  Alishova Gular, Sangeeta Chawla <i>University of York, United Kingdom</i>
10:00-10:15	<b>Cluster analysis of durum wheat (<i>Triticum durum</i> Desf.) yield parameters</b>  Safarova Aliyeva Gamar <i>Baku State University, Azerbaijan</i>
10:15-10:30	<b>Study of the genetic diversity of mulberry silkworm breeds and hybrids</b>  Ramazanova Jala, Mammadov Ayaz <i>Western Caspian University, Azerbaijan</i>
10:30-10:45	<b>Study of genetic characteristics of sturgeon fishes in the Caspian Sea area belonging to Azerbaijan</b>  Rzayev Elshad, Taghiyeva Safada <i>Azerbaijan Fish Farm, Azerbaijan</i>



<b>10:45-11:00</b>	<p><b>Analysis of morphological and physiological changes in different wheat genotypes under the influence of stress factors</b></p> <p>Tamrazov Tamraz <i>Research Institute of Crop Husbandry, Azerbaijan</i></p>
<b>11:00-11:30</b>	<b>Break/Poster session</b>
<b>11:30 - 11:45</b>	<p><b>Expression analysis of <i>TaWXPL1D</i> gene in wheat genotypes under drought stress</b></p> <p>Rustamova Samira<sup>1</sup>, <b>Sadikhova Zeyneb<sup>2</sup></b>, Huseynova Irada<sup>1,2</sup>  <sup>1</sup><i>Institute of Molecular Biology and Biotechnologies, Azerbaijan</i>  <sup>2</sup><i>Baku State University, Azerbaijan</i></p>
<b>11:45- 12:00</b>	<p><b>Study of the effect of ZnO nanoparticles on the chlorophyll pigment of bean plants exposed to drought stress</b></p> <p><b>Babanli Safiyakhanim</b>, Ahmadov Ismat, Khalilov Rovshan  <i>Baku State University, Azerbaijan</i></p>
<b>12:00 - 12:15</b>	<p><b>The role of <i>Danae racemose</i> and <i>Radix glycyrrhizae</i> extracts in restoring the pigment content of the thylakoid membrane damaged by oxidative stress</b></p> <p><b>Dadashova Sevil<sup>1</sup></b>, Aghalarov Rufat<sup>2</sup>, Huseynova Nilufar<sup>1</sup>  <sup>1</sup><i>Institute of Botany, Azerbaijan</i>  <sup>2</sup><i>Baku State University, Azerbaijan</i></p>
<b>12:15 - 12:30</b>	<p><b>Thrombophilia panel testing - significance of analysis of 12 thrombophilic mutations during pregnancy</b></p> <p><b>Valiyev Emil<sup>1</sup></b>, Valiyev Ismayil<sup>2</sup>  <sup>1</sup><i>Baku State University, Azerbaijan</i>  <sup>2</sup><i>Republican Clinical Urological Hospital named after Academician M.J.Javadzadeh</i></p>

<b>12:30 - 12:45</b>	<b>The role of nanobiotechnology in remediation of oil-contaminated soils</b>  Ahmadova Hijran <i>Institute of Ecology, Azerbaijan</i>
<b>12:45 - 13:00</b>	<b>Technology of production of drug nanoparticles from plant extracts by green synthesis methods</b>  <b>Gahramanova Kamala</b> , Ahmadov Ismat, Mammadov Ziyaddin <i>Baku State University, Baku, Azerbaijan</i>
<b>13:00 - 14:00</b>	<b>Lunch</b>
<b>14:00 - 14:15</b>	<b>Impact of gamma radiation on paramagnetic centres in <i>Saccharomyces cerevisiae</i> yeast strain</b>  <b>Kazimli Leyla</b> <sup>1</sup> , Nasibova Aygun <sup>1,2</sup> , Khalilov Rovshan <sup>1,2</sup> <sup>1</sup> <i>Institute of Radiation Problems, Azerbaijan</i> <sup>2</sup> <i>Baku State University, Azerbaijan</i>
<b>14:15 - 14:30</b>	<b>Effect of different nanoparticles on the yield of <i>Early burlat</i> cherry variety</b>  Ismayilova Lamiya <i>Institute of Ecology, Azerbaijan</i>
<b>14:30 - 14:45</b>	<b>Functionalization of surgical meshes with antibacterial hybrid Ag@crown nanoparticles</b>  Hasanova Ulviya, <b>Aliyev Alibala</b> , Israyilova Aygun <i>Baku State University, Azerbaijan</i>
<b>14:45 - 15:00</b>	<b>Evaluation of genetic polymorphism in durum wheat genotypes based on glutenin profiles</b>  <b>Asadova Nahida</b> , Akhundova Ellada <i>Baku State University, Azerbaijan</i>
<b>15:00 - 15:15</b>	<b>Break/Poster session</b>

<b>15:15 - 15:30</b>	<b>Comparative analysis of metal nanoparticles synthesis methods</b>  <b>Hasanova Gunay</b> , Omarova Sabina, Abdullayeva Naila, Vazirova Brilyant, Mammadova Afat, Khalilov Rovshan <i>Baku State University, Azerbaijan</i>
<b>15:30 - 15:45</b>	<b>Study of the relationship between indicators of flour yield and test weight on the baking quality of local varieties of bread wheat</b>  <b>Hasanova Gatiba<sup>1</sup></b> , Poladova Gulshan <sup>2</sup> <sup>1</sup> <i>Research Institute of Crop Husbandry, Azerbaijan</i> <sup>2</sup> <i>Institute of Genetic Resources, Azerbaijan</i>
<b>15:45 - 16:00</b>	<b>Population-statistical analysis of cardiovascular diseases among the population of Shamkir district</b>  <b>Isgandarova Leyla</b> , Khalilova Fidan, Akbarova-Ben-Tzvi Gunay <i>Baku State University, Azerbaijan</i>

December 20, Friday

## PARALLEL SESSIONS

**Session 2-1: Biodiversity: studying adaptive potential and applying molecular-biological research in the restoration of rare species**

**Chairpersons:** **Gurbanov Elshad (Azerbaijan),  
Naraliyeva Nasibakhon (Uzbekistan)**

**Academic Building II, 2nd floor, room № 205, BSU**

<b>09:30-09:45</b>	<b>Investigation of the microfungi of Dashkasan district: taxonomic composition and host plant diversity</b>  Apbayeva Khadija, Aghayeva Parvin, Mailova Tamilla, <b>Aghayeva Dilzara</b> <i>Institute of Botany, Baku, Azerbaijan</i>
<b>09:45-10:00</b>	<b>The importance of species and varietal diversity in the global gene pool of cotton collections</b>  <b>Abbasov Asaf</b> , Aslanova Aynura, Eldarov Sebuhi, Huseynzade Jale <i>The Scientific Research Institute of Plant Protection and Technical Plants, Azerbaijan</i>
<b>10:00-10:15</b>	<b>Investigation of Plant Communities Formed by Species of the Genus <i>Suaeda</i> Forssk. ex Scop. in the Flora of Azerbaijan</b>  <b>Alosmanova Vafa</b> , Bakhshiyev Vazeh <i>Baku State University, Azerbaijan</i>
<b>10:15 -10:30</b>	<b>The role of plants as highly effective bioindicators for heavy metal detection</b>  Mammadova Adila <i>Azerbaijan Medical University, Azerbaijan</i>

<b>10:30 -10:45</b>	<b>Rethinking our consumption habits: ecological footprint and our future</b>  Balakhanova Qumru <i>Azerbaijan State Pedagogical University, Azerbaijan</i>
<b>10:45 -11:00</b>	<b>Detection of single-stranded (+) RNA genomic viruses in vegetable crops using the DAS-ELISA (Double Antibody Sandwich Enzyme-Linked Immunosorbent Assay) method</b>  Hasanli Khadija <sup>2</sup> , <b>Quliyeva Aytaj<sup>2</sup></b> , Sultanova Nargiz <sup>1,2</sup> <sup>1</sup> <i>The Institute of Molecular Biology and Biotechnologies, Azerbaijan</i> <sup>2</sup> <i>Baku State University, Azerbaijan</i>
<b>11:00 -11:30</b>	<b>Break/Poster session</b>
<b>11:30 - 11:45</b>	<b>Classification of the Convolvuletum-Argusiosum formation in Absheron National Park</b>  Gurbanov Elshad, <b>Huseynova Humira</b> , Mammadli Sabina <i>Baku State University, Azerbaijan</i>
<b>11:45 - 12:00</b>	<b>Development and analysis of the technology for liquid extracts obtained from <i>Chenopodium album</i> L. grown in Azerbaijan</b>  <b>Nasrullayeva Gunesh</b> , Maharramova Mehriban, Yusifova Mehriban, Farzaliyev Elsever <i>Azerbaijan State University of Economics, Azerbaijan</i>
<b>12:00 - 12:15</b>	<b>Comparative analysis of the lizards <i>Ophisops elegans</i> (Menetries, 1832), <i>Lacerta strigata</i> (Eichwald, 1831) and <i>Tenuidactylus caspius</i> (Eichwald, 1831) inhabiting the mid-mountain region of the north-eastern slope of the Lesser Caucasus</b>  Najafov Janbakhish <sup>1</sup> , <b>Hashimov Ramin<sup>2</sup></b> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Azerbaijani Medical University, Azerbaijan</i>

<b>12:15 - 12:30</b>	<b>Quantitative assessment of the <i>Buprestidae</i> family biodiversity distributed in the natural regions of Azerbaijan</b>  <b>Huseynova Ellada, Aliyeva Narmin</b> <i>Institute of Zoology, Azerbaijan</i>
<b>12:30 - 12:45</b>	<b>Spread of honey bee pest - Varroa mite in the northeastern zone of Azerbaijan</b>  <b>Gazi Rəfiga</b> <i>Institute of Zoology, Azerbaijan</i>
<b>12:45 - 13:00</b>	<b>Parasitic bees of the family <i>Apidae</i></b>  <b>Huseynzade Guler</b> <i>Institute of Zoology, Azerbaijan</i>
<b>13:00 - 14:00</b>	<b>Lunch</b>
<b>14:00 - 14:15</b>	<b>Phytocoenoses formed by leguminous plants in the semi-desert vegetation of Yevlakh district: conservation and protection</b>  <b>Mammadova Zulfiyya, Vahidli Aytaj</b> <i>Baku State University, Azerbaijan</i>
<b>14:15 - 14:30</b>	<b>Phytotoxicity of soils and soil enzymes' activity in the tugay forests along the Kur river floodplain</b>  <b>Ahmadova Nigar</b> <i>Baku State University, Azerbaijan</i>
<b>14:30 - 14:45</b>	<b>Rare threadwing species of Azerbaijan: Lederer's lacewing - <i>Lertha ledereri</i> (Sélys-Longchamps, 1866)</b>  <b>Kerimova İlhamə</b> <i>Institute of Zoology, Azerbaijan</i>

<b>14:45 - 15:00</b>	<p><b>The role of salicylic acid in salt tolerance adaptation of the Aghdash-3 cotton variety (<i>Gossypium hirsutum</i> L.)</b></p> <p><b>Khanjanli Sevindj<sup>1</sup></b>, Amrahov Nurlan<sup>1</sup>, Mammadova Ruhangiz<sup>2</sup>, Mammadov Ziyaddin<sup>1</sup>  <sup>1</sup><i>Baku State University, Azerbaijan</i>  <sup>2</sup><i>Institute of Genetic Resources, Azerbaijan</i></p>
<b>15:00 - 15:15</b>	<p><b>The economic importance of mountain xerophytic vegetation and methods for its improvement</b></p> <p>Jabbarov Musa, <b>Asadova Fatima</b>  <i>Baku State University, Azerbaijan</i></p>
<b>15:15 - 15:30</b>	<p><b>Bioremediation using microorganisms for the restoration of heavy metal-polluted environments in Azerbaijan</b></p> <p>Heybatov Aslan, <b>Fataliyev Eldost</b>, Sunqarov Ismayil  <i>Baku State University, Azerbaijan</i></p>
<b>15:30 - 15:45</b>	<p><b>Study of the oxidation index and qualitative composition of flavonoids in samples of bee propolis (<i>Apis propolis</i>)</b></p> <p><b>Khalilova Aynur</b>, Abdullayeva Narmina, Huseynova Nigar  <i>Baku State University, Azerbaijan</i></p>
<b>15:45 - 16:00</b>	<p><b>Identification of fungal species responsible for diseases in quince and pomegranate plants growing in Goygol district</b></p> <p>Mehdiyeva Lale, <b>Masimova Nurana</b>  <i>Baku State University, Azerbaijan</i></p>

December 20, Friday

## PARALLEL SESSIONS

**Session 2-2: Biodiversity: studying adaptive potential and applying molecular-biological research in the restoration of rare species**

**Chairpersons:** Turkan Ismail (Türkiye),  
Ismayilova Sevinj (Azerbaijan)

**Academic Building II, 2nd floor, room № 219, BSU**

<b>09:30-09:45</b>	<b>Study of respiratory intensity and reductase activity in soft and hard wheat seedlings under salt stress</b>  <b>Abdiyev Vilayet</b> , Ismayilova Sevinj, Aliyeva Nigar, Djafarzade Boyukhanım, Mammadli Lale, Abdullayeva Mina <i>Baku State University, Azerbaijan</i>
<b>09:45-10:00</b>	<b>The role of hepcidin and ferroportin on the progression of chronic kidney disease</b>  Afandiyeva Gulnar <i>Azerbaijan Medical University, Azerbaijan</i>
<b>10:00-10:15</b>	<b>Effect of NO inductor on proline content of <i>Triticum durum</i> Desf. under drought and salinity stresses</b>  <b>Allahverdiyeva Sevinj<sup>1</sup></b> , Amrahov Nurlan <sup>1,2</sup> , Mammadova Afat <sup>1</sup> , Mammadov Ziyaddin <sup>1</sup> , Khudayev Faig <sup>2</sup> , Allahverdiyev Rustam <sup>3</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Azerbaijan Research Institute of Crop Husbandry, Azerbaijan</i> <sup>3</sup> <i>Azerbaijan Medical University, Azerbaijan</i>



<b>10:15 - 10:30</b>	<b>Effect of potassium humate on the growth of red clover (<i>Trifolium pratense</i> L.) in saline soils</b>  <b>Muslumova Zohra</b> , Mammadli Sevil, Farajov Mahir <i>Institute of Radiation Problems, Azerbaijan</i>
<b>10:30 - 10:45</b>	<b>Effect of formate ions on photochemical processes in thylakoid membrane</b>  Cumshudlu Konul <i>Institute of Molecular Biology &amp; Biotechnologies, Azerbaijan</i>
<b>10:45 - 11:00</b>	<b>Health indicators of elderly and old-aged people living in Sumgait city</b>  Karamova Natavan <i>Institute of Physiology, Azerbaijan</i>
<b>11:00 - 11:30</b>	<b>Break/Poster session</b>
<b>11:30 - 11:45</b>	<b>Some probiotic properties of proteolytic lactic acid bacteria</b>  <b>Karimova Telli<sup>1</sup></b> , Gulahmadova Malahat <sup>2</sup> , Ojaqverdieva Sabina <sup>1</sup> , Gulahmadov Saib <sup>1</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Institute of Microbiology, Azerbaijan</i>
<b>11:45- 12:00</b>	<b>Effects of a gluten-free diet on patients with autoimmune thyroiditis</b>  <b>Amiraslan Shahana</b> , Guliyeva Sabina <i>Azerbaijan Medical University, Azerbaijan</i>
<b>12:00 - 12:15</b>	<b>Determination of osteocalcin and osteopontin levels in various types of osteoporosis</b>  <b>Hasanova Humay</b> , Azizova Gulnara <i>Azerbaijan Medical University, Azerbaijan</i>
<b>12:15 - 12:30</b>	<b>Vitamins of folate cycle in the diffuse large b-cell lymphoma</b>  Dadashova Arzu <i>Azerbaijan Medical University, Azerbaijan</i>

<b>12:30 - 12:45</b>	<b>Palmitic acid: a key component in the study of biophysical properties of cell membranes</b>  Gasimov Oktay <sup>2</sup> , Umudova Gulandam <sup>1</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Institute of Biophysics, Azerbaijan</i>
<b>12:45 - 13:00</b>	<b>Investigation of liver alterations in hypothyroidism</b>  <b>Asgarova Tahira</b> , Yaqubova Vafa, Abilova Rubaya, Rahimli Kamala <i>Azerbaijan Medical University, Azerbaijan</i>
<b>13:00 - 14:00</b>	<b>Lunch</b>
<b>14:00 - 14:15</b>	<b>Effect of zinc ions on photosystem II oxygen evolution</b>  <b>Shafa Rustamova</b> <sup>1,2</sup> , Konul Cumshudlu <sup>1</sup> <sup>1</sup> <i>Institute of Molecular Biology &amp; Biotechnologies, Azerbaijan</i> <sup>2</sup> <i>Baku State University, Azerbaijan</i>
<b>14:15 - 14:30</b>	<b>Effect of a protein-free diet on memory processes in animals with different types of nervous systems</b>  Ibrahimova Samira <i>Institute of Physiology, Azerbaijan</i>
<b>14:30 - 14:45</b>	<b>Study of the morphological and cultural characteristics of bacterial strains isolated from the phyllosphere of cotton plants</b>  Ahmadova Farayat, <b>Aghabalayeva Sevinj</b> <i>Baku State University, Azerbaijan</i>
<b>14:45 - 15:00</b>	<b>Electrophysiological study of the role of conditioned reflexes in the brain's functional mechanism</b>  Huseynova Ulduz <i>Baku State University, Azerbaijan</i>

<b>15:00 - 15:15</b>	<p><b>Morphological and cultural characteristics of lactic acid bacteria strains isolated from the surface of stone fruits collected in Imishli district</b></p> <p><b>Tagiyeva Pakiza<sup>1</sup></b>, Jafarov Mirmusa<sup>1,2</sup>, Alkishiyeve Kamala<sup>1</sup></p> <p><sup>1</sup><i>Baku State University, Azerbaijan</i>  <sup>2</sup><i>Institute of Microbiology, Azerbaijan</i></p>
<b>15:15 - 15:30</b>	<p><b>Perspectives on the study of laccase enzyme-encoding genes in representatives of the genus <i>Trametes Quel.</i> found in the territory of the Republic of Azerbaijan</b></p> <p><b>Aliyev Fikrat<sup>1</sup></b>, Hasanova Arzu<sup>1</sup>, Aliyeva Nurlana<sup>2</sup></p> <p><sup>1</sup><i>Sumgait State University, Azerbaijan</i>  <sup>2</sup><i>Institute of Microbiology, Azerbaijan</i></p>
<b>15:30 - 15:45</b>	<p><b>Study of phytocenoses of shrubby vegetation of Mil steppe</b></p> <p>Asadova Kamala</p> <p><i>Baku State University, Azerbaijan</i></p>
<b>15:45 - 16:00</b>	<p><b>Anaphylactic shock in a female rat following two doses of ceftriaxone injections</b></p> <p>Bakhshiyeva Alina</p> <p><i>Baku State University, Azerbaijan</i></p>

December 20, Friday

## PARALLEL SESSIONS

### Session 3: Aquatic ecosystems, aquaculture, and biomonitoring

**Chairperson:** Sayim Ferah (Türkiye)  
Ibrahimov Shaiq (Azerbaijan)

**Academic Building II, 3rd floor, room № 303, BSU**

<b>10:30 - 10:45</b>	<b>Bioecological features of <i>Lemnaceae</i> in Kyrgyzstan and prospects for their use</b>  <b>Karimov Bolotbek</b> , Karimov Meder <i>Osh State University, Kyrgyzstan</i>
<b>10:45 - 11:00</b>	<b>The impact of transboundary rivers on the ecological state of Andijan region</b>  <b>G'apporov Fakhridin</b> , Naraliyeva Nasibakhon, Ibroximova Gulbakhor <i>Andijan State University, Uzbekistan</i>
<b>11:00 - 11:30</b>	<b>Break/Poster session</b>
<b>11:30 - 11:45</b>	<b>Conservation of small mammal fauna biodiversity as a factor of sustainable development of the southern Aral sea region</b>  <b>Mambetullaeva Sveta</b> , Utemuratova Gulnarakhan, Allamuratova Ziyuar, Khodjalepesova Indira <i>Karakalpak Scientific Research Institute of Natural Sciences, Uzbekistan</i>
<b>11:45- 12:00</b>	<b>Herbicides and their effect on fish behaviour</b>  Mammadova Sevinj <sup>1,2</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Institute of Physiology, Azerbaijan</i>

<b>12:00 - 12:15</b>	<p><b>Impact of global climate change on mesoplankton and ichthyofauna biodiversity of the Azerbaijani sector of the South Caspian Sea</b></p> <p><b>Suleymanov Suleyman</b>, Jalilov Anvar, Samadli Intizar <i>Institute of Zoology, Azerbaijan</i></p>
<b>12:15 - 12:30</b>	<p><b>Hydrofauna of Sarisu Lake</b></p> <p><b>Mehdizadeh Bilal<sup>1</sup></b>, Aliyev Saleh<sup>1,2</sup>, Suleymanov Suleyman<sup>2</sup> <sup>1</sup><i>Baku State University, Azerbaijan</i> <sup>2</sup><i>Institute of Zoology, Azerbaijan</i></p>
<b>12:30 - 12:45</b>	<p><b>Zooplankton (<i>Metazoa</i>) of the Yenikand reservoir</b></p> <p>Tapdiqova Konul <i>Institute of Zoology, Azerbaijan</i></p>
<b>12:45 - 13:00</b>	<p><b>Pest of the Alfalfa plant - <i>Clytra atraphaxidis</i> Pall, 1773</b></p> <p><b>Shahverdiyeva Zinyat</b>, Abbasova Aynura, Hajiyeve Sakina, Gazi Rafiga, Rzayeva Guntekin, Aliyeva Humay, Gulahmadzade Fatima <i>Institute of Zoology, Azerbaijan</i></p>
<b>13:00 - 14:00</b>	<b>Lunch</b>
<b>14:00 - 14:15</b>	<p><b>Analysis of autumn monitoring of swamp birds migrating in the “Beshbarmag Bottleneck” of North-East Azerbaijan</b></p> <p>Humbatova Sevinj <i>Baku State University, Azerbaijan</i></p>
<b>14:15 - 14:30</b>	<p><b>Impact of the Caspian sea's water level decline on waterfowl during the wintering period along the Absheron coast</b></p> <p>Taghiyev Abulfaz, Musayev Avtandil, <b>Salimova Jale</b>, Badalova Samira, Firuza Gadirzade <i>Baku State University, Azerbaijan</i></p>

<b>14:30 - 14:45</b>	<b>Biodiversity of macrozoobenthos of rivers of the northeastern slope of the Greater Caucasus</b>  Aliyev Saleh <sup>1,2</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Institute of Zoology, Azerbaijan</i>
<b>14:45 - 15:00</b>	<b>On the study of the macrozoobenthos of Gulalan and Gimil Lakes</b>  Aliyev Saleh, Mansimova Ilaha, <b>Malikova Aysel</b> <i>Baku State University, Azerbaijan</i>
<b>15:00 - 15:15</b>	<b>Impact of microorganisms on aquatic ecosystems and drinking water quality</b>  Mammadjan Aysun <i>Western Caspian University, Azerbaijan</i>
<b>15:15 - 15:30</b>	<b>On the current ecological state of the Caspian Sea and the current state of the Caspian goldfish population</b>  Akhundov Mehman <sup>1</sup> , <b>Alizadeh Nargiz</b> <sup>2</sup> <sup>1</sup> <i>Fisheries and Aquaculture Centre, Azerbaijan</i> <sup>2</sup> <i>Baku State University, Azerbaijan</i>
<b>15:30 - 15:45</b>	<b>On the study of micro- and macrozoobenthos of Absheron rivers</b>  Aliyev Saleh, Mansimova Ilaha, <b>Khangeldiyeva Narmin</b> <i>Baku State University, Azerbaijan</i>
<b>15:45 - 16:00</b>	<b>Ecological status of <i>Acipenseridae</i> and artificial reproduction</b>  Akhundov Mehman <sup>1</sup> , <b>Gurbanaliyeva Lamiye</b> <sup>2</sup> <sup>1</sup> <i>Fisheries and Aquaculture Centre, Azerbaijan</i> <sup>2</sup> <i>Baku State University, Azerbaijan</i>

December 20, Friday

## PARALLEL SESSIONS

**Session 4: Application of innovative biological research methods in the ecology of living systems, environmental protection, and medicine**

**Chairpersons:** Omeroglu Ersoy Esra (Türkiye),  
Khalilov Rovshan (Azerbaijan)

**Academic Building II, 3rd floor, room № 307, BSU**



09:30-09:45	<b>Environmental plasticity of <i>Ulva intestinalis</i> L.: reproductive responses to polluted and unpolluted coastal ecosystems</b>  Rizwan Saba <i>Jinnah University for Women, Pakistan</i>
09:45-10:00	<b>The role of physical exercise and natural compounds in myocardial regeneration: potential for activation of cardiac stem cells</b>  <b>Mirzayeva Gunesh<sup>1</sup></b> , Sultanova Nargiz <sup>2,3</sup> <sup>1</sup> <i>Shanghai University, China</i> <sup>2</sup> <i>Institute of Molecular Biology and Biotechnologies, Azerbaijan</i> <sup>3</sup> <i>Baku State University, Azerbaijan</i>
10:00-10:15	<b>New diagnostic serum biomarkers and hormone levels in women with breast cancer</b>  <b>Karimova Leyla<sup>1</sup></b> , Azizova Gulnara <sup>2</sup> , Shahverdiyeva Ilaha <sup>2</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Azerbaijan Medical University, Azerbaijan</i>

<b>10:15-10:30</b>	<b>Determination of forest cover change in Shaki-Oghuz districts</b>  <b>Abiyev Yusif<sup>1</sup></b> , Mursal Nigar <sup>2</sup> , Valiyeva Aydan <sup>1</sup> , Abbasova Nazira <sup>1</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Institute of Botany, Azerbaijan</i>
<b>10:30-10:45</b>	<b>The role of phytohormones in plant adaptation</b>  <b>Yusifova Anahanim</b> , Asadova Basti <i>Azerbaijan State Pedagogical University, Azerbaijan</i>
<b>10:45-11:00</b>	<b>Organic compounds against bacteria and fungi</b>  Gaoussou Binate <i>Baku State University, Azerbaijan</i>
<b>11:00-11:30</b>	<b>Break/Poster session</b>
<b>11:30 -11:45</b>	<b>Effect of iron oxide nanoparticles on the growth of maize seedlings cultivated under drought stress</b>  <b>Aliyeva Naila</b> , Mamedov Ziyaddin, Khalilov Rovshan <i>Baku State University, Azerbaijan</i>
<b>11:45- 12:00</b>	<b>Biogas potential from livestock manure in Eastern Zangazur: a path to sustainable energy</b>  <b>Yusifova Mahluga</b> , Alizade Shams <i>Baku State University, Azerbaijan</i>
<b>12:00 - 12:15</b>	<b>Antimicrobial peptides as crucial biomarkers in the diagnosis and pathogenesis of colorectal cancer</b>  <b>Bayramova Narmin</b> , Azizova Gulnara, Hasanova Shayman, Mammadova Farah <i>Azerbaijan Medical University, Azerbaijan</i>
<b>12:15 - 12:30</b>	<b>Ecolo-biotechnological potential of bioactive compounds from extremophiles</b>  <b>Jafarzadeh Sabina</b> , Iskender Elman <i>Institute of Microbiology, Azerbaijan</i>



<b>12:30 - 12:45</b>	<p><b>Effect of temperature on the development of pigmented actinomycetes</b></p> <p>Ahmadova Farayat, <b>Hasanova Sevd</b>a, Guliyeva Sevinj, Suleymanova Gulshan, Suleymanova Durdana, Rahimova Mehnura  <i>Baku State University, Azerbaijan</i></p>
<b>12:45 - 13:00</b>	<p><b>Determination of sulfate-reducing bacteria (SRB) in produced waters taken from wells of the “Oil stones” OGPD</b></p> <p><b>Hasanova Susan</b><sup>2</sup>, Zulfaliyeva Leyla<sup>3</sup>, Sultanov Elshan<sup>3,4</sup>, Sultanova Nargiz<sup>1,2</sup>  <sup>1</sup><i>Institute of Molecular Biology and Biotechnologies, Azerbaijan</i>  <sup>2</sup><i>Baku State University, Azerbaijan</i>  <sup>3</sup><i>Azerbaijan State Oil and Industry University, Azerbaijan</i>  <sup>4</sup><i>Oil and Gas Scientific Research Project Institute, SOCAR, Azerbaijan</i></p>
<b>13:00 - 14:00</b>	<b>Lunch</b>
<b>14:00 - 14:15</b>	<p><b>Isolation of bacterial exopolysaccharides and their role in medicine</b></p> <p><b>Mustafazade Aygun</b><sup>1</sup>, Cantürk Zerrin<sup>2</sup>  <sup>1</sup><i>Institute of Molecular Biology &amp; Biotechnologies, Azerbaijan</i>  <sup>2</sup><i>Anadolu University, Türkiye</i></p>
<b>14:15 - 14:30</b>	<p><b>Effect of indole-3-acetic acid on the catalase activity of <i>G. hirsutum</i> L. Agdash-3 variety subjected to drought</b></p> <p><b>Yusibov Tural</b><sup>1</sup>, Amrahov Nurlan<sup>1,2</sup>, Ojagverdiyeva Sabina<sup>1</sup>, Aliyev Elshan<sup>1</sup>, Mammadova Ruhangiz<sup>3</sup>, Mammadov Ziyaddin<sup>1</sup>  <sup>1</sup><i>Baku State University, Azerbaijan</i>  <sup>2</sup><i>Institute of Crop Husbandry, Azerbaijan</i>  <sup>3</sup><i>Genetic Resources Institute, Azerbaijan</i></p>

<b>14:30 - 14:45</b>	<p><b>The statistical analysis of morphometric trait changes in plants using the maple software package for a reliable environmental quality assessment</b></p> <p><b>Ismayilova Maleyka<sup>1</sup></b>, Mammadova Roza<sup>2</sup>, Gasimov Gurban<sup>1</sup>, Mammadova Afat<sup>1</sup>  <sup>1</sup><i>Baku State University, Azerbaijan</i>  <sup>2</sup><i>Institute of Soil Science and Agrochemistry, Azerbaijan</i></p>
<b>14:45 - 15:00</b>	<p><b>Study of the fatty acid composition of the lipid complex in the peel and seed of common pomegranate</b></p> <p><b>Suleymanova Aisha<sup>1</sup></b>, Mukhtarova Gulbeniz<sup>2</sup>  <sup>1</sup><i>Institute of Bioresources, Ganja, Azerbaijan</i>  <sup>2</sup><i>Institute of Petrochemical Processes named after Y. Mammadaliyev, Azerbaijan</i></p>
<b>15:00 - 15:15</b>	<p><b>Medicinal properties of representatives of the <i>Asteraceae</i> family and their use in folk economy</b></p> <p>Gurbanov Elshad, <b>Nagiyeva Gunay</b>  <i>Baku State University, Azerbaijan</i></p>
<b>15:15 - 15:30</b>	<p><b>Comparative study of Actinomysetes storage methods in culture collections</b></p> <p>Zakirova Nigar  <i>Baku State University, Azerbaijan</i></p>
<b>15:30 - 15:45</b>	<p><b>Development of technology and safety research of functional food products based on milk</b></p> <p>Bunyatzadeh Zamina  <i>Odla Yurdu University, Azerbaijan</i></p>
<b>15:45 - 16:00</b>	<p><b>Splitting water into hydrogen and oxygen using biocatalysts under the influence of sunlight</b></p> <p>Mammadova Shafa  <i>Azerbaijan State Pedagogical University, Azerbaijan</i></p>

December 19, Thursday

## POSTER SESSION

16:00 – 16:30

Main Academic Building, 3rd floor, BSU

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|----|---|
| 1. | <b>Molecular-genetic and phylogenetic analysis of the nematode <i>Rhabdias engelbrechti</i> found in south Uzbekistan</b><br><br>Aliyev Shohjahon, Amirov Oybek<br><i>Institute of Zoology, Uzbekistan</i>  |
| 2. | <b>The role of microbial biosensors in promoting sustainable agriculture and ecological balance</b><br><br>Bayer Asli, Kamba Hitshika Aisha, Omeroğlu Ersoy Esra<br><i>Ege University, Türkiye</i>  |
| 3. | <b>Association of nitrogen fixation microorganisms in the surface of nodules in wild Perennial Leguminous plants <i>Esparceta Onobrychis</i></b><br><br>Umarov Bakhtiyor<br><i>Tashkent Scientific Research Institute for Vaccines and Serums, Uzbekistan</i>   |
| 4. | <b>Isolation and screening of microorganisms from sewage sludge with plastic compounds-degrading potential</b><br><br>Guirado-Mendoza Luna <sup>1</sup> , Robledo-Mahón Tatiana <sup>1,2</sup> , Aranda Elisabet <sup>1,2</sup> and Angeles-De Paz. Gabriela <sup>1</sup><br><sup>1</sup> <i>Institute of Water Research, Spain</i><br><sup>2</sup> <i>University of Granada, Spain</i> |
| 5. | <b>Bioecological features of representatives of the <i>Asteraceae</i> family distributed in the territory of Aghsu district</b><br><br>Gurbanov Elshad, Nagiyeva Gunay<br><i>Baku State University, Azerbaijan</i>  |

6.	<p><b>Plant growth-promoting bacteria (PGPB): A green solution to combat soil heavy metal contamination</b></p> <p><b>Kamba Hitshika Aisha</b>, Bayer Aslı, Omeroğlu Ersoy Esra  <i>Ege University, Türkiye</i></p>
7.	<p><b>Al-Compost project: enhancing the kinetics of olive mill wastes composting through dephenolization and bioaugmentation strategies</b></p> <p><b>Velilla S.</b><sup>1,2</sup>, Cubero-Cardoso J.<sup>1,2</sup>, Guirado-Mendoza L.<sup>1,2</sup>, Robledo-Mahón T.<sup>1,2</sup>, Serrano A.<sup>1,2</sup>, Gonzalez-Lopez J.<sup>1,2</sup>, Calvo C.<sup>1,2</sup>, Aranda E.<sup>1,2</sup>  <sup>1</sup><i>Institute of Water Research, Spain</i>  <sup>2</sup><i>University of Granada, Spain</i></p>
8.	<p><b>Ecobotanical study of some species of the <i>Crassulaceae</i> D.C. family distributed in the north of the Lesser Caucasus</b></p> <p><b>Akbarova Chichek</b>, Mammadova Afat  <i>Baku State University, Azerbaijan</i></p>
9.	<p><b>Dynamics of changes of POL products in different regions of cerebral cortex in epiphysectomised 3-month-old and one-year-old rats</b></p> <p>Mammadova Nazakat  <i>Baku State University, Azerbaijan</i></p>
10.	<p><b>Silver nanoparticle biosynthesis property of <i>Lactobacillus</i> spp. Dİ-10 bacterial strain</b></p> <p>Jafarov Mirmusa<sup>1,2</sup>, <b>Aslanova Aytaj</b><sup>1</sup>, Alakbarli Seljan<sup>1</sup>, Babayeva Irada<sup>1</sup>, Alkishiyeva Kamala<sup>1</sup>  <sup>1</sup><i>Baku State University, Azerbaijan</i>  <sup>2</sup><i>Institute of Microbiology, Azerbaijan</i></p>
11.	<p><b>The comparative physical parameters of the sounds of black francolin birds distributed in Gizilaghaj National Park and Barda district and their behaviour</b></p> <p><b>Musayev Avtandil</b>, Mammadov Anar  <i>Baku State University, Azerbaijan</i></p>

<b>12.</b>	<b>Bioecological characteristics and ecological assessment of some endemic and rare plants of the Absheron peninsula</b>  Najafova Fatima <i>Baku State University, Azerbaijan</i>
<b>13.</b>	<b>The modern state of the reptilia fauna of Baku city due to urbanization</b>  Najafov Janbakhish, <b>Ahmedli Gunay</b> <i>Baku State University, Azerbaijan</i>
<b>14.</b>	<b>Multilocus phylogeny of the genus <i>Alburnoides</i> with biogeographical implications for the Caucasus region</b>  <b>Omelchenko D.<sup>1</sup></b> , Frynta D. <sup>1</sup> , Guliyev A <sup>2</sup> , Lerch Z. <sup>1</sup> , Mammadov Ch <sup>2</sup> , Musilová Z. <sup>1</sup> , Šanda R <sup>1</sup> , Švátora M. <sup>1</sup> <sup>1</sup> <i>Charles University, Czech Republic</i> <sup>2</sup> <i>Baku State University, Azerbaijan</i>
<b>15.</b>	<b>Trophic relationships of lizards with birds in Gobustan</b>  <b>Asgarova Sabina</b> , Humbatova Sevinj <i>Baku State University, Azerbaijan</i>
<b>16.</b>	<b>Antimicrobial activity of lactic acid bacteria isolated from cranberry (<i>Cornus</i> L.) and mespilus (<i>Mespilus</i> L.) fruits</b>  <b>Aitaj Aliyeva<sup>1</sup></b> , Malahat Gulahmadova <sup>2</sup> , Sabina Ojagverdiyeva <sup>1</sup> , Saib Gulahmadov <sup>1</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Institute of Microbiology, Azerbaijan</i>
<b>17.</b>	<b>Analysis of the ecological status of some rivers flowing into the Caspian Sea</b>  <b>Guliyeva Laman<sup>1</sup></b> , Najafova Samira <sup>2</sup> <sup>1</sup> <i>Baku State University, Azerbaijan</i> <sup>2</sup> <i>Institute of Microbiology, Azerbaijan</i>
<b>18.</b>	<b>Study of morpho-cultural characteristics of bacterial strains belonging to the genus <i>Bacillus</i> isolated from the rhizosphere of cotton plant</b>  Ahmadova Farayat, <b>Samadova Khalida</b> <i>Baku State University, Azerbaijan</i>

19.	<b>The main biotopes where birds live during wintering at the International Airport named after Heydar Aliyev</b>  <b>Gadirzade Firuza</b> , Taghiyev Abulfaz, Gulu-zade Elmir <i>Baku State University, Azerbaijan</i>
20.	<b>Investigation of spike length heterosis in F<sub>1</sub> hybrids between substituted wheat-rye lines and common wheats</b>  <b>Mustafayeva Samira</b> , Abbasova Sakina, Rahimov Rahim <i>Genetic Resources Institute, Azerbaijan</i>
21.	<b>Genetic analysis of barley quality traits</b>  Rasulova Laman <i>Baku State University, Azerbaijan</i>
22.	<b>Determination of fungal species causing disease in cranberry (variety – Armudu Zoghal) and pomegranate (variety – Bala Mursal) plants</b>  Mehdiyeva Lala, <b>Masimova Nurana</b> , Alizade Khadija <i>Baku State University, Azerbaijan</i>
23.	<b>Phytotoxicity of soils of Binaghadi district of Baku city and the main directions of bioremediation</b>  <b>Aliyeva Nurdan</b> , Ismayilov Nariman <i>Baku State University, Azerbaijan</i>
24.	<b>Productivity and resource of some species of the genus <i>Salvia</i> L. distributed in the Guba massif</b>  Mustafayeva Latafat <sup>2</sup> , <b>Mammadova Pari</b> <sup>1</sup> <sup>1</sup> <i>Institute of Botany, Azerbaijan</i> <sup>2</sup> <i>Gazakh branch of Baku State University, Azerbaijan</i>
25.	<b>Etnobotanical study of wild edible plants spread in Nakhchivan Autonomous Republic</b>  Nasirova Afruz <i>Odclar Yurdu University, Azerbaijan</i>
26.	<b>Effect of copper ions on photosystem II oxygen evolution</b>  Suleymanov Ruslan <i>Institute of Molecular Biology &amp; Biotechnologies, Azerbaijan</i>

December 20, Friday

## ONLINE ORAL PRESENTATION

Academic Building II, 4th floor, room № 403, BSU



### Session 1: Genetic diversity: issues and solutions

**Chairpersons:** Huseynova Nigar (Azerbaijan),  
Salayeva Samira (Azerbaijan)

**09:30-09:45** Study of the effect of physical mutagen on  
cotton seeds

Zeynalova Intizar, Eyyubova Gulabatin  
*Scientific Research Institute of Plant Protection and  
Technical Plants, Azerbaijan*

### Session 2: Biodiversity: studying adaptive potential and applying molecular-biological research in the restoration of rare species

**Chairpersons:** Huseynova Nigar (Azerbaijan),  
Salayeva Samira (Azerbaijan)

**09:45-10:00** Bioclimatic modelling of the species *Cousinia  
knorringiae* Bornm. (*Asteraceae*)

Gulomov Rustam  
*Namangan State University, Uzbekistan*

**10:00-10:15** Rare *Medicago sativa* L. communities in  
Uzbekistan and assessment of their current state

Saitjanova Umida, Shomurodov Habibullo  
*Institute of Botany, Uzbekistan*

10:15-10:30	<p><b>Comparative analysis of chloroplast DNA characteristics of climatically adapted <i>Tetradium daniellii</i> (Benn) from Uzbekistan with genomes of naturally distributed individuals in China</b></p> <p><b>Mamadjanova Munavvar<sup>1</sup></b>, Naraliyeva Nasibakhon<sup>2</sup>, Karimov Bobur<sup>3</sup>, Yusupov Ziyoviddin<sup>3</sup>, Zulunov Islom<sup>2</sup>, Ergasheva Gulmira<sup>2</sup></p> <p><sup>1</sup>Namangan State University, Uzbekistan  <sup>2</sup>Andijan State University, Uzbekistan  <sup>3</sup>Institute of Botany, Uzbekistan</p>
10:30-10:45	<p><b>Potential impacts of climate change on the geographic distributions of <i>Euphorbia davidii</i> Subils and <i>Euphorbia ferganensis</i> B.Fedtsch. in central Asia: a maxent species distribution modeling approach</b></p> <p><b>Najmiddinov Asilbek</b>, Batoshov Avazbek  Namangan State University, Uzbekistan</p>
10:45-11:00	<p><b>The scientific discussion of key issue aspects of lead overindulgence, biomonitoring obstacles and environmental protection impediments</b></p> <p><b>Sulashvili Nodar</b>, Davitashvili Magda, Gorgaslidze Nana, Gabunia Luiza, Alavidze Nato, Giorgobiani Marina, Abuladze Nino, Gabunia Ketevani, Sulashvili Marika, Okropiridze Tamar  Iakob Gogebashvili Telavi State University, Georgia</p>
11:00-11:15	<p><b>Silver nanoparticles obtained by “green synthesis” and their effect on <i>Dunaliella salina</i> cells</b></p> <p><b>Vazirova Brilliant</b>, Omarova Sabina, Jalilova Aynura, Aliyev Ilyas, Hasanova Gunay, Khalilov Rovshan  Baku State University, Azerbaijan</p>



<b>11:15-11:30</b>	<p><b>Temperature impact on antibiotic removal by solid-state anaerobic digestion of swine manure</b></p> <p><b>Trujillo-Reyes Ángeles<sup>1,2</sup></b>, Purswan Jessica<sup>1,2</sup>, Postigo Cristina<sup>1,3</sup>, Aranda Elisabet<sup>1,2</sup>, Serrano Antonio<sup>1,2</sup>  <sup>1</sup><i>Institute of Water Research, Spain</i>  <sup>2</sup><i>University of Granada, Spain</i>  <sup>3</sup><i>Technologies for Water Management and Treatment Research Group, Spain</i></p>
<b>11:30-11:45</b>	<p><b>Impact of micro-aeration on fungal community from anaerobic digestion</b></p> <p><b>Robledo-Mahón Tatiana<sup>1,2</sup></b>, Serrano Antonio<sup>1,2</sup>, Postigo Cristina<sup>1,3</sup>, Aranda Elisabet<sup>1,2</sup>, Trujillo-Reyes Ángeles<sup>1,2</sup>  <sup>1</sup><i>Institute of Water Research, Spain</i>  <sup>2</sup><i>Department of Microbiology, University of Granada, Spain</i>  <sup>3</sup><i>Department of Civil Engineering, University of Granada, Spain</i></p>
<b>11:45-12:00</b>	<p><b>Olive mill solid waste composting at demonstrative-scale by innovative technologies</b></p> <p><b>Cubero-Cardoso J.<sup>1,2</sup></b>, Velilla-Delgado, S.<sup>1,2</sup>, Robledo-Mahón T.<sup>1,2</sup>, Serrano, A.<sup>1,2</sup>, Gonzalez-Lopez, J. <sup>1,2</sup>, Aranda E. <sup>1,1</sup>, Calvo C. <sup>1,1</sup>  <sup>1</sup><i>Institute of Water Research, Spain</i>  <sup>2</sup><i>University of Granada, Spain</i></p>
<b>12:00-12:15</b>	<p><b>Comparative analysis of the commercial ichthyofauna of the Aydar-Arnasay lakes system</b></p> <p><b>Mirzayev Ulugbek</b>, Azizov Nabi  <i>Institute of Zoology, Uzbekistan</i></p>
<b>12:15-13:00</b>	<b>Lunch</b>

### Session 3: Aquatic ecosystems, aquaculture, and biomonitoring

**Chairpersons:** Taghiyev Abulfaz (Azerbaijan),  
Humbatova Sevinj (Azerbaijan)

**13:00-13:15**      **New records of freshwater *Algae* from the Naryn river (Uzbekistan)**

**Ikramov Nuriddin**, Tojiboev Sharobitdin  
*Namangan State University, Uzbekistan*

### Session 4: Application of innovative biological research methods in the ecology of living systems, environmental protection, and medicine

**Chairpersons:** Salayeva Samira (Azerbaijan),  
Mammadova Roza (Azerbaijan)

**13:15-13:30**      **The subfamily *Mirinae* (Hahn, 1831) distributed in the Fergana valley**

**Hudoyberdieva Marifat<sup>1</sup>**, Mirzayeva Gulnara<sup>2</sup>,  
Qurbonov Abduburxon<sup>1</sup>, Mamadaliyeva E'tibor<sup>1</sup>

<sup>1</sup>*Tashkent Medical Academy, Uzbekistan*

<sup>2</sup>*Institute of Zoolog, Uzbekistan*

**13:30-13:45**      **Microbial biodiversity and its role on soil health and agriculture resilience in Mediterranean drylands**

**López-Rodríguez María del Mar<sup>1</sup>**, Saia Sergio<sup>3</sup>,  
Purswani Jessica<sup>1,2</sup>, Pozo Clementina<sup>1,2</sup>, Calvo  
Concepción<sup>1,2</sup>, Robledo-Mahón Tatiana<sup>1,2</sup>, Aranda  
Elisabet<sup>1,2</sup>

<sup>1</sup>*Institute of Water Research, Spain*

<sup>2</sup>*University of Granada, Spain*

<sup>3</sup>*Università di Pisa, Italy*

<b>13:45-14:00</b>	<p><b>Impact of seasonal changes in soil moisture to the vegetation of some useful species (in the conditions of the Namangan hills)</b></p> <p><b>Toshmirzaeva Gavkharkhan<sup>1</sup></b>, Neralieva Nasibakhan<sup>2</sup>  <sup>1</sup><i>Namangan State University, Uzbekistan</i>  <sup>2</sup><i>Andijan State University, Uzbekistan</i></p>
<b>14:00-14:15</b>	<p><b>Impact of climate change on mountain ecosystems of the northeastern part of the Lesser Caucasus and adaptation of plants</b></p> <p><b>Aslanova Yegana</b>, Aslan Isfandiyar  <i>Ganja State University, Azerbaijan</i></p>
<b>14:15-14:30</b>	<p><b>The species distribution of <i>Ziziphora</i> L. in the flora of Uzbekistan</b></p> <p><b>Mirzayeva Saodat</b>, Naraliyeva Nasibakhon, Sayfiyeva Mehriniso, Zulunov Islom  <i>Andijan State University, Uzbekistan</i></p>
<b>14:30-14:45</b>	<p><b>Bioecology of the beet moth (<i>Scrobipalpa ocellatella</i> Boyd, 1858) in the sugar beet agrocenosis</b></p> <p><b>Gazi Saliga</b>, Rzayeva Guntekin, Hamzayeva Gulara  <i>Institute of Zoology, Azerbaijan</i></p>
<b>14:45-15:00</b>	<p><b>Distribution of <i>Rosa canina</i> L. in some districts of Uzbekistan</b></p> <p><b>Ismonova Gulmira</b>, Ibroximova Gulbahor, Kimsanov Sherzod, Abdumutalipov Ro'zimuxammad, Soipov Raxmatullax  <i>Andijan State University, Uzbekistan</i></p>
<b>15:00-15:15</b>	<p><b>Phylogenetic relationships of nematodes of the superfamily <i>Trichostrongylidae</i> Leiper, 1908</b></p> <p><b>Amirov Oybek<sup>1</sup></b>, Ibrohimov Anvar<sup>2</sup>, Karimova Rokhatoy<sup>1</sup>  <sup>1</sup><i>Institute of Zoology, Uzbekistan</i>  <sup>2</sup><i>Namangan State University, Uzbekistan</i></p>

<b>15:15-15:30</b>	<b>Species diversity of mycocomplexes in the rhizosphere of perennial legumes</b>  Aliyeva Gulnar <i>Sumgait State University, Azerbaijan</i>
<b>15:30-15:45</b>	<b>A new record of the genus <i>Platinaspis</i> distributed in the Fergana valley (<i>Coleoptera: Coccinellidae</i>)</b>  <b>Gafurova Saodat<sup>1</sup>, Kholmatov Bakhtiyor<sup>2</sup>, Amirov Oybek<sup>2</sup></b> <i><sup>1</sup>Namangan State University, Uzbekistan</i> <i><sup>2</sup>Institute of Zoology, Uzbekistan</i>
<b>16:00-17:00</b>	<b>Closing Ceremony</b>

